

Bibliography of the Carnegie Institution for Science July 1, 2017, to June 30, 2018

Department of Embryology

Anderson J.L., T.S. Mulligan, M.C. Shen, H. Wang, C.M. Scahill, F.J. Tan, S.J. Du, E.M. Busch-Nentwich, and S.A. Farber. mRNA processing in mutant zebrafish lines generated by chemical and CRISPR-mediated mutagenesis produces unexpected transcripts that escape nonsense-mediated decay. *PLoS Genetics*. 13(11), e1007105, 2017.

DeLuca, S. and Spradling, A.C. Efficient expression of genes in the Drosophila germline using a UAS-promoter free of interference by hsp70 piRNAs. *Genetics*. 209, 381-387, 2018.

Deryusheva, S. and J.G. Gall. Orchestrated positioning of post-transcriptional modifications at the branch point recognition region of U2 snRNA. *RNA*. 24(1), 30-42. doi: 10.1261/rna.063842.117, 2017.

Gaysinskaya V, B.F. Miller, C. De Luca, G.W. van der Heijden, K.D. Hansen, and A. Bortvin, Transient reduction of DNA methylation at the onset of meiosis in male mice, *Epigenetics Chromatin*. 11(1), 15, doi: 10.1186/s13072-018-0186-0, 2018.

Huang Y, T. Li, S.C. Ems-McClung, C.E. Walczak, C. Prigent, X. Zhu, X. Zhang X, and Y. Zheng. Aurora A activation in mitosis promoted by BuGZ, *J Cell Biol*. 217(1), 107-116, doi: 10.1083/jcb.201706103, 2018

Lee, P-T, J. Zirin, O. Kanca, W-W Lin, K.L. Schulze, D. Li-Kroeger, R. Tao, C. Devereaux, Y. Hu, V. Chung, Y. Fang, Y. He, H. Pan, M. Ge, Z. Zuo, B. E. Housden, S. E. Mohr, S. Yamamoto, R.W. Levis, A.C. Spradling, N. Perrimon, H.J. Bellen. A gene-specific T2A-GAL4 library for Drosophila, *Elife*. 7, e35574, <https://doi.org/10.7554/eLife.35574.001>, 2018.

Newkirk SJ, S. Lee, F.C. Grandi, V. Gaysinskaya, J.M. Rosser, N. Vanden Berg, C.A. Hogarth, M.C.N Marchetto, A.R. Muotri, M.D. Griswold, P. Ye, A. Bortvin, F.G. Gage, J.D. Boeke, and W. An. Intact piRNA pathway prevents L1 mobilization in male meiosis, *Proc. Natl. Acad. Sci*. 114(28), E5635-E5644, 2017

Quinlivan V.H. and S. A. Farber. Lipid Uptake, Metabolism, and Transport in the Larval Zebrafish. *Frontiers in Endocrinology*. 8, 319-330, 2017.

Sæle O., K.E. Rød, V.H. Quinlivan, S. Li, and S.A. Farber. Using a dual labeled fluorescent triglyceride to quantify intestinal lipolysis by a novel HPLC method. *BBA - Molecular and Cell Biology of Lipids*. 1863(9), 948-957, <https://doi.org/10.1016/j.bbalip.2018.05.006>, 2018.

Spradling, A. C. Polytene Chromosome Structure and Somatic Genome Instability, *Cold Spring Harb Symp Quant Biol*. 82, 293-304, doi: 10.1101, 2017.

Talhouarne, G.J.S. and J.G. Gall. 7SL RNA in vertebrate red blood cells. *RNA*. 24(7), 908-914, doi: 10.1261/rna.065474.117, 2018.

Tosic M, A. Allen, D. Willmann, C. Lepper, J. Kim, D. Duteil, and R. Schüle. Lsd1

regulates skeletal muscle regeneration and directs the fate of satellite cells.
Nat Commun. 9(1), 366, doi: 10.1038/s41467-017-02740-5, 2018.

Yu B., Y. Lin, S.P. Parhad, Z. Jin, J. Ma, W.E. Theurkauf, Z. Zhang, and Y. Huang. Structural insights into Rhino-Deadlock complex for germline piRNA cluster specification. *EMBO reports.* 19 (7), E45418, 2018

Zheng, X., J. Hu, S. Yue, L. Kristiani, M. Kim, M. Sauria, J. Taylor, Y. Kim, and Y. Zheng. Lamins organize the global three-dimensional genome from the nuclear periphery, *Molecular Cell*, doi: <https://doi.org/10.1016/j.molcel.2018.05.017>, 2018.

Zheng, X. and Y. Zheng. CscoreTool: fast Hi-C compartment analysis at high resolution, *Bioinformatics*, 34(9), 1568-1570, doi: 10.1093/bioinformatics/btx802, 2018.

Geophysical Laboratory

Here updated through September 1, 2018. The list is regularly updated on the Geophysical Laboratory web site (<http://www.gl.ciw.edu>).

- 5572 Abdel-Hafiez, M., Y. Zhao, Z. Huang, C.-W. Cho, C. H. Wong, A. Hassen, M. Ohkuma, Y.-W. Fang, B.-J. Pan, Z.-A. Ren, A. Sadakov, A. Usoltsev, V. Pudalov, M. Mito, R. Lortz, C. Krellner, and W. Yang, High-pressure effects on isotropic superconductivity in the iron-free layered pnictide superconductor BaPd₂As₂, *Phys. Rev. B* 97, 134508, 2018.
- 5502 Achilles, C. N., R. T. Downs, D. W. Ming, E. B. Rampe, R. V. Morris, A. H. Treiman, S. M. Morrison, D. F. Blake, D. T. Vaniman, R. C. Ewing, S. J. Chipera, A. S. Yen, T. F. Bristow, B. L. Ehlmann, R. Gellert, R. M. Hazen, K. V. Fendrich, P. I. Craig, J. P. Grotzinger, D. J. Des Marais, J. D. Farmer, P. C. Sarrazin, and J. M. Morookian, Mineralogy of an active eolian sediment from the Namib dune, Gale crater, Mars, *J. Geophys. Res. Planets* 122, 2344-2361, doi:10.1002/2017JE005262, 2017.
- 5620 Ackerson, M. R., B. O. Mysen, N. D. Tailby, and E. B. Watson, Low-temperature crystallization of granites and the implications for crustal magmatism, *Nature* 559, 94-97, 2018.
- 5522 Adeleke, A. A., M. J. Greschner, A. Majumdar, B. Wan, H. Liu, Z. Li, H. Gou, and Y. Yao, Single-bonded allotrope of nitrogen predicted at high pressure, *Phys. Rev. B* 96, 224104, 2017.
- Ahart, M., M. Somayazulu, D. Popov, Y. Xie, X. Long, Z.-G. Ye, R. E. Cohen, and R. J. Hemley, Pressure-induced transitions in ferroelectric single-crystal PbZr_{0.54}Ti_{0.46}O₃, *Ferroelectrics*, in press.
- 5542 Alexander, C. M. O'D., R. C. Greenwood, R. Bowden, J. M. Gibson, K. T. Howard, and I. A. Franchi, A mutli-technique [sic] search for the most primitive CO chondrites, *Geochim. Cosmochim. Acta* 221, 406-420, 2018.
- 5597 An, C., X. Chen, B. Wu, Y. Zhou, Y. Zhou, R. Zhang, C. Park, F. Song, and Z. Yang, Pressure-induced topological insulator-to-metal transition and superconductivity in Sn-doped Bi_{1.1}Sb_{0.9}Te₂S, *Phys. Rev. B* 97, 174516, 2018.

- 5470 An, C., P. Lu, X. Chen, Y. Zhou, J. Wu, Y. Zhou, C. Park, C. C. Gu, B. Zhang, Y. Yuan, J. Sun, and Z. Yang, Pressure-induced anomalous enhancement of insulating state and isosymmetric structural transition in quasi-one-dimensional TiS_3 , *Phys. Rev. B* **96**, 134110, 2017.
- 5535 Antonangeli, D., G. Morard, L. Paolasini, G. Garbarino, C. A. Murphy, E. Edmund, F. Decremps, G. Fiquet, A. Bosak, M. Mezouar, and Y. Fei, Sound velocities and density measurements of solid hcp-Fe and hcp-Fe-Si (9 wt.%) alloy at high pressure: constraints on the Si abundance in the Earth's inner core, *Earth Planet. Sci. Lett.* **482**, 446-453, 2018.
- 5560 Baker, D. M., C. J. Freeman, J. C. Y. Wong, M. L. Fogel, and N. Knowlton, Climate change promotes parasitism in a coral symbiosis, *ISME J.* **12**, 921-930, 2018.
- 5499 Baker, J., R. Kumar, C. Park, C. Kenney-Benson, A. Cornelius, and N. Velisavljevic, Giant pressure-induced enhancement of Seebeck coefficient and thermoelectric efficiency in SnTe, *ChemPhysChem* **18**, 3315-3319, 2017.
- 5567 Baker, J. L., R. S. Kumar, C. Park, N. Velisavljevic, and A. Cornelius, Compressibility and thermoelectric behavior of TiCoSb half-Heusler compound at high pressures, *Intermetallics* **95**, 137-143, 2018.
- 5561 Basu, A., M. Ahart, N. Holtgrewe, C. Lin, and R. J. Hemley, Pressure-induced transformations of multiferroic relaxor $\text{PbFe}_{0.5}\text{Nb}_{0.5}\text{O}_3$, *J. Appl. Phys.* **123**, 084102, 2018.
- 5521 Behera, M. K., D. K. Pradhan, S. K. Pradhan, and A. K. Pradhan, Tuning of thermally induced first-order semiconductor-to-metal transition in pulsed laser deposited VO_2 epitaxial thin films, *J. Appl. Phys.* **122**, 245110, 2017.
- 5624 Bennett, N. R., and Y. Fei, Pressure, sulfur, and metal-silicate partitioning: the effect of sulfur species on the parameterization of experimental results, *Am. Mineral.* **103**, 1068-1079, 2018.
- 5654 Bhadram, V. S., Q. Cheng, C. K. Chan, Y. Liu, S. Lany, K. Landskron, and T. A. Strobel, $\text{Zn}_x\text{Mn}_{1-x}\text{O}$ solid solutions in the rocksalt structure: optical, charge transport, and photoelectrochemical properties, *ACS Appl. Energy Mater.* **1**, 260-266, 2018.
- 5527 Bhadram, V. S., H. Liu, E. Xu, T. S. Li, V. B. Prakapenka, R. Hrubciak, S. Lany, and T. A. Strobel, Semiconducting cubic titanium nitride in the Th_3P_4 structure, *Phys. Rev. Mater.* **2**, 011602(R), 2018.
- 5655 Bi, Y., E. Xu, T. A. Strobel, and T. Li, Formation of inclusion type silicon phases induced by inert gases, *Commun. Chem.* **1**, 15, 2018.
- 5503 Bielskas, A., and S. J. Hardy, Open access publishing trends at two geoscience research organizations: Columbia University and Carnegie Institution for Science, in *Four Years of Earth Science Information: Exploring Data, Access, and More*, M. Hudson, ed., pp. 196-202, GSIS Proceedings, Vol. 44, Geoscience Information Society, Alexandria, Virginia, 2017.
- 5453 Boehler, R., J. J. Molaison, and B. Haberl, Novel diamond cells for neutron diffraction using multi-carat CVD anvils, *Rev. Sci. Instrum.* **88**, 083905, 2017.
- 5519 Bower, D. M., D. R. Hummer, and A. Steele, An experimental look at the taphonomy of cyanobacterial mats in siliciclastic sediments, *Palaios* **32**, 725-738, 2017.

- 5613 Bristow, T. F., E. B. Rampe, C. N. Achilles, D. F. Blake, S. J. Chipera, P. Craig, J. A. Crisp, D. J. Des Marais, R. T. Downs, R. Gellert, J. P. Grotzinger, S. Gupta, R. M. Hazen, B. Horgan, J. V. Hogencamp, N. Mangold, P. R. Mahaffy, A. C. McAdam, D. W. Ming, J. M. Morookian, R. V. Morris, S. M. Morrison, A. H. Treiman, D. T. Vaniman, A. Vasavada, and A. S. Yen, Clay mineral diversity and abundance in sedimentary rocks of Gale crater, Mars, *Sci. Adv.* 4, eaar3330, 2018.
- 5508 Brownsberger, K., M. Ahart, M. Somayazulu, C. Park, S. A. Gramsch, and R. J. Hemley, X-ray diffraction, lattice structure, and equation of state of PdH_x and PdD_x to megabar pressures, *J. Phys. Chem. C* 121, 27327-27331, 2017.
- 5515 Brubaker, Z. E., R. L. Stillwell, P. Chow, Y. Xiao, C. Kenney-Benson, R. Ferry, Z. Jenei, R. J. Zieve, and J. R. Jeffries, Pressure dependence of Ce valence in CeRhIn₅, *J. Phys.: Condens. Matter* 30, 035601, 2018.
- Brucato, J. R., and T. Fornaro, Role of mineral surfaces in prebiotic processes and space-like conditions, in *Biosignatures for Astrobiology*, B. Cavalazzi and F. Westall, eds., Springer, in press.
- 5617 Cao, Z.-Y., J.-W. Hu, A. F. Goncharov, and X.-J. Chen, Nontrivial metallic state of MoS₂, *Phys. Rev. B* 97, 214519, 2018.
- 5648 Celliers, P. M., M. Millot, S. Brygoo, R. S. McWilliams, D. E. Fratanduono, J. R. Rygg, A. F. Goncharov, P. Loubeyre, J. H. Eggert, J. L. Peterson, N. B. Meezan, S. Le Pape, G. W. Collins, R. Jeanloz, and R. J. Hemley, Insulator-metal transition in dense fluid deuterium, *Science* 361, 677-682, 2018.
- 5557 Chan, Q. H. S., M. E. Zolensky, Y. Kebukawa, M. Fries, M. Ito, A. Steele, Z. Rahman, A. Nakato, A. L. D. Kilcoyne, H. Suga, Y. Takahashi, Y. Takeichi, and K. Mase, Organic matter in extraterrestrial water-bearing salt crystals, *Sci. Adv.* 4, eaao3521, 2018.
- 5474 Chapman, J. B. J., R. E. Cohen, A. V. Kimmel, and D. M. Duffy, Improving the functional control of aged ferroelectrics using insights from atomistic modelling, *Phys. Rev. Lett.* 119, 177602, 2017.
- 5592 Chen, B., X. Lai, J. Li, J. Liu, J. Zhao, W. Bi, E. E. Alp, M. Y. Hu, and Y. Xiao, Experimental constraints on the sound velocities of cementite Fe₃C to core pressures, *Earth Planet. Sci. Lett.* 494, 164-171, 2018.
- 5619 Chen, F., Y. Zhu, S. Liu, Y. Qi, H. Y. Hwang, N. C. Brandt, J. Lu, F. Quirin, H. Enquist, P. Zalden, T. Hu, J. Goodfellow, M.-J. Sher, M. C. Hoffmann, D. Zhu, H. Lemke, J. Glowia, M. Chollet, A. R. Damodaran, J. Park, Z. Cai, I. W. Jung, M. J. Highland, D. A. Walko, J. W. Freeland, P. G. Evans, A. Vailionis, J. Larsson, K. A. Nelson, A. M. Rappe, K. Sokolowski-Tinten, L. W. Martin, H. Wen, and A. M. Lindenberg, Reply to "Comment on 'Ultrafast terahertz-field-driven ionic response in ferroelectric BaTiO₃'", *Phys. Rev. B* 97, 226102, 2018.
- 5585 Chen, H., S.-H. Shim, K. Leinenweber, V. Prakapenka, Y. Meng, and C. Prescher, Crystal structure of CaSiO₃ perovskite at 28-62 GPa and 300 K under quasi-hydrostatic stress conditions, *Am. Mineral.* 103, 462-468, 2018.
- 5559 Chen, M., J. Shu, X. Xie, D. Tan, and H. K. Mao, Natural diamond formation by self-redox of ferromagnesian carbonate, *Proc. Natl. Acad. Sci. USA* 115, 2676-2680, 2018.

- 5467 Chen, X., P. Lu, X. Wang, Y. Zhou, C. An, Y. Zhou, C. Xian, H. Gao, Z. Guo, C. Park, B. Hou, K. Peng, X. Zhou, J. Sun, Y. Xiong, Z. Yang, D. Xing, and Y. Zhang, Topological Dirac line nodes and superconductivity coexist in SnSe at high pressure, *Phys. Rev. B* 96, 165123, 2017.
- 5616 Chi, Z., X. Chen, C. An, L. Yang, J. Zhao, Z. Feng, Y. Zhou, Y. Zhou, C. Gu, B. Zhang, Y. Yuan, C. Kenney-Benson, W. Yang, G. Wu, X. Wan, Y. Shi, X. Yang, and Z. Yang, Pressure-induced superconductivity in MoP, *npj Quantum Mater.* 3, 28, 2018.
- 5583 Cottrell, E., A. Lanzirotti, B. Mysen, S. Birner, K. A. Kelley, R. Botcharnikov, F. A. Davis, and M. Newville, A Mössbauer-based XANES calibration for hydrous basalt glasses reveals radiation-induced oxidation of Fe, *Am. Mineral.* 103, 489-501, 2018.
- 5664 Cousins, C. R., M. Fogel, R. Bowden, I. Crawford, A. Boyce, C. Cockell, and M. Gunn, Biogeochemical probing of microbial communities in a basalt-hosted hot spring at Kverkfjöll volcano, Iceland, *Geobiology* 16, 507-521, 2018.
- 5462 Dhaliwal, J. K., J. M. D. Day, C. A. Corder, K. T. Tait, K. Marti, N. Assayag, P. Cartigny, D. Rumble III, and L. A. Taylor, Early metal-silicate differentiation during planetesimal formation revealed by acapulcoite and lodranite meteorites, *Geochim. Cosmochim. Acta* 216, 115-140, 2017.
- 5632 Dimitrievska, M., V. Stavila, A. V. Soloninin, R. V. Skoryunov, O. A. Babanova, H. Wu, W. Zhou, W. S. Tang, A. Faraone, J. D. Tarver, B. A. Trump, A. V. Skripov, and T. J. Udovic, Nature of decahydro-closo-decaborate anion reorientations in an ordered alkali-metal salt: Rb₂B₁₀H₁₀, *J. Phys. Chem. C* 122, 15198-15207, 2018.
- 5523 Du, Z., C. Jackson, N. Bennett, P. Driscoll, J. Deng, K. K. M. Lee, E. Greenberg, V. B. Prakapenka, and Y. Fei, Insufficient energy from MgO exsolution to power early geodynamo, *Geophys. Res. Lett.* 44, 11376-11381, doi:10.1002/2017GL075283, 2017.
- Duncan, M. S., N. C. Schmerr, C. M. Bertka, and Y. Fei, Extending the solidus for a model iron-rich martian mantle composition to 25 GPa, *Geophys. Res. Lett.*, in press.
- 5662 Dygert, N., C. R. M. Jackson, M. A. Hesse, M. M. Tremblay, D. L. Shuster, and J. T. Gu, Plate tectonic cycling modulates Earth's ³He/²²Ne ratio, *Earth Planet. Sci. Lett.* 498, 309-321, 2018.
- 5512 Dygert, N., J.-F. Lin, E. W. Marshall, Y. Kono, and J. E. Gardner, A low viscosity lunar magma ocean forms a stratified anorthitic flotation crust with mafic poor and rich units, *Geophys. Res. Lett.* 44, 11282-11291, doi:10.1002/2017GL075703, 2017.
- 5602 Eigenbrode, J. L., R. E. Summons, A. Steele, C. Freissinet, M. Millan, R. Navarro-González, B. Sutter, A. C. McAdam, H. B. Franz, D. P. Glavin, P. D. Archer, Jr., P. R. Mahaffy, P. G. Conrad, J. A. Hurowitz, J. P. Grotzinger, S. Gupta, D. W. Ming, D. Y. Sumner, C. Szopa, C. Malespin, A. Buch, and P. Coll, Organic matter preserved in 3-billion-year-old mudstones at Gale crater, Mars, *Science* 360, 1096-1100, 2018.
- Elardo, S. M., The origin and rationale of lunar magma ocean theory, in *Encyclopedia of Lunar Science*, B. Cudnik, ed., Springer, in press.
- 5491 Eldridge, D. L., B. O. Mysen, and G. D. Cody, Experimental estimation of the bisulfite isomer quotient as a function of temperature: implications for sulfur isotope fractionations in aqueous sulfite solutions, *Geochim. Cosmochim. Acta* 220, 309-328, 2018.

- 5635 Escanhoela, C. A., Jr., G. Fabbris, F. Sun, C. Park, J. Gopalakrishnan, K. Ramesha, E. Granado, N. M. Souza-Neto, M. van Veenendaal, and D. Haskel, Tuning magnetic coercivity with external pressure in iron-rhenium based ferrimagnetic double perovskites, *Phys. Rev. B* 98, 054402, 2018.
- 5506 Estrada, C. F., A. K. Adcock, D. A. Sverjensky, and R. M. Hazen, Cooperative and inhibited adsorption of D-ribose onto brucite [Mg(OH)₂] with divalent cations, *ACS Earth Space Chem.* 1, 591-600, 2017.
- 5603 Etiopé, G., E. Ifandi, M. Nazzari, M. Procesi, B. Tsikouras, G. Ventura, A. Steele, R. Tardini, and P. Szatmari, Widespread abiotic methane in chromitites, *Sci. Rep.* 8, 8728, 2018.
- 5626 Fan, M., Y. Zheng, A. Li, K. Li, H. Liu, and Z.-A. Qiao, Janus CoN/Co cocatalyst in porous N-doped carbon: toward enhanced catalytic activity for hydrogen evolution, *Catal. Sci. Technol.* 8, 3695-3703, 2018.
- 5581 Fischer, R. A., A. J. Campbell, B. A. Chidester, D. M. Reaman, E. C. Thompson, J. S. Pigott, V. B. Prakapenka, and J. S. Smith, Equations of state and phase boundary for stishovite and CaCl₂-type SiO₂, *Am. Mineral.* 103, 792-802, 2018.
- 5612 Fornaro, T., A. Boosman, J. R. Brucato, I. Loes ten Kate, S. Siljeström, G. Poggiali, A. Steele, and R. M. Hazen, UV irradiation of biomarkers adsorbed on minerals under Martian-like conditions: hints for life detection on Mars, *Icarus* 313, 38-60, 2018.
- 5630 Fornaro, T., J. R. Brucato, C. Feuille, D. A. Sverjensky, R. M. Hazen, R. Brunetto, M. D'Amore, and V. Barone, Binding of nucleic acid components to the serpentinite-hosted hydrothermal mineral brucite, *Astrobiology* 18, 989-1007, 2018.
- 5659 Fries, M., and A. Steele, Raman spectroscopy and confocal Raman imaging in mineralogy and petrography, in *Confocal Raman Microscopy*, 2nd ed., J. Toporski, J. Dieing, and O. Hollricher, eds., pp. 209-236, Springer, Cham, Switzerland, 2018.
- 5476 Gaaney, S. R., E. M. Hausrath, C. T. Adcock, O. Tschauner, J. A. Hurowitz, B. L. Ehlmann, Y. Xiao, and C. L. Bartlett, Clay mineral formation under oxidized conditions and implications for paleoenvironments and organic preservation on Mars, *Nature Commun.* 8, 1230, 2017.
- 5580 Gavriliuk, A. G., V. V. Struzhkin, A. A. Mironovich, I. S. Lyubutin, I. A. Troyan, P. Chow, and Y. Xiao, Spin crossover and the magnetic *P-T* phase diagram of hematite at high hydrostatic pressures and cryogenic temperatures, *JETP Lett.* 107, 247-253, 2018.
- 5511 Gavryushkin, P. N., N. S. Martirosyan, T. M. Inerbaev, Z. I. Popov, S. V. Rashchenko, A. Y. Likhacheva, S. S. Lobanov, A. F. Goncharov, V. B. Prakapenka, and K. D. Litasov, Aragonite-II and CaCO₃-VII: new high-pressure, high-temperature polymorphs of CaCO₃, *Cryst. Growth Des.* 17, 6291-6296, 2017.
- 5516 Geballe, Z. M., H. Liu, A. K. Mishra, M. Ahart, M. Somayazulu, Y. Meng, M. Baldini, and R. J. Hemley, Synthesis and stability of lanthanum superhydrides, *Angew. Chem. Int. Ed.* 57, 688-692, 2018.
- 5486 Gleason, A. E., C. A. Bolme, H. J. Lee, B. Nagler, E. Galtier, R. G. Kraus, R. Sandberg, W. Yang, F. Langenhorst, and W. L. Mao, Time-resolved diffraction of shock-released SiO₂ and diaplectic glass formation, *Nature Commun.* 8, 1481, 2017.

- 5465 Goldberger, D., E. Evlyukhin, P. Cifligu, Y. Wang, and M. Pravica, Measurement of the energy and high-pressure dependence of X-ray-induced decomposition of crystalline strontium oxalate, *J. Phys. Chem. A* 121, 7108-7113, 2017.
- 5637 Gomi, H., Y. Fei, and T. Yoshino, The effects of ferromagnetism and interstitial hydrogen on the equation of states of hcp and dhcp FeH_x: implications for the Earth's inner core age, *Am. Mineral.* 103, 1271-1281, 2018.
- 5463 Goncharov, A. F., and Z. M. Geballe, Comment on "Evidence of a first-order phase transition to metallic hydrogen", *Phys. Rev. B* 96, 157101, 2017.
- 5500 Grzelak, A., J. Gawraczyński, T. Jaroń, D. Kurzydłowski, A. Budzianowski, Z. Mazej, P. J. Leszczyński, V. B. Prakapenka, M. Derzsi, V. V. Struzhkin, and W. Grochala, High-pressure behavior of silver fluorides up to 40 GPa, *Inorg. Chem.* 56, 14651-14661, 2017.
- 5481 Grzelak, A., J. Gawraczyński, T. Jaroń, D. Kurzydłowski, Z. Mazej, P. J. Leszczyński, V. B. Prakapenka, M. Derzsi, V. V. Struzhkin, and W. Grochala, Metal fluoride nanotubes featuring square-planar building blocks in a high-pressure polymorph of AgF₂, *Dalton Trans.* 46, 14742-14745, 2017.
- 5606 Guerette, M., M. R. Ackerson, J. Thomas, E. B. Watson, and L. Huang, Thermally induced amorphous to amorphous transition in hot-compressed silica glass, *J. Chem. Phys.* 148, 194501, 2018.
- 5653 Guerette, M., T. A. Strobel, H. Zhang, S. Juhl, N. Alem, K. Lokshin, L. Krishna, and P. C. Taylor, Advanced synthesis of Na₄Si₂₄, *MRS Adv.* 3, 1427-1433, 2018.
- 5456 Guguchia, Z., T. Adachi, Z. Shermadini, T. Ohgi, J. Chang, E. S. Bozin, F. von Rohr, A. M. dos Santos, J. J. Molaison, R. Boehler, Y. Koike, A. R. Wieteska, B. A. Frandsen, E. Morenzoni, A. Amato, S. J. L. Billinge, Y. J. Uemura, and R. Khasanov, Pressure tuning of structure, superconductivity, and novel magnetic order in the Ce-underdoped electron-doped cuprate T'-Pr_{1.3-x}La_{0.7}Ce_xCuO₄ (x = 0.1), *Phys. Rev. B* 96, 094515, 2017.
- 5487 Haberl, B., S. Dissanayake, F. Ye, L. L. Daemen, Y. Cheng, C. W. Li, A.-J. Ramirez-Cuesta, M. Matsuda, J. J. Molaison, and R. Boehler, Wide-angle diamond cell for neutron scattering, *High Pressure Res.* 37, 495-506, 2017.
- 5566 Ham, K. J., Y. Kono, P. J. Patel, S. M. Kilczewski, and Y. K. Vohra, Pressure induced densification and compression in a reprocessed borosilicate glass, *Materials* 11, 114, 2018.
- 5536 Han, F., D. Wang, Y. Wang, N. N. Li, J.-K. Bao, B. Li, A. S. Botana, Y. Xiao, P. Chow, D. Y. Chung, J. Chen, X. Wan, M. G. Kanatzidis, W. Yang, and H. K. Mao, Spin quenching assisted by a strongly anisotropic compression behavior in MnP, *New J. Phys.* 20, 023012, 2018.
- 5483 Hazen, R. M., Chance, necessity, and the origins of life: a physical sciences perspective, *Phil. Trans. Roy. Soc. London A* 375, 20160353, 2017.
- 5504 Hazen, R. M., *Breve storia della Terra [The Story of Earth] (in Italian)*, Il Saggiatore, Milan, 430 pp., 2017.
- 5584 Hazen, R. M., Titan mineralogy: a window on organic mineral evolution, *Am. Mineral.* 103, 341-342, 2018.

- ____ Hazen, R. M., *Symphony in C: Carbon and the Emergence of Almost Everything*, W. W. Norton & Co., New York, in press.
- 5623 Helffrich, G., A. Shahar, and K. Hirose, Isotopic signature of core-derived SiO₂, *Am. Mineral.* 103, 1161-1164, 2018.
- 5469 Hou, B., T. Kim, S. Kim, C. Park, C. B. Bahn, J. Kim, S. Hong, and J. H. Kim, Zinc adsorption and hydration structures at yttria-stabilized zirconia surfaces, *J. Phys. Chem. C* 121, 21305-21310, 2017.
- 5610 Hu, M., X. Dong, Y. Wu, L. Liu, Z. Zhao, X.-F. Zhou, T. A. Strobel, G. Gao, Y. Tian, and J. He, Low-energy 3D sp² carbons with versatile properties beyond graphite and graphene, *Dalton Trans.* 47, 6233-6239, 2018.
- 5591 Hu, X., G. Yang, B. Zhao, P. Li, J. Yang, C. Leng, H. Liu, H. Huang, and Y. Fei, Shock compression behavior of a mixture of cubic and hexagonal boron nitride, *J. Appl. Phys.* 123, 175903, 2018.
- 5593 Huang, H., H. Jang, M. Fujita, T. Nishizaki, Y. Lin, J. Wang, J. Ying, J. S. Smith, C. Kenney-Benson, G. Shen, W. L. Mao, C.-C. Kao, Y.-J. Liu, and J.-S. Lee, Modification of structural disorder by hydrostatic pressure in the superconducting cuprate YBa₂Cu₃O_{6.73}, *Phys. Rev. B* 97, 174508 2018.
- 5652 Huang, H., C. Leng, Q. Wang, G. Yang, X. Hu, Y. Wu, X. Liu, and Y. Fei, Measurements of sound velocity of liquid Fe-11.8 wt % S up to 211.4 GPa and 6,150 K, *J. Geophys. Res. Solid Earth* 123, 4730-4739, doi:10.1029/2017JB015269, 2018.
- 5579 Huang, H.-T., L. Zhu, M. D. Ward, B. L. Chaloux, R. Hrubiak, A. Epshteyn, J. V. Badding, and T. A. Strobel, Surprising stability of cubane under extreme pressure, *J. Phys. Chem. Lett.* 9, 2031-2037, 2018.
- 5589 Hudspeth, J., C. Sanloup, and Y. Kono, Properties of molten CaCO₃ at high pressure, *Geochem. Perspect. Lett.* 7, 17-21, 2018.
- 5492 Hwang, H., D. Seoung, Y. Lee, Z. Liu, H.-P. Liermann, H. Cynn, T. Vogt, C.-C. Kao, and H. K. Mao, A role for subducted super-hydrated kaolinite in Earth's deep water cycle, *Nature Geosci.* 10, 947-953, 2017.
- 5575 Ivanov, A. V., S. B. Mukasa, V. S. Kamenetsky, M. Ackerson, E. I. Demonterova, B. G. Pokrovsky, N. V. Vladykin, M. V. Kolesnichenko, K. D. Litasov, and D. A. Zedgenizov, Volatile concentrations in olivine-hosted melt inclusions from meimechite and melanephelinite lavas of the Siberian Traps Large Igneous Province: evidence for flux-related high-Ti, high-Mg magmatism, *Chem. Geol.* 483, 442-462, 2018.
- 5534 Jackson, C. R. M., N. R. Bennett, Z. Du, E. Cottrell, and Y. Fei, Early episodes of high-pressure core formation preserved in plume mantle, *Nature* 553, 491-495, 2018.
- 5628 Jiang, S., N. Holtgrewe, S. S. Lobanov, F. Su, M. F. Mahmood, R. S. McWilliams, and A. F. Goncharov, Metallization and molecular dissociation of dense fluid nitrogen, *Nature Commun.* 9, 2624, 2018.
- 5514 Kalita, P., P. Specht, S. Root, N. Sinclair, A. Schuman, M. White, A. L. Cornelius, J. Smith, and S. Sinogeikin, Direct observations of a dynamically driven phase transition with *in situ* x-ray diffraction in a simple ionic crystal, *Phys. Rev. Lett.* 119, 255701, 2017.

- 5660 Kearney, J. S. C., M. Graužinytė, D. Smith, D. Sneed, C. Childs, J. Hinton, C. Park, J. S. Smith, E. Kim, S. D. S. Fitch, A. L. Hector, C. J. Pickard, J. A. Flores-Livas, and A. Salamat, Pressure-tuneable visible-range band gap in the ionic spinel tin nitride, *Angew. Chem. Int. Ed.* 57, 11623-11628, 2018.
- 5571 Keefer, D. W., H. Gou, Q. Wang, A. Purdy, A. Epshteyn, S. J. Juhl, G. D. Cody, J. Badding, and T. A. Strobel, Tetracyanomethane under pressure: extended CN polymers from precursors with built-in sp^3 centers, *J. Phys. Chem. A* 122, 2858-2863, 2018.
- 5540 Kim, E. J., Y. Fei, and S. K. Lee, Effect of pressure on the short-range structure and speciation of carbon in alkali silicate and aluminosilicate glasses and melts at high pressure up to 8 GPa: ^{13}C , ^{27}Al , ^{17}O and ^{29}Si solid-state NMR study, *Geochim. Cosmochim. Acta* 224, 327-343, 2018.
- 5647 Kolodziej, T., Y. Shvyd'ko, D. Shu, S. Kearney, S. Stoupin, W. Liu, T. Gog, D. A. Walko, J. Wang, A. Said, T. Roberts, K. Goetze, M. Baldini, W. Yang, T. Fister, V. Blank, S. Terentyev, and K.-J. Kim, High Bragg reflectivity of diamond crystals exposed to multi-kW mm^{-2} X-ray beams, *J. Synchrotron Rad.* 25, 1022-1029, 2018.
- 5529 Kono, Y., Viscosity measurement, in *Magma Under Pressure*, Y. Kono and C. Sanloup, eds., pp. 261-280, Elsevier, Amsterdam, 2018.
- 5528 Kono, Y., and C. Sanloup, eds., *Magma Under Pressure: Advances in High-Pressure Experiments on Structure and Properties of Melts*, Elsevier, Amsterdam, 497 pp., 2018.
- 5544 Kono, Y., Y. Shibazaki, C. Kenney-Benson, Y. Wang, and G. Shen, Pressure-induced structural change in $MgSiO_3$ glass at pressures near the Earth's core-mantle boundary, *Proc. Natl. Acad. Sci. USA* 115, 1742-1747, 2018.
- 5656 Krivovichev, S. V., V. G. Krivovichev, and R. M. Hazen, Structural and chemical complexity of minerals: correlations and time evolution, *Eur. J. Mineral.* 30, 231-236, 2018.
- 5472 Kronenberg, A. K., H. F. B. Hasnan, C. W. Holyoke III, R. D. Law, Z. Liu, and J. B. Thomas, Synchrotron FTIR imaging of OH in quartz mylonites, *Solid Earth* 8, 1025-1045, 2017.
- Kruglov, I. A., A. G. Kvashnin, A. F. Goncharov, A. R. Oganov, S. Lobanov, N. Holtgrewe, S. Jiang, V. Prakapenka, E. Greenberg, and A. V. Yanilkin, Uranium polyhydrides at moderate pressures: prediction, synthesis, and expected superconductivity, *Sci. Adv.*, in press.
- 5663 Kurakevych, O. O., Y. Le Godec, T. A. Strobel, D. Y. Kim, W. A. Crichton, and J. Guignard, Exploring silicon allotropy and chemistry by high pressure – high temperature conditions, *J. Phys.: Conf. Ser.* 950, 042049, 2017.
- 5530 Lai, X., B. Chen, J. Wang, Y. Kono, and F. Zhu, Polyamorphic transformations in Fe-Ni-C liquids: implications for chemical evolution of terrestrial planets, *J. Geophys. Res. Solid Earth* 122, 9745-9754, doi:10.1002/2017JB014835, 2017.
- 5633 Lavina, B., R. T. Downs, and S. Sinogeikin, The structure of ferroselite, $FeSe_2$, at pressures up to 46 GPa and temperatures down to 50 K: a single-crystal micro-diffraction analysis, *Crystals* 8, 289, 2018.

- 5565 Lavina, B., E. Kim, H. Cynn, P. F. Weck, K. Seaborg, E. Siska, Y. Meng, and W. Evans, Phosphorus dimerization in gallium phosphide at high pressure, *Inorg. Chem.* **57**, 2432-2437, 2018.
- 5604 Lee, S. K., Y.-H. Kim, P. Chow, Y. Xiao, C. Ji, and G. Shen, Amorphous boron oxide at megabar pressures via inelastic X-ray scattering, *Proc. Natl. Acad. Sci. USA* **115**, 5855-5860, 2018.
- 5543 Li, B., C. Ji, W. Yang, J. Wang, K. Yang, R. Xu, W. Liu, Z. Cai, J. Chen, and H. K. Mao, Diamond anvil cell behavior up to 4 Mbar, *Proc. Natl. Acad. Sci. USA* **115**, 1713-1717, 2018.
- 5541 Li, C., Y. Wu, B. Deng, Y. Xie, Q. Guo, S. J. Yuan, X. Chen, M. Bhuiyan, Z. Wu, K. Watanabe, T. Taniguchi, H. Wang, J. J. Cha, M. Snure, Y. Fei, and F. Xia, Synthesis of crystalline black phosphorus thin film on sapphire, *Adv. Mater.* **30**, 1703748, 2018.
- 5595 Li, Q., J. Wang, and H. Liu, Theoretical research on novel orthorhombic tungsten dinitride from first principles calculations, *RSC Adv.* **8**, 9272-9276, 2018.
- 5498 Li, Q., Y. Wang, W. Pan, W. Yang, B. Zou, J. Tang, and Z. Quan, High-pressure band-gap engineering in lead-free Cs₂AgBiBr₆ double perovskite, *Angew. Chem. Int. Ed.* **56**, 15969-15973, 2017.
- 5494 Li, X., M. Baldini, T. Wang, B. Chen, E.-S. Xu, B. Vermilyea, V. H. Crespi, R. Hoffmann, J. J. Molaison, C. A. Tulk, M. Guthrie, S. Sinogeikin, and J. V. Badding, Mechanochemical synthesis of carbon nanothread single crystals, *J. Am. Chem. Soc.* **139**, 16343-16349, 2017.
- 5582 Li, X., T. Wang, P. Duan, M. Baldini, H.-T. Huang, B. Chen, S. J. Juhl, D. Koeplinger, V. H. Crespi, K. Schmidt-Rohr, R. Hoffmann, N. Alem, M. Guthrie, X. Zhang, and J. V. Badding, Carbon nitride nanothread crystals derived from pyridine, *J. Am. Chem. Soc.* **140**, 4969-4972, 2018.
- 5545 Li, Y., X. Feng, H. Liu, J. Hao, S. A. T. Redfern, W. Lei, D. Liu, and Y. Ma, Route to high-energy density polymeric nitrogen t-N via He-N compounds, *Nature Commun.* **9**, 722, 2018.
- 5509 Li, Y., Y. Zhou, Z. Guo, F. Han, X. Chen, P. Lu, X. Wang, C. An, Y. Zhou, J. Xing, G. Du, X. Zhu, H. Yang, J. Sun, Z. Yang, W. Yang, H. K. Mao, Y. Zhang, and H.-H. Wen, Concurrence of superconductivity and structure transition in Weyl semimetal TaP under pressure, *npj Quantum Mater.* **2**, 66, 2017.
- 5550 Lin, C., J. S. Smith, S. V. Sinogeikin, and G. Shen, Experimental evidence of low-density liquid water upon rapid decompression, *Proc. Natl. Acad. Sci. USA* **115**, 2010-2015, 2018.
- 5464 Lin, C., X. Yong, J. S. Tse, J. S. Smith, S. V. Sinogeikin, C. Kenney-Benson, and G. Shen, Kinetically controlled two-step amorphization and amorphous-amorphous transition in ice, *Phys. Rev. Lett.* **119**, 135701, 2017.
- 5478 Lipp, M. J., Z. Jenei, H. Cynn, Y. Kono, C. Park, C. Kenney-Benson, and W. J. Evans, Anomalous elastic properties across the γ to α volume collapse in cerium, *Nature Commun.* **8**, 1198, 2017.

- 5625 Liu, C., A. Eleish, G. Hystad, J. J. Golden, R. T. Downs, S. M. Morrison, D. R. Hummer, J. P. Ralph, P. Fox, and R. M. Hazen, Analysis and visualization of vanadium mineral diversity and distribution, *Am. Mineral.* 103, 1080-1086, 2018.
- 5497 Liu, C., A. H. Knoll, and R. M. Hazen, Geochemical and mineralogical evidence that Rodinian assembly was unique, *Nature Commun.* 8, 1950, 2017.
- 5600 Liu, C., Z. Wang, and F. A. Macdonald, Sr and Mg isotope geochemistry of the basal Ediacaran cap limestone sequence of Mongolia: implications for carbonate diagenesis, mixing of glacial meltwaters, and seawater chemistry in the aftermath of Snowball Earth, *Chem. Geol.* 491, 1-13, 2018.
- 5639 Liu, G., J. Gong, L. Kong, R. D. Schaller, Q. Hu, Z. Liu, S. Yan, W. Yang, C. C. Stoumpos, M. G. Kanatzidis, H. K. Mao, and T. Xu, Isothermal pressure-derived metastable states in 2D hybrid perovskites showing enduring bandgap narrowing, *Proc. Natl. Acad. Sci. USA* 115, 8076-8081, 2018.
- 5490 Liu, G., L. Kong, P. Guo, C. C. Stoumpos, Q. Hu, Z. Liu, Z. Cai, D. J. Gosztola, H. K. Mao, M. G. Kanatzidis, and R. D. Schaller, Two regimes of bandgap red shift and partial ambient retention in pressure-treated two-dimensional perovskites, *ACS Energy Lett.* 2, 2518-2524, 2017.
- 5548 Liu, G., and H. Liu, First principles study of LiAlO_2 : new dense monoclinic phase under high pressure, *J. Phys.: Condens. Matter* 30, 115401, 2018.
- 5578 Liu, G., H. Liu, X. Feng, and S. A. T. Redfern, High-pressure phase transitions of nitinol NiTi to a semiconductor with an unusual topological structure, *Phys. Rev. B* 97, 140104(R), 2018.
- 5568 Liu, J., S. M. Dorfman, F. Zhu, J. Li, Y. Wang, D. Zhang, Y. Xiao, W. Bi, and E. Alp, Valence and spin states of iron are invisible in Earth's lower mantle, *Nature Commun.* 9, 1284, 2018.
- 5493 Liu, J., Q. Hu, D. Y. Kim, Z. Wu, W. Wang, Y. Xiao, P. Chow, Y. Meng, V. B. Prakapenka, H. K. Mao, and W. L. Mao, Hydrogen-bearing iron peroxide and the origin of ultralow-velocity zones, *Nature* 551, 494-497, 2017.
- 5611 Liu, L., X. Liu, X. Bao, Q. He, W. Yan, Y. Ma, M. He, R. Tao, and R. Zou, Si-disordering in MgAl_2O_4 -spinel under high P - T conditions, with implications for Si-Mg disorder in Mg_2SiO_4 -ringwoodite, *Minerals* 8, 210, 2018.
- 5501 Liu, N., A. Steele, L. R. Nittler, R. M. Stroud, B. T. De Gregorio, C. M. O'D. Alexander, and J. Wang, Coordinated EDX and micro-Raman analysis of presolar silicon carbide: a novel, nondestructive method to identify rare subgroup SiC, *Meteorit. Planet. Sci.* 52, 2550-2569, 2017.
- 5485 Liu, S., and R. E. Cohen, Origin of negative longitudinal piezoelectric effect, *Phys. Rev. Lett.* 119, 207601, 2017.
- 5638 Lobanov, S. S., J. A. Daly, A. F. Goncharov, X. Chan, S. K. Ghose, H. Zhong, L. Ehm, T. Kim, and J. B. Parise, Iodine in metal-organic frameworks at high pressure, *J. Phys. Chem. A* 122, 6109-6117, 2018.
- 5488 Lobanov, S. S., N. Holtgrewe, J.-F. Lin, and A. F. Goncharov, Radiative conductivity and abundance of post-perovskite in the lowermost mantle, *Earth Planet. Sci. Lett.* 479, 43-49, 2017.

- 5634 Lu, S., W. Ma, G. Jin, Q. Zeng, X. Feng, T. Feng, H. Liu, S. Meng, S. A. T. Redfern, and B. Yang, A combined experimental and theoretical investigation of donor and acceptor interface in efficient aqueous-processed polymer/nanocrystal hybrid solar cells, *Sci. China Chem.* 61, 437-443, 2018.
- 5449 Lunning, N. G., K. G. Gardner-Vandy, E. S. Sosa, T. J. McCoy, E. S. Bullock, and C. M. Corrigan, Partial melting of oxidized planetesimals: an experimental study to test the formation of oligoclase-rich achondrites Graves Nunataks 06128 and 06129, *Geochim. Cosmochim. Acta* 214, 73-85, 2017.
- 5495 Ma, X., D. Hummer, J. J. Golden, P. A. Fox, R. M. Hazen, S. M. Morrison, R. T. Downs, B. L. Madhikarmi, C. Wang, and M. B. Meyer, Using visual exploratory data analysis to facilitate collaboration and hypothesis generation in cross-disciplinary research, *ISPRS Int. J. Geo-Info.* 6, 368, 2017.
- 5477 Ma, Y., D. Duan, Z. Shao, H. Yu, H. Liu, F. Tian, X. Huang, D. Li, B. Liu, and T. Cui, Divergent synthesis routes and superconductivity of ternary hydride MgSiH₆ at high pressure, *Phys. Rev. B* 96, 144518, 2017.
- 5484 Mamajanov, I., and G. D. Cody, Protoenzymes: the case of hyperbranched polyesters, *Phil. Trans. Roy. Soc. London A* 375, 20160357, 2017.
- 5658 Mandal, S., R. E. Cohen, and K. Haule, Valence and spin fluctuations in Mn-doped ferroelectric BaTiO₃, *Phys. Rev. B* 98, 075155, 2018.
- 5562 Mao, H. K., X.-J. Chen, Y. Ding, B. Li, and L. Wang, Solids, liquids, and gases under high pressure, *Rev. Mod. Phys.* 90, 015007, 2018.
- 5538 Mao, H. K., Q. Hu, L. Yang, J. Liu, D. Y. Kim, Y. Meng, L. Zhang, V. B. Prakapenka, W. Yang, and W. L. Mao, When water meets iron at Earth's core-mantle boundary, *Natl. Sci. Rev.* 4, 870-878, 2017.
- 5496 McCubbin, F. M., K. E. V. Kaaden, P. N. Peplowski, A. S. Bell, L. R. Nittler, J. W. Boyce, L. G. Evans, L. P. Keller, S. M. Elardo, and T. J. McCoy, A low O/Si ratio on the surface of Mercury: evidence for silicon smelting? *J. Geophys. Res. Planets* 122, 2053-2076, doi:10.1002/2017JE005367, 2017.
- 5636 McCubbin, F. M., B. L. Phillips, C. T. Adcock, K. T. Tait, A. Steele, J. S. Vaughn, M. D. Fries, V. Atudorei, K. E. Vander Kaaden, and E. M. Hausrath, Discreditation of bobdownsite and the establishment of criteria for the identification of minerals with essential monofluorophosphate (PO₃F²⁻), *Am. Mineral.* 103, 1319-1328, 2018.
- 5555 Meyer, M. B., G. R. Ganis, J. M. Wittmer, J. A. Zalasiewicz, and K. De Baets, A Late Ordovician planktic assemblage with exceptionally preserved soft-bodied problematica from the Martinsburg Formation, Pennsylvania, *PALAIOS* 33, 36-46, 2018.
- 5657 Mishra, A. K., T. Muramatsu, H. Liu, Z. M. Geballe, M. Somayazulu, M. Ahart, M. Baldini, Y. Meng, E. Zurek, and R. J. Hemley, New calcium hydrides with mixed atomic and molecular hydrogen, *J. Phys. Chem. C* 122, 19370-19378, 2018.
- 5577 Moore, E. K., J. Hao, A. Prabhu, H. Zhong, B. I. Jelen, M. Meyer, R. M. Hazen, and P. G. Falkowski, Geological and chemical factors that impacted the biological utilization of cobalt in the Archean eon, *J. Geophys. Res. Biogeosci.* 123, 743-759, doi:10.1002/2017JG004067, 2018.

- 5615 Morrison, S. M., R. T. Downs, D. F. Blake, A. Prabhu, A. Eleish, D. T. Vaniman, D. W. Ming, E. B. Rampe, R. M. Hazen, C. N. Achilles, A. H. Treiman, A. S. Yen, R. V. Morris, T. F. Bristow, S. J. Chipera, P. C. Sarrazin, K. V. Fendrich, J. M. Morookian, J. D. Farmer, D. J. Des Marais, and P. I. Craig, Relationships between unit-cell parameters and compositions for rock-forming minerals on Earth, Mars, and other extraterrestrial bodies, *Am. Mineral.* 103, 848-856, 2018.
- 5614 Morrison, S. M., R. T. Downs, D. F. Blake, D. T. Vaniman, D. W. Ming, R. M. Hazen, A. H. Treiman, C. N. Achilles, A. S. Yen, R. V. Morris, E. B. Rampe, T. F. Bristow, S. J. Chipera, P. C. Sarrazin, R. Gellert, K. V. Fendrich, J. M. Morookian, J. D. Farmer, D. J. Des Marais, and P. I. Craig, Crystal chemistry of martian minerals from Bradbury Landing through Naukluft Plateau, Gale crater, Mars, *Am. Mineral.* 103, 857-871, 2018.
- 5598 Muscente, A. D., A. Prabhu, H. Zhong, A. Eleish, M. Meyer, P. Fox, R. Hazen, and A. H. Knoll, Quantifying ecological impacts of mass extinctions with network analysis of fossil communities, *Proc. Natl. Acad. Sci. USA* 115, 5217-5222, 2018.
- 5526 Mysen, B., Mass transfer in the Earth's interior: fluid-melt interaction in aluminosilicate-C-O-H-N systems at high pressure and temperature under oxidizing conditions, *Prog. Earth Planet. Sci.* 5, 6, 2018.
- 5650 Mysen, B., Silicate solution, cation properties and mass transfer by aqueous fluid in the Earth's interior, *Prog. Earth Planet. Sci.* 5, 40, 2018.
- Mysen, B., Solution mechanisms of COHN fluids in melts to upper mantle temperature, pressure, and redox conditions, *Am. Mineral.*, in press.
- Mysen, B. O., Solubility of volatiles, in *Encyclopedia of Glass Science. Technology, History and Culture*, P. Richet, ed., Wiley-Interscience, in press.
- Mysen, B. O., Structure of chemically complex silicate systems, in *Encyclopedia of Glass Science. Technology, History and Culture*, P. Richet, ed., Wiley-Interscience, in press.
- 5609 Ni, S., F. Guo, D. Wang, G. Liu, Z. Xu, L. Kong, J. Wang, S. Jiao, Y. Zhang, Q. Yu, J. Luo, B. Wang, Z. Li, C. Zhang, and L. Zhao, Effect of MgO surface modification on the TiO₂ nanowires electrode for self-powered UV photodetectors, *ACS Sustainable Chem. Eng.* 6, 7265-7272, 2018.
- 5553 Park, S., D. R. Rittman, C. L. Tracy, K. W. Chapman, F. Zhang, C. Park, S. N. Tkachev, E. O'Quinn, J. Shamblin, M. Lang, W. L. Mao, and R. C. Ewing, A₂TiO₅ (A = Dy, Gd, Er, Yb) at high pressure, *Inorg. Chem.* 57, 2269-2277, 2018.
- 5517 Park, S., C. L. Tracy, F. Zhang, R. I. Palomares, C. Park, C. Trautmann, M. Lang, W. L. Mao, and R. C. Ewing, Swift-heavy ion irradiation response and annealing behavior of A₂TiO₅ (A = Nd, Gd, and Yb), *J. Solid State Chem.* 258, 108-116, 2018.
- 5574 Park, S., C. L. Tracy, F. Zhang, C. Park, C. Trautmann, S. N. Tkachev, M. Lang, W. L. Mao, and R. C. Ewing, Radiation-induced disorder in compressed lanthanide zirconates, *Phys. Chem. Chem. Phys.* 20, 6187-6197, 2018.
- 5586 Phelan, D., F. Han, A. Lopez-Bezanilla, M. J. Krogstad, Y. Gim, Y. Rong, J. Zhang, D. Parshall, H. Zheng, S. L. Cooper, M. Feygenson, W. Yang, and Y.-S. Chen, Structural properties of barium stannate, *J. Solid State Chem.* 262, 142-148, 2018.

- Potenti, S., P. Manini, T. Fornaro, G. Poggiali, O. Crescenzi, A. Napolitano, J. R. Brucato, V. Barone, and M. d'Ischia, Solid state photochemistry of hydroxylated naphthalenes on minerals: probing polycyclic aromatic hydrocarbon transformation pathways under astrochemically-relevant conditions, *ACS Earth Space Chem.*, in press.
- 5466 Powderly, K. M., S. M. Clarke, M. Amsler, C. Wolverton, C. D. Malliakas, Y. Meng, S. D. Jacobsen, and D. E. Freedman, High-pressure discovery of β -NiBi, *Chem. Commun.* 53, 11241-11244, 2017.
- 5643 Pradhan, D. K., S. Kumari, D. K. Pradhan, A. Kumar, R. S. Katiyar, and R. E. Cohen, Effect of substrate temperature on structural and magnetic properties of c-axis oriented spinel ferrite $\text{Ni}_{0.65}\text{Zn}_{0.35}\text{Fe}_2\text{O}_4$ (NZFO) thin films, *J. Alloys Compounds* 766, 1074-1079, 2018.
- 5533 Qi, Y., S. Liu, A. M. Lindenberg, and A. M. Rappe, Ultrafast electric field pulse control of giant temperature change in ferroelectrics, *Phys. Rev. Lett.* 120, 055901, 2018.
- 5459 Raju, S. V., R. Hrubciak, V. Drozd, and S. Saxena, Laser-assisted processing of Ni-Al-Co-Ti under high pressure, *Mater. Manuf. Processes* 32, 1606-1611, 2017.
- Rampe, E. B., M. Lapotre, T. F. Bristow, R. E. Arvidson, R. V. Morris, C. N. Achilles, C. Weitz, D. F. Blake, D. W. Ming, S. M. Morrison, D. T. Vaniman, S. J. Chipera, R. T. Downs, J. P. Grotzinger, R. M. Hazen, T. S. Peretyazhko, B. Sutter, V. Tu, A. S. Yen, B. Horgan, N. Castle, P. I. Craig, D. J. Des Marais, J. Farmer, R. Gellert, A. C. McAdam, J. M. Morookian, P. C. Sarrazin, and A. H. Treiman, Mineralogy of the Bagnold Dunes sands, Gale crater, as observed in situ and from orbit, *Geophys. Res. Lett.*, in press.
- 5479 Ransom, T. C., M. Ahart, R. J. Hemley, and C. M. Roland, Vitrification and density scaling of polyurea at pressures up to 6 GPa, *Macromolecules* 50, 8274-8278, 2017.
- 5558 Rumble, D., The third isotope of the third element on the third planet, *Am. Mineral.* 103, 1-10, 2018.
- Rumble, D., J. L. Ash, P.-L. Wang, L.-H. Lin, Y.-T. Lin, and T.-H. Tu, Resolved measurements of $^{13}\text{CDH}_3$ and $^{12}\text{CD}_2\text{H}_2$ from a mud volcano in Taiwan, *J. Asian Earth Sci.*, in press.
- 5450 Ruzicka, A. M., M. Hutson, J. M. Friedrich, M. L. Rivers, M. K. Weisberg, D. S. Ebel, K. Ziegler, D. Rumble III, and A. A. Dolan, Petrogenesis of Miller Range 07273, a new type of anomalous melt breccia: implications for impact effects on the H chondrite asteroid, *Meteorit. Planet. Sci.* 52, 1963-1990, 2017.
- 5608 Sereika, R., W. Wu, C. Park, C. Kenney-Benson, D. L. Brewster, S. M. Heald, J. Zhang, S. Yesudhas, H. Deng, B. Chen, J. Luo, Y. Ding, and H. K. Mao, Prolonged mixed phase induced by high pressure in MnRuP, *Phys. Rev. B* 97, 214103, 2018.
- 5649 Shahar, A., Silicon isotopes, in *Encyclopedia of Geochemistry*, W. M. White, ed., pp. 1337-1339, Springer, Cham, Switzerland, 2018.
- 5640 Shelton, H., T. Bi, E. Zurek, J. Smith, and P. Dera, The ideal crystal structure of cristobalite X-I: a bridge in SiO_2 densification, *J. Phys. Chem. C* 122, 17437-17446, 2018.

- 5645 Shibazaki, Y., and Y. Kono, Effect of silicon, carbon, and sulfur on structure of liquid iron and implications for structure-property relations in liquid iron-light element alloys, *J. Geophys. Res. Solid Earth* 123, 4697-4706, doi:10.1029/2018JB015456, 2018.
- 5605 Shiell, T. B., D. G. McCulloch, D. R. McKenzie, M. R. Field, B. Haberl, R. Boehler, B. A. Cook, C. de Tomas, I. Suarez-Martinez, N. A. Marks, and J. E. Bradby, Graphitization of glassy carbon after compression at room temperature, *Phys. Rev. Lett.* 120, 215701, 2018.
- 5588 Shkolyar, S., E. J. Eshelman, J. D. Farmer, D. Hamilton, M. G. Daly, and C. Youngbull, Detecting kerogen as a biosignature using colocated UV time-gated Raman and fluorescence spectroscopy, *Astrobiology* 18, 431-453, 2018.
- Shkolyar, S., and J. D. Farmer, Biosignature preservation potential in playa evaporites: impacts of diagenesis and implications for Mars exploration, *Astrobiology*, in press.
- Sio, C. K., M. Roskosz, N. Dauphas, N. R. Bennett, T. D. Mock, and A. Shahar, The isotope effect for Mg-Fe interdiffusion in olivine and its dependence on crystal orientation, composition and temperature, *Geochim. Cosmochim. Acta*, in press.
- 5629 Sirisena, K. A., S. Ramirez, A. Steele, and M. Glamoclija, Microbial diversity of hypersaline sediments from Lake Lucero playa in White Sands National Monument, New Mexico, USA, *Microb. Ecol.* 76, 404-418, 2018.
- 5532 Smith, D., K. V. Lawler, M. Martinez-Canales, A. W. Daykin, Z. Fussell, G. A. Smith, C. Childs, J. S. Smith, C. J. Pickard, and A. Salamat, Postaragonite phases of CaCO₃ at lower mantle pressures, *Phys. Rev. Mater.* 2, 013605, 2018.
- 5644 Smith, D., J. S. Smith, C. Childs, E. Rod, R. Hrubciak, G. Shen, and A. Salamat, A CO₂ laser heating system for *in situ* high pressure-temperature experiments at HPCAT, *Rev. Sci. Instrum.* 89, 083901, 2018.
- 5641 Smith, E. M., S. B. Shirey, S. H. Richardson, F. Nestola, E. S. Bullock, J. Wang, and W. Wang, Blue boron-bearing diamonds from Earth's lower mantle, *Nature* 560, 84-87, 2018.
- 5507 Sneed, D., M. Pravica, E. Kim, N. Chen, C. Park, and M. White, Forcing cesium into higher oxidation states using useful hard x-ray induced chemistry under high pressure, *J. Phys.: Conf. Ser.* 950, 042055, 2017.
- 5549 Stavrou, E., Y. Yao, A. F. Goncharov, S. S. Lobanov, J. M. Zaug, H. Liu, E. Greenberg, and V. B. Prakapenka, Synthesis of xenon and iron-nickel intermetallic compounds at Earth's core thermodynamic conditions, *Phys. Rev. Lett.* 120, 096001, 2018.
- Steele, A., L. G. Benning, R. Wirth, S. Siljeström, M. D. Fries, E. Hauri, P. G. Conrad, K. Rogers, J. Eigenbrode, A. Schreiber, A. Needham, J. H. Wang, F. M. McCubbin, D. Kilcoyne, and J. D. Rodriguez Blanco, Organic synthesis on Mars by electrochemical reduction of CO₂, *Sci. Adv.*, in press.
- 5596 Steenstra, E. S., A. X. Seegers, J. Eising, B. G. J. Tomassen, F. P. F. Webers, J. Berndt, S. Klemme, S. Matveev, and W. van Westrenen, Evidence for a sulfur-undersaturated lunar interior from the solubility of sulfur in lunar melts and sulfide-silicate partitioning of siderophile elements, *Geochim. Cosmochim. Acta* 231, 130-156, 2018.

- 5552 Stefanoski, S., G. J. Finkelstein, M. D. Ward, T. Zeng, K. Wei, E. S. Bullock, C. M. Beavers, H. Liu, G. S. Nolas, and T. A. Strobel, Zintl ions within framework channels: the complex structure and low-temperature transport properties of Na₄Ge₁₃, *Inorg. Chem.* 57, 2002-2012, 2018.
- 5570 Strobel, T. A., A. J. Ramirez-Cuesta, L. L. Daemen, V. S. Bhadram, T. A. Jenkins, C. M. Brown, and Y. Cheng, Quantum dynamics of H₂ trapped within organic clathrate cages, *Phys. Rev. Lett.* 120, 120402, 2018.
- 5661 Sun, F., H. Zheng, Y. Liu, E. D. Sandoval, C. Xu, J. Xu, C. Q. Jin, C. J. Sun, W. G. Yang, H. K. Mao, and J. F. Mitchell, Electronic and structural response to pressure in the hyperkagome-lattice Na₃Ir₃O₈, *Phys. Rev. B* 98, 085131, 2018.
- 5525 Sun, J. P., P. Shahi, H. X. Zhou, Y. L. Huang, K. Y. Chen, B. S. Wang, S. L. Ni, N. N. Li, K. Zhang, W. G. Yang, Y. Uwatoko, G. Xing, J. Sun, D. J. Singh, K. Jin, F. Zhou, G. M. Zhang, X. L. Dong, Z. X. Zhao, and J.-G. Cheng, Reemergence of high-T_c superconductivity in the (Li_{1-x}Fe_x)OHFe_{1-y}Se under high pressure, *Nature Commun.* 9, 380, 2018.
- 5524 Sutter, B., A. C. McAdam, P. R. Mahaffy, D. W. Ming, K. S. Edgett, E. B. Rampe, J. L. Eigenbrode, H. B. Franz, C. Freissinet, J. P. Grotzinger, A. Steele, C. H. House, P. D. Archer, C. A. Malespin, R. Navarro-González, J. C. Stern, J. F. Bell, F. J. Calef, R. Gellert, D. P. Glavin, L. M. Thompson, and A. S. Yen, Evolved gas analyses of sedimentary rocks and eolian sediment in Gale Crater, Mars: results of the Curiosity rover's sample analysis at Mars instrument from Yellowknife Bay to the Namib Dune, *J. Geophys. Res. Planets* 122, 2574-2609, doi:10.1002/2016JE005225, 2017.
- 5455 Tanaka, K., J. S. Tse, and H. Liu, Electron-phonon coupling mechanisms for hydrogen-rich metals at high pressure, *Phys. Rev. B* 96, 100502(R), 2017.
- 5518 Tang, H., X. Yuan, P. Y. Yu, Q. Hu, M. Wang, Y. Yao, L. Wu, Q. Zou, Y. Ke, Y. Zhao, L. Wang, X. Li, W. Yang, H. Gou, H. K. Mao, and W. L. Mao, Revealing the formation mechanism of ultrahard nanotwinned diamond from onion carbon, *Carbon* 129, 159-167, 2018.
- 5539 Tao, R., Y. Fei, E. S. Bullock, C. Xu, and L. Zhang, Experimental investigation of Fe³⁺-rich majoritic garnet and its effect on majorite geobarometer, *Geochim. Cosmochim. Acta* 225, 1-16, 2018.
- 5651 Tao, R., L. Zhang, M. Tian, J. Zhu, X. Liu, J. Liu, H. E. Höfer, V. Stagno, and Y. Fei, Formation of abiogenic hydrocarbon from reduction of carbonate in subduction zones: constraints from petrological observation and experimental simulation, *Geochim. Cosmochim. Acta* 239, 390-408, 2018.
- 5587 Thiyagarajan, R., X. Yan, V. Pazhanivelu, A. P. B. Selvadurai, R. Murugaraj, and W. Yang, Doping effect of alkali metal elements on the structural stability and transport properties of ZnO at high pressures, *J. Alloys Compounds* 751, 266-274, 2018.
- 5547 Tian, M., J. J. Ague, X. Chu, E. F. Baxter, N. Dragovic, C. P. Chamberlain, and D. Rumble III, The potential for metamorphic thermal pulses to develop during compaction-driven fluid flow, *Geochem. Geophys. Geosyst.* 19, 232-256, doi:10.1002/2017GC007269, 2018.

- Vadapoo, R., M. Ahart, M. Staruch, M. Guerette, J. Luo, P. Finkel, and R. E. Cohen, Effect of aging and Mn substitution on anisotropy of third generation piezoelectrics, *Ferroelectrics*, in press.
- 5618 Vaniman, D. T., G. M. Martínez, E. B. Rampe, T. F. Bristow, D. F. Blake, A. S. Yen, D. W. Ming, W. Rapin, P.-Y. Meslin, J. M. Morookian, R. T. Downs, S. J. Chipera, R. V. Morris, S. M. Morrison, A. H. Treiman, C. N. Achilles, K. Robertson, J. P. Grotzinger, R. M. Hazen, R. C. Wiens, and D. Y. Sumner, Gypsum, bassanite, and anhydrite at Gale crater, Mars, *Am. Mineral.* 103, 1011-1020, 2018.
- 5471 Veiga, L. S. I., M. Etter, K. Glazyrin, F. Sun, C. A. Escanhoela, Jr., G. Fabbris, J. R. L. Mardegan, P. S. Malavi, Y. Deng, P. P. Stavropoulos, H.-Y. Kee, W. G. Yang, M. van Veenendaal, J. S. Schilling, T. Takayama, H. Takagi, and D. Haskel, Pressure tuning of bond-directional exchange interactions and magnetic frustration in the hyperhoneycomb iridate β -Li₂IrO₃, *Phys. Rev. B* 96, 140402(R), 2017.
- 5482 Walker, S. I., N. Packard, and G. D. Cody, Re-conceptualizing the origins of life, *Phil. Trans. Roy. Soc. London A* 375, 20160337, 2017.
- 5554 Wang, P., R. Kumar, E. M. Sankaran, X. Qi, X. Zhang, D. Popov, A. L. Cornelius, B. Li, Y. Zhao, and L. Wang, Vanadium diboride (VB₂) synthesized at high pressure: elastic, mechanical, electronic, and magnetic properties and thermal stability, *Inorg. Chem.* 57, 1096-1105, 2018.
- 5513 Wang, Y., S.-Q. Jiang, A. F. Goncharov, F. A. Gorelli, X.-J. Chen, D. Plašienka, R. Martoňák, E. Tosatti, and M. Santoro, Synthesis and Raman spectroscopy of a layered SiS₂ phase at high pressures, *J. Chem. Phys.* 148, 014503, 2018.
- 5594 Wang, Y., J. Ying, Z. Zhou, J. Sun, T. Wen, Y. Zhou, N. Li, Q. Zhang, F. Han, Y. Xiao, P. Chow, W. Yang, V. V. Struzhkin, Y. Zhao, and H. K. Mao, Emergent superconductivity in an iron-based honeycomb lattice initiated by pressure-driven spin-crossover, *Nature Commun.* 9, 1914, 2018.
- 5537 Wang, Y., H. Zhang, X. Yang, S. Jiang, and A. F. Goncharov, Kinetic boundaries and phase transformations of ice I at high pressure, *J. Chem. Phys.* 148, 044508, 2018.
- 5573 Ward, M. D., H.-T. Huang, L. Zhu, A. Biswas, D. Popov, J. V. Badding, and T. A. Strobel, Chemistry through cocrystals: pressure-induced polymerization of C₂H₂·C₆H₆ to an extended crystalline hydrocarbon, *Phys. Chem. Chem. Phys.* 20, 7282-7294, 2018.
- 5601 Webster, C. R., P. R. Mahaffy, S. K. Atreya, J. E. Moores, G. J. Flesch, C. Malespin, C. P. McKay, G. Martinez, C. L. Smith, J. Martin-Torres, J. Gomez-Elvira, M.-P. Zorzano, M. H. Wong, M. G. Trainer, A. Steele, D. Archer, Jr., B. Sutter, P. J. Coll, C. Freissinet, P.-Y. Meslin, R. V. Gough, C. H. House, A. Pavlov, J. L. Eigenbrode, D. P. Glavin, J. C. Pearson, D. Keymeulen, L. E. Christensen, S. P. Schwenzer, R. Navarro-Gonzalez, J. Pla-García, S. C. R. Rafkin, Á. Vicente-Retortillo, H. Kahanpää, D. Viudez-Moreiras, M. D. Smith, A.-M. Harri, M. Genzer, D. M. Hassler, M. Lemmon, J. Crisp, S. P. Sander, R. W. Zurek, and A. R. Vasavada, Background levels of methane in Mars' atmosphere show strong seasonal variations, *Science* 360, 1093-1096, 2018.
- 5451 Wen, T., R. Ding, Y. Zhou, Y. Si, B. Yang, and Y. Wang, Polymorphism of erbium oxyfluoride: selective synthesis, crystal structure, and phase-dependent upconversion luminescence, *Eur. J. Inorg. Chem.* 2017, 3849-3854, 2017.

- 5480 Wu, H. H., and R. E. Cohen, Polarization rotation and the electrocaloric effect in barium titanate, *J. Phys.: Condens. Matter* 29, 485704, 2017.
- 5458 Wu, Y., F. Qin, X. Wu, H. Huang, C. A. McCammon, T. Yoshino, S. Zhai, Y. Xiao, and V. B. Prakapenka, Spin transition of ferric iron in the calcium-ferrite type aluminous phase, *J. Geophys. Res. Solid Earth* 122, 5935-5944, doi:10.1002/2017JB014095, 2017.
- 5599 Xie, S.-Y., L. Wang, F. Liu, X.-B. Li, L. Bai, V. B. Prakapenka, Z. Cai, H. K. Mao, S. Zhang, and H. Liu, Correlated high-pressure phase sequence of VO₂ under strong compression, *J. Phys. Chem. Lett.* 9, 2388-2393, 2018.
- 5627 Xu, C., J. Kynický, W. Song, R. Tao, Z. Lü, Y. Li, Y. Yang, M. Pohanka, M. V. Galiova, L. Zhang, and Y. Fei, Cold deep subduction recorded by remnants of a Paleoproterozoic carbonated slab, *Nature Commun.* 9, 2790, 2018.
- 5460 Xu, C., W. Xiao, T. Liu, F. Sun, J. Zheng, S. Peng, X. Liu, F. Pan, W. Yang, and H. K. Mao, Pressure induced abnormal insulating state in triangular layered cobaltite Li_xCoO₂ (x = 0.9), *J. Mater. Chem. A* 5, 19390-19397, 2017.
- 5665 Xu, J., P. Zhang, K. Haule, J. Minar, S. Wimmer, H. Ebert, and R. E. Cohen, Thermal conductivity and electrical resistivity of solid iron at Earth's core conditions from first principles, *Phys. Rev. Lett.* 121, 096601, 2018.
- 5489 Xu, M., S. Jakobs, R. Mazzarello, J.-Y. Cho, Z. Yang, H. Hollermann, D. Shang, X. Miao, Z. Yu, L. Wang, and M. Wuttig, Impact of pressure on the resonant bonding in chalcogenides, *J. Phys. Chem. C* 121, 25447-25454, 2017.
- 5607 Yamanaka, T., M. Ahart, H. K. Mao, and H. Yan, New high-pressure tetragonal polymorphs of SrTiO₃—molecular orbital and Raman band change under pressure, *J. Phys.: Condens. Matter* 30, 265401, 2018.
- 5576 Yamanaka, T., Y. Nakamoto, M. Ahart, and H. K. Mao, Pressure dependence of electron density distribution and *d-p-π* hybridization in titanate perovskite ferroelectrics, *Phys. Rev. B* 97, 144109, 2018.
- 5621 Yang, F. C., O. Hellman, M. S. Lucas, H. L. Smith, C. N. Saunders, Y. Xiao, P. Chow, and B. Fultz, Temperature dependence of phonons in Pd₃Fe through the Curie temperature, *Phys. Rev. B* 98, 024301, 2018.
- 5457 Yang, W., D. Y. Kim, L. Yang, N. Li, L. Tang, K. Amine, and H. K. Mao, Oxygen-rich lithium oxide phases formed at high pressure for potential lithium–air battery electrode, *Adv. Sci.* 4, 1600453, 2017.
- 5531 Yang, X., R. Jiang, Y. Lin, Y. Li, J. Li, and B. Zhao, Nitrogen release characteristics of polyethylene-coated controlled-release fertilizers and their dependence on membrane pore structure, *Particuology* 36, 158-164, 2018.
- 5622 Ying, J., H. Paudyal, C. Heil, X.-J. Chen, V. V. Struzhkin, and E. R. Margine, Unusual pressure-induced periodic lattice distortion in SnSe₂, *Phys. Rev. Lett.* 121, 027003, 2018.
- 5556 Ying, J., L. Tang, F. Chen, X. Chen, and V. V. Struzhkin, Coexistence of metallic and insulating channels in compressed YbB₆, *Phys. Rev. B* 97, 121101(R), 2018.

- 5454 Yue, B., F. Hong, K.-D. Tsuei, N. Hiraoka, Y.-H. Wu, V. M. Silkin, B. Chen, and H. K. Mao, High-energy electronic excitations in a bulk MoS₂ single crystal, *Phys. Rev. B* **96**, 125118, 2017.
- 5546 Zarifi, N., H. Liu, J. S. Tse, and E. Zurek, Crystal structures and electronic properties of Xe-Cl compounds at high pressure, *J. Phys. Chem. C* **122**, 2941-2950, 2018.
- 5468 Zhang, C., J. Sun, F. Liu, A. Narayan, N. Li, X. Yuan, Y. Liu, J. Dai, Y. Long, Y. Uwatoko, J. Shen, S. Sanvito, W. Yang, J. Cheng, and F. Xiu, Evidence for pressure-induced node-pair annihilation in Cd₃As₂, *Phys. Rev. B* **96**, 155205, 2017.
- 5590 Zhang, F. X., M. W. Ullah, S. Zhao, K. Jin, Y. Tong, G. Velisa, H. Xue, H. Bei, R. Huang, C. Park, W. J. Weber, and Y. Zhang, Local structure of NiPd solid solution alloys and its response to ion irradiation, *J. Alloys Compounds* **755**, 242-250, 2018.
- 5642 Zhang, J., Y. Ding, C.-C. Chen, Z. Cai, J. Chang, B. Chen, X. Hong, A. Fluerasu, Y. Zhang, C.-S. Ku, D. Brewes, S. Heald, H. Ishii, N. Hiraoka, K.-D. Tsuei, W. Liu, Z. Zhang, Y. Q. Cai, G. Gu, T. Irifune, and H. K. Mao, Evolution of a novel ribbon phase in optimally doped Bi₂Sr₂CaCu₂O_{8+δ} at high pressure and its implication to high-T_c superconductivity, *J. Phys. Chem. Lett.* **9**, 4182-4188, 2018.
- 5505 Zhang, J., F.-L. Liu, T.-P. Ying, N.-N. Li, Y. Xu, L.-P. He, X.-C. Hong, Y.-J. Yu, M.-X. Wang, J. Shen, W.-G. Yang, and S.-Y. Li, Observation of two superconducting domes under pressure in tetragonal FeS, *npj Quantum Mater.* **2**, 49, 2017.
- 5569 Zhang, J., S. Zhang, P. Kong, L. Yang, C. Jin, Q. Liu, X. Wang, and J. Yu, Pressure induced electronic phase transitions and superconductivity in n-type Bi₂Te₃, *J. Appl. Phys.* **123**, 125901, 2018.
- 5452 Zhang, K., Y. Li, Q. Huang, B. Wang, X. Zheng, Y. Ren, and W. Yang, Ultrastable amorphous Sb₂Se₃ film, *J. Phys. Chem. B* **121**, 8188-8194, 2017.
- 5564 Zhang, L., Y. Ren, X. Liu, F. Han, K. Evans-Lutterodt, H. Wang, Y. He, J. Wang, Y. Zhao, and W. Yang, Chain breakage in the supercooled liquid - liquid transition and re-entry of the λ-transition in sulfur, *Sci. Rep.* **8**, 4558, 2018.
- 5563 Zhang, L., H. Yuan, Y. Meng, and H. K. Mao, Discovery of a hexagonal ultradense hydrous phase in (Fe,Al)OOH, *Proc. Natl. Acad. Sci. USA* **115**, 2908-2911, 2018.
- 5631 Zhang, Q., C. Chen, N. N. Li, Q. Huang, Y. He, X. Liu, B. Wang, D. Zhang, D. Y. Kim, Y. Wang, B. Xu, and W. Yang, Pressure impact on the crystal structure, optical, and transport properties in layered oxychalcogenides BiCuChO (Ch = S, Se), *J. Phys. Chem. C* **122**, 15929-15936, 2018.
- 5551 Zhang, X., W. Xu, Y. Wang, S. Jiang, F. A. Gorelli, E. Greenberg, V. B. Prakapenka, and A. F. Goncharov, Synthesis and properties of selenium trihydride at high pressures, *Phys. Rev. B* **97**, 064107, 2018.
- Zhang, X., W. Xu, Y. Wang, S. Jiang, F. A. Gorelli, E. Greenberg, V. B. Prakapenka, and A. F. Goncharov, Reply to "Comment on 'Synthesis and properties of selenium trihydride at high pressures'", *Phys. Rev. B*, in press.
- 5461 Zhang, X., Y. Zhao, M. Zhang, H. Liu, Y. Yao, T. Cheng, and H. Chen, Novel boron channel-based structure of boron carbide at high pressures, *J. Phys.: Condens. Matter* **29**, 455401, 2017.

- 5510 Zhao, J. Y., W. Bi, S. Sinogeikin, M. Y. Hu, E. E. Alp, X. C. Wang, C. Q. Jin, and J. F. Lin, A compact membrane-driven diamond anvil cell and cryostat system for nuclear resonant scattering at high pressure and low temperature, *Rev. Sci. Instrum.* 88, 125109, 2017.
- 5520 Zhao, P., K. Feng, Y. Wang, and J. Gao, Syntheses, structure and properties of a new Fillowite-type compound $\text{Na}_{0.48}\text{Mn}_{1.22}\text{PO}_4$, *J. Alloys Compounds* 734, 229-234, 2018.
- 5473 Zhou, Y., T. Wen, W. Kong, B. Yang, and Y. Wang, The impact of nitrogen doping and reduced-niobium self-doping on the photocatalytic activity of ultra-thin Nb_3O_8 -nanosheets, *Dalton Trans.* 46, 13854-13861, 2017.
- 5475 Zhou, Y., T. Wen, X. Zhang, B. Chang, W. Kong, Y. Guo, B. Yang, and Y. Wang, A multiple structure-design strategy towards ultrathin niobate perovskite nanosheets with thickness-dependent photocatalytic hydrogen-evolution performance, *Chem. Asian J.* 12, 2727-2733, 2017.
- 5646 Zhou, Y., B. Zhang, X. Chen, C. Gu, C. An, Y. Zhou, K. Cai, Y. Yuan, C. Chen, H. Wu, R. Zhang, C. Park, Y. Xiong, X. Zhang, K. Wang, and Z. Yang, Pressure-induced metallization and robust superconductivity in pristine 1T-SnSe_2 , *Adv. Electron. Mater.* 4, 1800155, 2018.

Global Ecology

Ahbe, E. and **K. Caldeira**, 2017: Spatial Distribution of Generation of Lorenz's Available Potential Energy in a Global Climate Model. *J. Climate*, 30, 2089–2101, <https://doi.org/10.1175/JCLI-D-15-0614.1>

Albright, Rebecca, Y. Takeshita, D. A. Koweek, A. Ninokawa, K. Wolfe, T. Rivlin, Y. Nebuchina, J. Young & **K. Caldeira**, 2018: Carbon dioxide addition to coral reef waters suppresses net community calcification. *Nature*, volume 555, pages 516–519. doi:10.1038/nature25968

Ambrose, A.R., W.L. Baxter, R.E. Martin, E. Francis, **G.P. Asner**, K.R. Nydick, and T.E. Dawson. 2018. Leaf- and crown-level adjustments help giant sequoias maintain favorable water status during severe drought. *Forest Ecology and Management* 419-420:257-267.

Anderegg, L.D., Berner, L.T., Badgley, G., Sethi, M.L., Law, B.E. and HilleRisLambers, J., 2018. Within-species patterns challenge our understanding of the leaf economics spectrum. *Ecology Letters*, 21(5), pp.734-744.

Anderson, C.M., **G.P. Asner**, W. Llactayo, and E.F. Lambin. 2018. Overlapping land allocations reduce deforestation in Peru. *Land Use Policy* 79:174-178.

Asner, G.P. and R. Tupayachi. 2017. Accelerated losses of protected forests from gold mining in the Peruvian Amazon. *Environmental Research Letters* 12:094004.

Asner, G.P., P.G. Brodrick, C. Philipson, N.R. Vaughn, R.E. Martin, D.E. Knapp, J. Heckler, L.J. Evans, T. Jucker, B. Goossens, D.J. Stark, G. Reynolds, R. Ong, N. Renneboog, F. Kugan,

and D.A. Coomes. 2017. Mapped aboveground carbon stocks to advance forest conservation and recovery in Malaysian Borneo. *Biological Conservation* 217:289-310.

Asner, G.P., R.E. Martin, and J. Mascaro. 2017. Coral reef atoll assessment in the South China Sea using Planet Dove satellites. *Remote Sensing for Ecology and Conservation* doi:10.1002/rse2.42

Asner, G.P., R.E. Martin, D.E. Knapp, et al. 2017. Airborne laser-guided imaging spectroscopy to map forest trait diversity and guide conservation. *Science* 355:385-389.

Asner, G.P., R.E. Martin, L.M. Keith, W.P. Heller, M.A. Hughes, N.R. Vaughn, R.F. Hughes, and C. Balzotti. 2018. A spectral mapping signature for the Rapid Ohia Death (ROD) pathogen in Hawaiian forests. *Remote Sensing* 10:404, doi:10.3390/rs10030404

Asner, G.P., R.E. Martin, R. Tupayachi, and W. Llactayo. 2017. Conservation assessment of the Peruvian Andes and Amazon based on mapped forest functional diversity. *Biological Conservation* 210:80-88.

Badgley, G., Field, C.B. and **Berry, J.A.** 2017. Canopy near-infrared reflectance and terrestrial photosynthesis. *Science Advances*, 3(3), p.e1602244.

Balzotti, C.S, and **G.P. Asner.** 2017. Episodic canopy structural transformations and biological invasion in a Hawaiian forest. *Frontiers in Plant Science* doi:10.3389/fpls.2017.01256

Balzotti, C.S., and **G.P. Asner.** 2017. Biotic and abiotic controls over canopy function and structure in humid Hawaiian forests. *Ecosystems* doi:10.1007/s10021-017-0151-y

Balzotti, C.S., **G.P. Asner**, P.G. Taylor, R. Cole, B.B. Osborne, C.C. Cleveland, S. Porder, and A.R. Townsend. 2017. Topographic distributions of emergent trees in tropical forests of the Osa Peninsula, Costa Rica. *Ecography* 40:829-839 (doi 10.1111/ecog.02062)

Barbosa, J.M. and **G.P. Asner.** 2017. Effects of long-term rainfall decline on the structure and functioning of Hawaiian forests. *Environmental Research Letters* 12:094002.

Barbosa, J.M. and **G.P. Asner.** 2017. Prioritizing landscapes for restoration based on spatial patterns of ecosystem controls and plant-plant interactions. *Journal of Applied Ecology* doi:10.1111/1365-2664.12857

Barbosa, J.M., **G.P. Asner**, R.F. Hughes, and M.T. Johnson. 2017. Landscape-scale GPP and carbon density inform patterns and impacts of an invasive tree across wet forests of Hawaii. *Ecological Applications* 27:403-415.

Blackman, A., L. Corral, E. Santo Lima, and **G.P. Asner.** 2017. Titling indigenous communities protects forests in the Peruvian Amazon. *Proceedings of the National Academy of Sciences* doi:10.1073/pnas.1603290114

Blonder, B., N. Salinas, L. Patrick Bentley, A. Shenkin, P.O. Chambi Porroa, Y. Valdez Tejeira, T.E. Boza Espinoza, G.R. Goldsmith, L. Enrico, R. Martin, **G.P. Asner**, S. Diaz, B.J.

Enquist, and Y. Malhi. 2018. Structural and defensive roles of angiosperm leaf venation network reticulation across an Andes-Amazon elevation gradient. *Journal of Ecology* 106:1683-1699.

Blonder, B., N. Salinas, L. Patrick Bentley, A. Shenkin, P.O. Chambi Porroa, Y. Valdez Tejeira, C. Violle, N.M. Fyllas, G.R. Goldsmith, R. Martin, **G.P. Asner**, S. Diaz, B.J. Enquist, and Y. Malhi. 2017. Predicting trait-environment relationships for venation networks along an Andes-Amazon elevation gradient. *Ecology* doi:10.1002/ecy.1747

Bouvet, A., S. Mermoz, T. Le Toan, L. Villard, R. Mathieu, L. Naidoo, and **G.P. Asner**. 2018. An above-ground biomass map of African savannahs and woodlands at 25 m resolution derived from ALOS PALSAR. *Remote Sensing of Environment* 206:156-173.

Brodrick, P.G., and **G.P. Asner**. 2017. Remotely sensed predictors of conifer tree mortality during severe drought. *Environmental Research Letters* 115013. doi:10.1088/1748-9326/aa8f55

Brown, P. and **K. Caldeira**, 2017: Greater future global warming inferred from Earth's recent energy budget. *Nature*, 552, 45–50, doi:10.1038/nature24672

Campbell, J.E., **Berry, J.A.**, Seibt, U., Smith, S.J., Montzka, S.A., Launois, T., Belviso, S., Bopp, L. and Laine, M., 2017. Large historical growth in global terrestrial gross primary production. *Nature*, 544(7648), p.84.

Cao, L., L. Duan, G. Bala, and **K. Caldeira**, 2017: Simultaneous stabilization of global temperature and precipitation through cocktail geoengineering *Geophys. Res. Lett.*, 44, 7429–7437 doi:10.1002/2017GL074281.

Caughlin, T.T., S.W. Rifai, S.J. Graves, **G.P. Asner**, and S.A. Bohlman. 2017. Integrating LiDAR-derived tree height and Landsat satellite reflectance to estimate forest regrowth in a tropical agricultural landscape. *Remote Sensing in Ecology and Conservation* 2(4):190-203.

Chadwick, K.D., and **G.P. Asner**. 2018. Landscape evolution and nutrient rejuvenation reflected in Amazon forest canopy chemistry. *Ecology Letters* doi:10.1111/ele.12963

Chan, G., A.P. Goldstein, A. Bin-Nun, L.D. Anadon & V. Narayanamurti, 2017: Six principles for energy innovation. *Nature*, 552, 25-27. doi: 10.1038/d41586-017-07761-0

Clack C.T.M., Qvist S.A., Apt J., Bazilian M., Brandt A.R., **Caldeira K.**, Davis S.J., Diakov V., Handschy M.A., Hines P.D.H., Jaramillo P., Kammen D.M., Long J.C.S., Morgan M.G., Reed A., Sivaram V., Sweeney J., Tynan G.R., Victor D.G., Weyant J.P., Whitacre J.F., 2017: Evaluation of a proposal for reliable low-cost grid power with 100% wind, water, and solar. *Proc Natl Acad Sci U S A* doi: 10.1073/pnas.1610381114.

Clark, K.E., R.G. Hilton, A.J. West, A. Robles Caceres, D.R. Grocke, T.R. Marthews, R.I. Ferguson, **G.P. Asner**, M. New, and Y. Malhi. 2017. Erosion of organic carbon from the Andes and its effects on ecosystem carbon dioxide balance. *J. of Geophysical Research – Biogeosciences* doi:10.1002/2016JG003615

Coomes, D.A., M. Dalponte, T. Jucker, **G.P. Asner**, L.F. Banin, D.F.R.P. Burslem, S.L. Lewis, R. Nilus, O.L. Phillips, M.-H. Phua, and L. Qie. 2017. Area-based vs tree-centric approaches to mapping forest carbon in Southeast Asian forests from airborne laser scanning data. *Remote Sensing of Environment* 194:77-88.

Cyronak, T., A.J. Andersson, C. Langdon, R. Albright, N.R. Bates, **K. Caldeira**, R. Carlton, J.E. Corredor, R.B. Dunbar, I. Enochs, J. Erez, B.D. Eyre, J. Gattuso, D. Gledhill, H. Kayanne, D.I. Kline, D.A. Koweek, C. Lantz, B. Lazar, D. Manzello, A. McMahon, M. Meléndez, H.N. Page, I.R. Santos, K.G. Schulz, E. Shaw, J. Silverman, A. Suzuki, L. Teneva, A. Watanabe, S. Yamamoto, 2018: Taking the metabolic pulse of the world's coral reefs. *PLoS ONE*, 13(1), e0190872. <https://doi.org/10.1175/JCLI-D-15-0614.1>

Davies, A.B., A. Gaylard, and **G.P. Asner**. 2018. Megafaunal effects on vegetation structure throughout a densely wooded African landscape. *Ecological Applications* doi:10.1002/eap.1655

Davies, A.B., M. Ancrenaz, F. Oram, and **G.P. Asner**. 2017. Canopy structure drives orangutan habitat selection in disturbed Bornean forests. *Proceedings of the National Academy of Sciences* doi:10.1073/pnas.1706780114

DeJong, H. B., R. B. Dunbar, D. A. Koweek, D. A. Mucciarone, S. K. Bercovici, and D. A. Hansell., 2017: Net community production and carbon export during the late summer in the Ross Sea, *Antarctica Global Biogeochem. Cycles*, 31, 473–491, doi:10.1002/2016GB005417.

Del Giudice, D., R.L. Muenich, M.M. Kalcic, N.S. Bosch, D. Scavia, **A.M. Michalak** (2018) "On the practical usefulness of least squares for assessing uncertainty in hydrologic and water quality predictions," *Environmental Modelling & Software*, 105, 286-295, doi:10.1016/j.envsoft.2018.03.009.

Del Giudice, D., Y. Zhou, E. Sinha, **A.M. Michalak** (2018) "Long-Term phosphorus loading and springtime temperatures explain interannual variability of hypoxia in a large temperate lake," *Environmental Science & Technology*, 52 (4), 2046–2054, doi:10.1021/acs.est.7b04730.

Doughty, C.E., P.E. Santos-Andrade, G.R. Goldsmith, B. Blonder, A. Shenkin, L.P. Bentley, C. Chavana-Bryant, W. Huaraca-Huasco, S. Diaz, N. Salinas, B.J. Enquist, R. Martin, **G.P. Asner**, and Y. Malhi. 2017. Can leaf spectroscopy predict leaf and forest traits along a Peruvian tropical forest elevation gradient? *Journal of Geophysical Research* 10.1002/2017JG003883

Enquist, B.J., L.P. Bentley, A. Shenkin, B. Maitner, V. Savage, S. Michaletz, B. Blonder, V. Buzzard, T.E. Boza Espinoza, W. Farfan-Rios, C.E. Doughty, G.R. Goldsmith, R.E. Martin, N. Salinas, M. Silman, S. Diaz, **G.P. Asner**, and Y. Malhi. 2017. Assessing trait-based scaling theory in tropical forests spanning a broad temperature gradient. *Global Ecology and Biogeography* doi:10.1111/geb.12645

Evans, L.J., A.B. Davies, B. Goossens, and **G.P. Asner**. 2017. Riparian vegetation structure and the hunting behavior of adult estuarine crocodiles. *PLoS One* doi:10.1371/journal.pone.0184804

Evans, L.J., B. Goossens, and **G.P. Asner**. 2017. Underproductive agriculture aids connectivity in tropical forests. *Forest Ecology and Management* 401:159-165.

Evans, L.J., **G.P. Asner**, and B. Goossens. 2018. Protected area management priorities crucial for the future of Bornean elephants. *Biological Conservation* doi:10.1016/j.biocon.2018.03.015

Fang, Y, **AM Michalak**, CR Schwalm, DN Huntzinger, JA Berry, P Ciais, S Piao, B Poulter, JB Fisher, RB Cook, D Hayes, M Huang, A Ito, A Jain, H Lei, C Lu, J Mao, NC Parazoo, S Peng, DM Ricciuto, X Shi, B Tao, H.Tian, W Wang, Y Wei, J Yang (2017) "Global land carbon sink response to temperature and precipitation varies with ENSO phase," *Environmental Research Letters*, 12 (6), 064007, doi:10.1088/1748-9326/aa6e8e.

Fyllas, N.M., L. Patrick Bentley, A. Shenkin, **G.P. Asner**, et al. 2017 Solar radiation and functional traits explain the decline of forest primary productivity along a tropical elevation gradient. *Ecology Letters* doi:10.1111/ele.12771.

Glassmeier, F., A. Possner, B. Vogel, H. Vogel, U. Lohmann, 2017: A comparison of two chemistry and aerosol schemes on the regional scale and resulting impact on radiative properties and warm and cold aerosol-cloud interactions *Atm. Chem. Phys.*, doi:10.5194/acp-17-8651-2017.

Ho, JC, **AM.Michalak** (2017) "Phytoplankton blooms in Lake Erie impacted by both long-term and springtime phosphorus loading," *Journal of Great Lakes Research*, 43 (3), 221-228, doi:10.1016/j.jglr.2017.04.001.

Ho, JC, RP Stumpf, TB Bridgeman, **AM Michalak** (2017) "Using Landsat to extend the historical record of lacustrine phytoplankton blooms: A Lake Erie case study," *Remote Sensing of Environment*, 191, 273-285, doi:10.1016/j.rse.2016.12.013.

Houweling, S, P Bergamaschi, F Chevallier, M Heimann, T Kaminski, M Krol, **AM Michalak**, P Patra (2017) "Global inverse modeling of CH₄ sources and sinks: an overview of methods," *Atmospheric Chemistry and Physics*, 17 (1), 235-256, doi:10.5194/acp-17-235-2017.

Hughes, R.F., **G.P. Asner**, J.A. Baldwin, J. Mascaro, L.K.K. Bufile, and D.E. Knapp. 2018. Estimating aboveground carbon density across forest landscapes of Hawaii: combining FIA plot-derived estimates and airborne LiDAR. *Forest Ecology and Management* 424:323-337.

Huntzinger, DN, **AM Michalak**, C Schwalm, P Ciais, AW King, Y Fang, K Schaefer, Y Wei, RB Cook, JB Fisher, D Hayes, M Huang, A Ito, A.K Jain, H Lei, C Lu, F.Maignan, J Mao, N Parazoo, S Peng, B Poulter, D Ricciuto, X Shi, H Tian, W Wang, N Zeng, F Zhao (2017) "Uncertainty in the response of terrestrial carbon sink to environmental drivers

undermines carbon-climate feedback predictions," *Scientific Reports*, 7 (4765), doi:10.1038/s41598-017-03818-2.

Jeong, S, A.A. Bloom, D. Schimel, C. Sweeney, N.C. Parazoo, D. Medvigy, G. Schaepman-Strub, C. Zheng, C.R. Schwalm, D.N. Huntzinger, **A.M. Michalak**, C.E. Miller (2018) "Accelerating rates of Arctic carbon cycling revealed by long-term atmospheric CO₂ measurements," *Science Advances*, 4 (7), doi:10.1126/sciadv.aao1167.

Jucker, T., **G.P. Asner**, M. Dalponte, P.G. Brodrick, C.D. Philipson, N.R. Vaughn, Y.A. Teh, C. Brelsford, D.F.R.P. Burslem, et al., and D.A. Coomes. 2018. Estimating aboveground carbon density and its uncertainty in Borneo's structurally complex tropical forests using airborne laser scanning. *Biogeosciences* 15:3811-3830.

Kim, J., J. Kug, S. Jeong, D.N. Huntzinger, **A.M. Michalak**, C.R. Schwalm, Y. Wei, K. Schaefer (2017) "Reduced North American terrestrial primary productivity linked to anomalous Arctic warming," *Nature Geoscience*, 10 (8), 572–576, doi:10.1038/ngeo2986.

Koweeck, D. A., Nickols, K. J., Leary, P. R., Litvin, S. Y., Bell, T. W., Luthin, T., Dunbar, R. B., 2017: A year in the life of a central california kelp forest: Physical and biological insights into biogeochemical variability *Biogeosciences*, 14(1), 31-44, <http://dx.doi.org/10.5194/bg-14-31-2017>.

Koweeck, David A., Richard C. Zimmerman, R.C., Hewett, K.M., Gaylord, B., Giddings, S.N., Nickols, K.J., Ruesink, J.L., Stachowicz, J.J., Takeshita, Y. and **Caldeira, K.**, 2018 Expected limits on the ocean acidification buffering potential of a temperate seagrass meadow *Ecological Applications* early view:21

Li, C., X. Zhang, F. Zwiers, Y. Fang, **A.M. Michalak** (2017) "Recent very hot summers in northern hemispheric land areas measured by wet bulb globe temperature will be the norm within 20 years," *Earth's Future*, 5 (12), 1203-1216, doi:10.1002/2017EF000639.

Li, C., Y. Fang, K. Caldeira, X. Zhang, N.S. Diffenbaugh, **A.M. Michalak** (2018) "Widespread persistent changes to temperature extremes occurred earlier than predicted," *Scientific Reports*, 8 (1007), doi:10.1038/s41598-018-19288-z.

Martin, R.E., **G.P. Asner**, E. Francis, A. Ambrose, W. Baxter, A.J. Das, N.R. Vaughn, T. Paz-Kagan, T. Dawson, K. Nydick, and N.L. Stephenson. 2018. Remote measurement of canopy water content in giant sequoias (*Sequoiadendron giganteum*) during drought. *Forest Ecology and Management* 419-420:279-290.

Martin, R.E., K.D. Chadwick, P.G. Brodrick, L. Carranza-Jimenez, N.R. Vaughn, and **G.P. Asner**. 2018. An approach for foliar trait retrieval from airborne imaging spectroscopy of tropical forests. *Remote Sensing* 10:199 doi:10.3390/rs10020199

McManus Chauvin, K., **G.P. Asner**, R.E. Martin, W.J. Kress, S.J. Wright, and C.B. Field. 2018. Decoupled dimensions of leaf economic and anti-herbivore defense strategies in a tropical canopy tree community. *Oecologia* doi:10.1007/s00442-017-4043-9.

Michalak, AM (2017) "Troubled waters on the Great Lakes," *Nature*, 543 (7646), 488-489, doi:10.1038/543488a.

Michalak, M., NA Randazzo, F Chevallier (2017) "Diagnostic methods for atmospheric inversions of long-lived greenhouse gases," *Atmospheric Chemistry and Physics*, 17 (12), 7405-7421, doi:10.5194/acp-17-7405-2017.

Miller, S.M., **A.M. Michalak**, V. Yadav, J.M. Tadić (2018) "Characterizing biospheric carbon balance using CO₂ observations from the OCO-2 satellite," *Atmospheric Chemistry and Physics*, 18 (9), 6785-6799, doi:10.5194/acp-18-6785-2018.

Miller, SM, **AM Michalak** (2017) "Constraining sector-specific CO₂ and CH₄ emissions in the US," *Atmospheric Chemistry and Physics*, 17 (6), 3963-3985, doi:10.5194/acp-17-3963-2017.

Modak, A., G. Bala, **K. Caldeira**, and L. Cao, 2018: Does shortwave absorption by methane influence its effectiveness? *Clim Dyn*, pp 1-20. <https://doi.org/10.1007/s00382-018-4102-x>

Mograbi, P.J. **G.P. Asner**, E.T.F. Witkowski, B.F.N. Erasmus, K.J. Wessels, R. Mathieu, and N.R. Vaughn. 2017. Humans and elephants as treefall drivers in African savannas. *Ecography* 10.1111/ecog.02549

Nasto, M.K., B.B. Osborne, Y. Lekberg, **G.P. Asner**, C.S. Balzotti, S. Porder, P.G. Taylor, A.R. Townsend, and C.C. Cleveland. 2017. Nutrient acquisition, soil phosphorus partitioning and competition among trees in a lowland tropical rain forest. *New Phytologist* 214:1506-1517.

Niemiec, R.M., **G.P. Asner**, P.G. Brodrick, J.A. Gaertner, N.M. Ardoin. 2018. Scale-dependence of environmental and socioeconomic drivers of *Albizia* invasion in Hawaii. *Landscape and Urban Planning* 169:70-80.

North, M.P., J.T. Kane, V.R. Kane, **G.P. Asner**, W. Berigan, D.J. Churchill, S. Conway, R.J. Gutierrez, S. Jeronimo, J. Keane, A. Koltunov, T. Mark, M. Moskal, T. Munton, Z. Peery, C. Ramirez, R. Sollmann, A.M. White, and S. Whitmore. 2017. Colver of tall trees best predicts California spotted owl habitat. *Forest Ecology and Management* 405:166-178.

Nydick, K.R., N.L. Stephenson, A.R. Ambrose, **G.P. Asner**, W.L. Baxter, A.J. Das, T. Dawson, R.E. Martin, and T. Paz-Kagan. 2018. Leaf to landscape responses of giant sequoia to hotter drought: An introduction and synthesis for the special section. *Forest Ecology and Management* 419-420:249-256.

Ordway, E.M., **G.P. Asner**, and E. Lambin. 2017. Deforestation risk due to commodity crop expansion in sub-Saharan Africa. *Environmental Research Letters* 12:044015.

Osborne, B.B., M.K. Nasto, **G.P. Asner**, C.S. Balzotti, C.C. Cleveland, B.W. Sullivan, P.G. Taylor, A.R. Townsend, and S. Porder. 2017. Climate, topography, and canopy chemistry exert hierarchical control over soil N cycling in a Neotropical lowland forest. *Ecosystems* doi:10.1007/s10021-016-0095-7

Paz-Kagan, T., and **G.P. Asner**. 2017. Drivers of woody canopy water content responses to drought in a Mediterranean-type ecosystem. *Ecological Applications* DOI: 10.1002/eap.1603

Paz-Kagan, T., N.R. Vaughn, R.E. Martin, P.G. Brodrick, N.L. Stephenson, A.J. Das, K.R. Nydick, and **G.P. Asner**. 2018. Landscape-scale variation in canopy water content of giant sequoias during drought. *Forest Ecology and Management* 419-420:291-304.

Paz-Kagan, T., P.G. Brodrick, N.R. Vaughn, A.J. Das, N.L. Stephenson, K.R. Nydick, and **G.P. Asner**. 2017. What mediates tree mortality during drought in the southern Sierra Nevada? *Ecological Applications* 27(8):2443-2457.

Persad, G.G., D.J. Paynter, Y. Ming, and V. Ramaswamy, 2017: Competing Atmospheric and Surface-Driven Impacts of Absorbing Aerosols on the East Asian Summertime Climate. *J. Climate*, 30, 8929–8949, <https://doi.org/10.1175/JCLI-D-16-0860.1>

Persad, Geeta G. and **Caldeira, K**, 2018: Divergent global-scale temperature effects from identical aerosols emitted in different regions *Nature Communications* volume 9, Article number: 3289

Possner, A., A. M. L. Ekman, and U. Lohmann, 2017: Cloud response and feedback processes in stratiform mixed-phase clouds perturbed by ship exhaust *Geophys. Res. Lett.*,44, doi:10.1002/2016GL071358.

Possner, A., and **K. Caldeira**, 2017: Geophysical potential for wind energy over the open oceans *PNAS* 114, 43, 11338-11343 doi:10.1073/pnas.1705710114.

Praetorius, Summer, Rugenstein, M., Persad, G., & **Caldeira, K.**, 2018 Global and Arctic climate sensitivity enhanced by changes in North Pacific heat flux *Nature Communications* volume 9, Article number: 3124

Rampino, M.R. & **Caldeira, K.** 2017: Comparison of the ages of large-body impacts, flood-basalt eruptions, ocean-anoxic events and extinctions over the last 260 million years: a statistical study *Int J Earth Sci (Geol Rundsch)*, <https://doi.org/10.1007/s00531-017-1513-6>

Rampino, M.R. & **Caldeira, K.**, 2017: Correlation of the largest craters, stratigraphic impact signatures, and extinction events over the past 250 Myr *Geoscience Frontiers*, 8 (6) 1241-1245 <https://doi.org/10.1016/j.gsf.2017.03.002>

Rogers, J.S., Stephen G. Monismith, Oliver B. Fringer, David A. Kowalik, Robert B. Dunbar, 2017: A coupled wave-hydrodynamic model of an atoll with high friction: Mechanisms for flow, connectivity, and ecological implications *Ocean Modelling*, 110, 66-82, <https://doi.org/10.1016/j.ocemod.2016.12.012>.

Schwalm, C.R., W.R.L. Anderegg, **A.M. Michalak**, J.B. Fisher, F. Biondi, G. Koch, M. Litvak, K. Ogle, J.D. Shaw, A. Wolf, D.N. Huntzinger, K. Schaefer, R. Cook, Y. Wei, Y. Fang, D. Hayes, M. Huang, A. Jain, H. Tian (2017) "Global patterns of drought recovery," *Nature*, 548 (7666), 202–205, doi:10.1038/nature23021

Shaner, M.R., S. J. Davis, N.S. Lewis and **K. Caldeira**, 2018: Geophysical constraints on the reliability of solar and wind power in the United States. *Energy Environ. Sci.*<http://dx.doi.org/10.1039/c7ee03029k>.

Shayegh, S., D. L. Sanchez and **K. Caldeira**, 2017: Evaluating relative benefits of different types of R&D for clean energy technologies. *Energy Policy*, 107, <https://doi.org/10.1016/j.enpol.2017.05.029>.

Shiga, Y.P., J.M. Tadić, X. Qiu, V. Yadav, A.E. Andrews, J.A. Berry, **A.M. Michalak** (2018) "Atmospheric CO₂ observations reveal strong correlation between regional net biospheric carbon uptake and solar-induced chlorophyll fluorescence," *Geophysical Research Letters*, 45 (2), 1122-1132, doi:10.1002/2017GL076630.

Sinha, E, **AM Michalak** (2016) "Precipitation Dominates Interannual Variability of Riverine Nitrogen Loading across the Continental United States," *Environmental Science & Technology*, 50 (23), 12874-12884, doi:10.1021/acs.est.6b04455

Sinha, E., **A.M. Michalak**, V. Balaji (2017) "Eutrophication will increase during the 21st century as a result of precipitation changes," *Science*, 357 (6349), 405-408, doi:10.1126/science.aan2409.

Skowronek, S., **G.P. Asner**, and H. Feilhauer. 2017. Performance of one-class classifiers for invasive species mapping using airborne imaging spectroscopy. *Ecological Informatics* 37:66-75.

Tadić, J.M., **A.M. Michalak**, L. Iraci, V. Ilić, S.C. Biraud, D.R. Feldman, T. Bui, M.S. Johnson, M. Loewenstein, S. Jeong, M.L. Fischer, E.L. Yates, J. Ryoo (2017) "Elliptic cylinder airborne sampling and geostatistical mass balance approach for quantifying local greenhouse gas emissions," *Environmental Science & Technology*, 51 (17), 10012–10021, doi:10.1021/acs.est.7b03100.

Tadić, JM. X Qiu, S Miller, **AM Michalak** (2017) "Spatio-temporal approach to moving window block kriging of satellite data v1.0," *Geoscientific Model Development*, 10, 709-720, doi:10.5194/gmd-10-709-2017.

Thompson, D.R., E.J. Hochberg, **G.P. Asner**, R.O. Green, D.E. Knapp, B.-C. Gao, R. Garcia, M. Gierach, Z. Lee, S. Maritorea, and R. Fick. 2017. Airborne mapping of benthic reflectance spectra with Bayesian linear mixtures. *Remote Sensing of Environment* 200:18-30.

Vaughn, N.R., **G.P. Asner**, P.G. Brodrick, R.E. Martin, J.W. Heckler, D.E. Knapp, and R.F. Hughes. 2018. An approach for high-resolution mapping of Hawaiian *Metrosideros* forest mortality using laser-guided imaging spectroscopy. *Remote Sensing* 10:502, doi:10.3390/rs10040502

Veenendaal, E.M. M. Torello-Raventos, H.S. Miranda, N.M. Sato, I. Oliveras, F. van Langevelde, G.P. Asner, and J. Lloyd. 2018. On the relationship between fire regime and vegetation structure in the tropics. *New Phytologist* doi:10.1111/nph.14940.

Wang, R., J. Moreno-Cruz, and K. Caldeira, 2017: Will the use of a carbon tax for revenue generation produce an incentive to continue carbon emissions? *Environmental Research Letters*, 12, <https://doi.org/10.1088/1748-9326/aa6e8a>.

Wu, M.S., S.J. Feakins, R.E. Martin, A. Shenkin, L. Patrick Bentley, B. Blonder, N. Salinas, G.P. Asner, and Y. Malhi. 2017. Altitude effect on leaf wax carbon isotopic composition in humid tropical forests. *Geochimica et Cosmochimica Acta* 206:1-17. doi:10.1016/j.gca.2017.02.022

Zheng, Y., N. Unger, J.M. Tadić, R. Seco, A.B. Guenther, M.P. Barkley, M.J. Potosnak, L.T. Murray, A.M. Michalak, X. Qiu, S. Kim, T. Karl, L. Gu, S.G. Pallardy (2017) "Drought impacts on photosynthesis, isoprene emission and atmospheric formaldehyde in a mid-latitude forest," *Atmospheric Environment*, 167, 190-201, doi:10.1016/j.atmosenv.2017.08.017.

Zhou, S., B. Yu, C.R. Schwalm, P. Ciais, Y. Zhang, J.B. Fisher, A.M. Michalak, W. Wang, B. Poulter, D.N. Huntzinger, S. Niu, J. Mao, A. Jain, D.M. Ricciuto, X. Shi, A. Ito, Y. Wei, Y. Huang, G. Wang (2017) "Response of water use efficiency to global environmental change based on output from terrestrial biosphere models," *Global Biogeochemical Cycles*, 31 (11), 1639-1655, doi:10.1002/2017GB005733.

Observatories

Abbott, B. P., Abbott, R., Abbott, T. D., Drout, M. R., Madore, B. F., Piro, A. L., Shappee, B. J., Simon, J. D., et al., A gravitational-wave standard siren measurement of the Hubble constant, *Natur*, 551, 85-88, 2017.

<http://adsabs.harvard.edu/abs/2017Natur.551...85A>

Abbott, B. P., Abbott, R., Abbott, T. D., Drout, M. R., Piro, A. L., Shappee, B. J., Simon, J. D., Madore, B. F., et al., Multi-messenger Observations of a Binary Neutron Star Merger, *ApJ*, 848, L12, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848L..12A>

Abolfathi, B., Aguado, D. S., Aguilar, G., Beaton, R., Blanc, G. A., Crane, J. D., Kollmeier, J. A., Simon, J. D., Teske, J., et al., The Fourteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the Extended Baryon Oscillation Spectroscopic Survey and from the Second Phase of the Apache Point Observatory Galactic Evolution Experiment, *ApJS*, 235, 42, 2018.

<http://adsabs.harvard.edu/abs/2018ApJS..235...42A>

Adamson, P., Aliaga, L., Ambrose, D., Bernstein, R., et al., Search for active-sterile neutrino mixing using neutral-current interactions in NOvA, *PhRvD*, 96, 072006, 2017.

<http://adsabs.harvard.edu/abs/2017PhRvD..96g2006A>

Alatalo, K., Bitsakis, T., Lanz, L., Beaton, R. L., Kelson, D. D., Mulchaey, J. S., Rich, J. A., et al, Welcome to the Twilight Zone: The Mid-infrared Properties of Post-starburst Galaxies, *ApJ*, 843, 9, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...843....9A>

Albaret, F. D., Allende Prieto, C., Almeida, A., Blanc, G. A., Crane, J. D., Kollmeier, J. A., et al., The 13th Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-IV Survey Mapping Nearby Galaxies at Apache Point Observatory, *ApJS*, 233, 25, 2017.

<http://adsabs.harvard.edu/abs/2017ApJS..233...25A>

Alexander, K. D., Berger, E., Fong, W., Drout, M., et al., The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. VI. Radio Constraints on a

Relativistic Jet and Predictions for Late-time Emission from the Kilonova Ejecta, *ApJ*, 848, L21, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848L..21A>

Anglés-Alcázar, D., Faucher-Giguère, C.-A., Quataert, E., Wetzel, A., et al., Black holes on FIRE: stellar feedback limits early feeding of galactic nuclei, *MNRAS*, 472, L109-L114, 2017. <http://adsabs.harvard.edu/abs/2017MNRAS.472L.109A>

Arcavi, I., Howell, D. A., Kasen, D., Shappee, B., Konidaris, N., et al., Energetic eruptions leading to a peculiar hydrogen-rich explosion of a massive star, *Natur*, 551, 210-213, 2017.

<http://adsabs.harvard.edu/abs/2017Natur.551..210A>

Arellano Ferro, A., Ahumada, J. A., Bustos Fierro, I. H., Calderón, J. H., Morrell, N. I., Metallicity and distance of NGC 6362 from its RR Lyrae and SX Phoenicis stars, *AN*, 339, 183-197, 2018.

<http://adsabs.harvard.edu/abs/2018AN....339..183A>

Ashall, C., Mazzali, P. A., Stritzinger, M. D., Burns, C. R., Phillips, M. M., Morrell, N., et al., On the type Ia supernovae 2007on and 2011iv: evidence for Chandrasekhar-mass explosions at the faint end of the luminosity-width relationship, *MNRAS*, 477, 153-174, 2018. <http://adsabs.harvard.edu/abs/2018MNRAS.477..153A>

Ashcraft, T. A., Windhorst, R. A., Jansen, R. A., Boutsia, K., et al., Ultra-deep Large Binocular Camera U-band Imaging of the GOODS-North Field: Depth Versus Resolution, *PASP*, 130, 064102, 2018.

<http://adsabs.harvard.edu/abs/2018PASP..130f4102A>

Bailey, J. I., Mateo, M., White, R. J., Shectman, S. A., Crane, J. D., Radial velocity variability and stellar properties of FGK stars in the cores of NGC 2516 and NGC 2422, *MNRAS*, 475, 1609-1632, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.475.1609B>

Balestra, I., Vanzella, E., Rosati, P., Kelson, D., et al., CLASH-VLT: spectroscopic confirmation of a $z = 6.11$ quintuply lensed galaxy in the Frontier Fields Cluster RXC J2248.7-4431 (Corrigendum), *A&A*, 611, C2, 2018.

<http://adsabs.harvard.edu/abs/2018A%26A...611C...2B>

Balogh, M. L., Gilbank, D. G., Muzzin, A., Wetzel, A., Gemini Observations of Galaxies in Rich Early Environments (GOGREEN) I: survey description, *MNRAS*, 470, 4168-4185, 2017. <http://adsabs.harvard.edu/abs/2017MNRAS.470.4168B>

Bañados, E., Connor, T., Mulchaey, J., et al., Chandra X-Rays from the Redshift 7.54 Quasar ULAS J1342+0928, *ApJ*, 856, L25, 2018.
<http://adsabs.harvard.edu/abs/2018ApJ...856L..25B>

Bañados, E., Kelson, D. D., Rudie, G. C., et al., An 800-million-solar-mass black hole in a significantly neutral Universe at a redshift of 7.5, *Natur*, 553, 473-476, 2018.
<http://adsabs.harvard.edu/abs/2018Natur.553..473B>

Barrera-Ballesteros, J. K., Sánchez, S. F., Heckman, T., Blanc, G. A., The MaNGA Team, Separate Ways: The Mass-Metallicity Relation Does Not Strongly Correlate with Star Formation Rate in SDSS-IV MaNGA Galaxies, *ApJ*, 844, 80, 2017.
<http://adsabs.harvard.edu/abs/2017ApJ...844...80B>

Beaton, R., A fresh approach to stellar benchmarking, *Nature*, 558, 33-35, 2018. <http://adsabs.harvard.edu/abs/2018Natur.558...33B>

Benson, A. J., Constraining the noise-free distribution of halo spin parameters, *MNRAS*, 471, 2871-2881, 2017.
<http://adsabs.harvard.edu/abs/2017MNRAS.471.2871B>

Bensby, T., Feltzing, S., Gould, A., McWilliam, A., et al., Chemical evolution of the Galactic bulge as traced by microlensed dwarf and subgiant stars. VI. Age and abundance structure of the stellar populations in the central sub-kpc of the Milky Way, *A&A*, 605, A89, 2017. <http://adsabs.harvard.edu/abs/2017A%26A...605A..89B>

Bernstein, L. S., Shroll, R. M., Galazutdinov, G. A., Beletsky, Y., Spectral Deconvolution of the 6196 and 6614 Å Diffuse Interstellar Bands Supports a Common-carrier Origin, *ApJ*, 859, 174, 2018.
<http://adsabs.harvard.edu/abs/2018ApJ...859..174B>

Blagorodnova, N., Neill, J. D., Walters, R., Konidaris, N., et al., The SED Machine: A Robotic Spectrograph for Fast Transient Classification, *PASP*, 130, 035003, 2018.
<http://adsabs.harvard.edu/abs/2018PASP..130c5003B>

Blanchard, P. K., Nicholl, M., Berger, E., Drout, M. R., PS16dtm: A Tidal Disruption Event in a Narrow-line Seyfert 1 Galaxy, *ApJ*, 843, 106, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...843..106B>

Blanton, M. R., Bershad, M. A., Abolfathi, B., Beaton, R., Blanc, G. A., Crane, J. D., Di Mille, F., Kollmeier, J. A., Mulchaey, J., Simon, J. D., Teske, J., et al., Sloan Digital Sky Survey IV: Mapping the Milky Way, Nearby Galaxies, and the Distant Universe, *AJ*, 154, 28, 2017.

<http://adsabs.harvard.edu/abs/2017AJ....154...28B>

Bonaca, A., Conroy, C., Wetzel, A., et al., Gaia Reveals a Metal-rich, in situ Component of the Local Stellar Halo, *ApJ*, 845, 101, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...845..101B>

Bose, S., Dong, S., Pastorello, A., Shappee, B. J., et al. Gaia17biu/SN 2017egm in NGC 3191: The Closest Hydrogen-poor Superluminous Supernova to Date Is in a “Normal,” Massive, Metal-rich Spiral Galaxy, *ApJ*, 853, 57, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...853...57B>

Boss, A. P., Weinberger, A. J., Keiser, S. A., Thompson, I. B., Astrometric Constraints on the Masses of Long-period Gas Giant Planets in the TRAPPIST-1 Planetary System, *AJ*, 154, 103, 2017.

<http://adsabs.harvard.edu/abs/2017AJ....154..103B>

Boyajian, T. S., Alonso, R., Ammerman, A., Simon, J. D., et al., The First Post-Kepler Brightness Dips of KIC 8462852, *ApJ*, 853, L8, 1/2018;

<http://adsabs.harvard.edu/abs/2018ApJ...853L...8B>

Braga, V. F., Stetson, P. B., Bono, G., Beaton, R. L., Madore, B. F., et al., On the RR Lyrae Stars in Globulars. V. The Complete Near-infrared (JHK_s) Census of ω Centauri RR Lyrae Variables, *AJ*, 155, 137, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155..137B>

Brahm, R., Hartman, J. D., Jordán, A., Shectman, S., Crane, J. D., Teske, J., Thompson, I., Osip, D., et al., HATS-43b, HATS-44b, HATS-45b, and HATS-46b: Four Short-period Transiting Giant Planets in the Neptune–Jupiter Mass Range, *AJ*, 155, 112, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155..112B>

Brown, J. S., Kochanek, C. S., Holoien, T. W.-S., Shappee, B. J., Morrell, N., et al., The ultraviolet spectroscopic evolution of the low-luminosity tidal disruption event iPTF16fnl, *MNRAS*, 473, 1130-1144, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.473.1130B>

Brown, S., Moon, D.-S., Ni, Y. Q., Drout, M., et al., High-cadence Multi-color Observations of the Dwarf Nova KSP-OT-201503a by the KMTNet Supernova Program, *ApJ*, 860, 21, 2018. <http://adsabs.harvard.edu/abs/2018ApJ...860...21B>

Ceillier, T., Tayar, J., Mathur, S., van Saders, J., et al., Surface rotation of Kepler red giant stars, *A&A*, 605, A111, 2017.

<http://adsabs.harvard.edu/abs/2017A%26A...605A.111C>

Chakrabarti, S., Angeloni, R., Freeman, K., Simon, J. D., et al., Discovery of a Group of Receding, Variable Halo Stars toward Norma, *ApJ*, 844, 159, 8/2017;

<http://adsabs.harvard.edu/abs/2017ApJ...844..159C>

Chang, S.-J., Lee, H.-W., Ahn, S.-H., Di Mille, F., Escape of Resonantly Scattered Ly β and H α from Hot and Optically Thick Media, *JKAS*, 51, 5-16, 2018.

<http://adsabs.harvard.edu/abs/2018JKAS...51....5C>

Chen, S.-F. S., Simcoe, R. A., Torrey, P., Bañados, E., et al., Mg II Absorption at $2 < Z < 7$ with Magellan/Fire. III. Full Statistics of Absorption toward 100 High-redshift QSOs, *ApJ*, 850, 188, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...850..188C>

Chiti, A., Frebel, A., Ji, A. P., et al., Chemical Abundances of New Member Stars in the Tucana II Dwarf Galaxy, *ApJ*, 857, 74, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...857...74C>

Chiti, A., Simon, J. D., Frebel, A., Thompson, I. B., Shectman, S. A., Crane, J. D., et al., Detection of a Population of Carbon-enhanced Metal-poor Stars in the Sculptor Dwarf Spheroidal Galaxy, *ApJ*, 856, 142, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...856..142C>

Chornock, R., Berger, E., Kasen, D., Drout, M. R., et al., The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. IV. Detection of Near-infrared Signatures of r-process Nucleosynthesis with Gemini-South, *ApJ*, 848, L19, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848L..19C>

Congiu, E., Contini, M., Ciroi, S., Di Mille, F., et al., High-resolution spectroscopy of the extended narrow-line region of IC 5063 and NGC 7212, *MNRAS*, 471, 562-588, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.471..562C>

Congiu, E., Contini, M., Ciroi, S., Di Mille, F., et al., Extended Narrow-Line Region in Seyfert Galaxies, *FrASS*, 4, 27, 2017.

<http://adsabs.harvard.edu/abs/2017FrASS...4...27C>

Connor, T., Donahue, M., Kelson, D. D., et al., Crowded Field Galaxy Photometry: Precision Colors in the CLASH Clusters, *ApJ*, 848, 37, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848...37C>

Contreras, C., Phillips, M. M., Burns, C. R., Piro, A. L., Shappee, B. J., Morrell, N., et al., SN 2012fr: Ultraviolet, Optical, and Near-infrared Light Curves of a Type Ia Supernova Observed within a Day of Explosion, *ApJ*, 859, 24, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...859...24C>

Coppejans, D. L., Margutti, R., Guidorzi, C., Drout, M., et al., Jets in Hydrogen-poor Superluminous Supernovae: Constraints from a Comprehensive Analysis of Radio Observations, *ApJ*, 856, 56, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...856...56C>

Coulter, D. A., Foley, R. J., Kilpatrick, C. D., Drout, M. R., Piro, A. L., Shappee, B. J., Simon, J. D., Madore, B. F., et al., Swope Supernova Survey 2017a (SSS17a), the optical counterpart to a gravitational wave source, *Sci*, 358, 1556-1558, 2017.

<http://adsabs.harvard.edu/abs/2017Sci...358.1556C>

Cowperthwaite, P. S., Berger, E., Rest, A., Drout, M. R., et al., An Empirical Study of Contamination in Deep, Rapid, and Wide-field Optical Follow-up of Gravitational Wave Events, *ApJ*, 858, 18, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...858...18C>

Cowperthwaite, P. S., Berger, E., Villar, V. A., Drout, M. R., et al., The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. II. UV, Optical, and Near-infrared Light Curves and Comparison to Kilonova Models, *ApJ*, 848, L17, 2017. <http://adsabs.harvard.edu/abs/2017ApJ...848L..17C>

Czekala, I., Andrews, S. M., Torres, G., Shappee, B. J., Holoien, T. W.-S., The Architecture of the GW Ori Young Triple-star System and Its Disk: Dynamical Masses, Mutual Inclinations, and Recurrent Eclipses, *ApJ*, 851, 132, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...851..132C>

Czerny, B., Beaton, R., Bejger, M., et al., Astronomical Distance Determination in the Space Age. Secondary Distance Indicators, *SSRv*, 214, 32, 2018.

<http://adsabs.harvard.edu/abs/2018SSRv..214...32C>

D'Agostino J. J., Poetrodjojo H., Ho I.-T., Madore B. F., et al., Starburst-AGN mixing: TYPHOON observations of NGC 1365, NGC 1068, and the effect of spatial resolution on the AGN fraction, *MNRAS*, 479, 4907-4935, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.479.4907D>

Dai, F., Winn, J. N., Gandolfi, D., Teske, J. K., Crane, J. D., Shectman, S. A., Thompson, I. B., et al., The Discovery and Mass Measurement of a New Ultra-short-period Planet: K2-131b, *AJ*, 154, 226, 2017.

<http://adsabs.harvard.edu/abs/2017AJ....154..226D>

de Jaeger, T., Anderson, J. P., Galbany, L., Phillips, M. M., Morrell, N., et al., Observed Type II supernova colours from the Carnegie Supernova Project-I, *MNRAS*, 476, 4592-4616, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.476.4592D>

Decarli, R., Walter, F., Venemans, B. P., Bañados, E., et al., An ALMA [C II] Survey of 27 Quasars at $z > 5.94$, *ApJ*, 854, 97, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...854...97D>

DeMaio, T., Gonzalez, A. H., Zabludoff, A., Connor, T., Mulchaey, J. S., Lost but not forgotten: intracluster light in galaxy groups and clusters, *MNRAS*, 474, 3009-3031, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.474.3009D>

Di Criscienzo, M., Merlin, E., Castellano, M., Boutsia, K., et al., The ASTRODEEP Frontier Fields catalogues. III. Multiwavelength photometry and rest-frame properties of MACS-J0717 and MACS-J1149, *A&A*, 607, A30, 2017.

<http://adsabs.harvard.edu/abs/2017A%26A...607A..30D>

Díaz, M. R., Jenkins, J. S., Tuomi, M., Teske, J. K., Shectman, S. A., Crane, J. D., Thompson, I. B., et al., The Test Case of HD 26965: Difficulties Disentangling Weak Doppler Signals from Stellar Activity, *AJ*, 155, 126, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155..126D>

Dib, S., Hony, S., Blanc, G., The extended law of star formation: the combined role of gas and stars, *MNRAS*, 469, 1521-1531, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.469.1521D>

Drout, M. R., Piro, A. L., Shappee, B. J., Simon, J. D., Morrell, N., Boutsia, K., Di Mille, F., Holoién, T. W.-S., Kollmeier, J. A., Madore, B. F., Alatalo, K., Bañados, E., Bernstein, R. A., Hansen, T. T., Ji, A. P., Strom, A. L., et al., Light curves of the neutron star merger GW170817/SSS17a: Implications for r-process nucleosynthesis, *Sci*, 358, 1570-1574, 2017.

<http://adsabs.harvard.edu/abs/2017Sci...358.1570D>

Du, X., Shapley, A. E., Reddy, N. A., Strom, A. L., Rudie, G. C., et al., The Redshift Evolution of Rest-UV Spectroscopic Properties in Lyman-break Galaxies at $z \sim 2-4$, *ApJ*, 860, 75, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...860...75D>

Dupree, A. K., Dotter, A., Johnson, C. I., Crane, J. D., et al., NGC 1866: First Spectroscopic Detection of Fast-rotating Stars in a Young LMC Cluster, *ApJ*, 846, L1, 2017. <http://adsabs.harvard.edu/abs/2017ApJ...846L...1D>

Escala, I., Wetzel, A., Kirby, E. N., et al., Modelling chemical abundance distributions for dwarf galaxies in the Local Group: the impact of turbulent metal diffusion, *MNRAS*, 474, 2194-2211, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.474.2194E>

Farina, E. P., Venemans, B. P., Decarli, R., Bañados, E., et al., Mapping the Ly α Emission around a $z \sim 6.6$ QSO with MUSE: Extended Emission and a Companion at a Close Separation, *ApJ*, 848, 78, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848...78F>

Fausnaugh, M. M., Starkey, D. A., Horne, K., Shappee, B. J., van Saders, J., et al., Continuum Reverberation Mapping of the Accretion Disks in Two Seyfert 1 Galaxies, *ApJ*, 854, 107, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...854..107F>

Fitts, A., Boylan-Kolchin, M., Elbert, O. D., Wetzel, A., et al., Fire in the Field: Simulating the Threshold of Galaxy Formation, *MNRAS*, 471, 3547-3562, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.471.3547F>

Gagné, J., Faherty, J. K., Mamajek, E. E., Beletsky, Y., et al., BANYAN. IX. The Initial Mass Function and Planetary-mass Object Space Density of the TW HYA Association, *ApJS*, 228, 18, 2017.

<http://adsabs.harvard.edu/abs/2017ApJS..228...18G>

Gall, C., Stritzinger, M. D., Ashall, Burns, C. R., Phillips, M. M., Morrell, N., et al., Two transitional type Ia supernovae located in the Fornax cluster member NGC 1404: SN 2007on and SN 2011iv, *A&A*, 611, A58, 2018.

<http://adsabs.harvard.edu/abs/2018A%26A...611A..58G>

Garrison-Kimmel, S., Wetzel, A., Bullock, J. S., et al., Not so lumpy after all: modelling the depletion of dark matter subhaloes by Milky Way-like galaxies, *MNRAS*, 471, 1709-1727, 2017. <http://adsabs.harvard.edu/abs/2017MNRAS.471.1709G>

Geha, M., Wechsler, R. H., Mao, Y.-Y., Bernstein, R., Lu, Y., The SAGA Survey. I. Satellite Galaxy Populations around Eight Milky Way Analogs, *ApJ*, 847, 4, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...847....4G>

Gennaro, M., Tchernyshyov, K., Brown, T. M., Simon, J. D., et al., Evidence of a Non-universal Stellar Initial Mass Function. Insights from HST Optical Imaging of Six Ultra-faint Dwarf Milky Way Satellites, *ApJ*, 855, 20, 3/2018;

<http://adsabs.harvard.edu/abs/2018ApJ...855...20G>

Gilbert, K. M., Tollerud, E., Beaton, R. L., et al., Global Properties of M31's Stellar Halo from the SPLASH Survey. III. Measuring the Stellar Velocity Dispersion Profile, *ApJ*, 852, 128, 2018. <http://adsabs.harvard.edu/abs/2018ApJ...852..128G>

Goulding, A. D., Greene, J. E., Bezanson, Johnson, S., et al., Galaxy interactions trigger rapid black hole growth: An unprecedented view from the Hyper Suprime-Cam survey, *PASJ*, 70, S37, 2018.

<http://adsabs.harvard.edu/abs/2018PASJ...70S..37G>

Graczyk, D., Pietrzyński, G., Thompson, I. B., et al., The Late-type Eclipsing Binaries in the Large Magellanic Cloud: Catalog of Fundamental Physical Parameters, *ApJ*, 860, 1, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...860....1G>

Graur, O., French, K. D., Zahid, H. J., et al., A Dependence of the Tidal Disruption Event Rate on Global Stellar Surface Mass Density and Stellar Velocity Dispersion, *ApJ*, 853, 39, 2018. <http://adsabs.harvard.edu/abs/2018ApJ...853...39G>

Graur, O., Zurek, D. R., Rest, A., Shappee, B. J., et al., Observations of SN 2015F Suggest a Correlation between the Intrinsic Luminosity of Type Ia Supernovae and the Shape of Their Light Curves >900 Days after Explosion, *ApJ*, 859, 79, 2018.
<http://adsabs.harvard.edu/abs/2018ApJ...859...79G>

Grazian, A., Giallongo, E., Boutsia, K., et al., The contribution of faint AGNs to the ionizing background at z 4, *A&A*, 613, A44, 2018.
<http://adsabs.harvard.edu/abs/2018A%26A...613A..44G>

Guenther, E. W., Barragán, O., Dai, F., Crane, J. D., Shectman, S. A., Teske, J. K., Thompson, I. B., et al., K2-106, a system containing a metal-rich planet and a planet of lower density, *A&A*, 608, A93, 2017.
<http://adsabs.harvard.edu/abs/2017A%26A...608A..93G>

Guo, Y., Rafelski, M., Bell, E. F., Lu, Y., et al., Clumpy Galaxies in CANDELS. II. Physical Properties of UV-bright Clumps at $0.5 \leq z < 3$, *ApJ*, 853, 108, 2018.
<http://adsabs.harvard.edu/abs/2018ApJ...853..108G>

Gutiérrez, C. P., Anderson, J. P., Hamuy, M., Phillips, M. M., Morrell, N., et al., Type II Supernova Spectral Diversity. II. Spectroscopic and Photometric Correlations, *ApJ*, 850, 90, 2017.
<http://adsabs.harvard.edu/abs/2017ApJ...850...90G>

Gutiérrez, C. P., Anderson, J. P., Hamuy, M., Morrell, N., Phillips, M. M., Madore, B. F., et al., Type II Supernova Spectral Diversity. I. Observations, Sample Characterization, and Spectral Line Evolution, *ApJ*, 850, 89, 2017.
<http://adsabs.harvard.edu/abs/2017ApJ...850...89G>

Hansen, T. T., Holmbeck, E. M., Beers, T. C., Simon, J. D., Thompson, I. B., The R-process Alliance: First Release from the Southern Search for R-process-enhanced Stars in the Galactic Halo, *ApJ*, 858, 92, 2018.
<http://adsabs.harvard.edu/abs/2018ApJ...858...92H>

Harikane, Y., Ouchi, M., Shibuya, T., Rauch, M., et al., SILVERRUSH. V. Census of Ly α , [O III] λ 5007, H α , and [C II] 158 μ m Line Emission with \sim 1000 LAEs at $z = 4.9-7.0$ Revealed with Subaru/HSC, *ApJ*, 859, 84, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...859...84H>

Hasselquist, S., Shetrone, M., Smith, V., McWilliam, A., et al., APOGEE Chemical Abundances of the Sagittarius Dwarf Galaxy, *ApJ*, 845, 162, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...845..162H>

Hatt, D., Beaton, R. L., Freedman, W. L., Madore, B. F., Rich, J. A., Seibert, M., The Carnegie-Chicago Hubble Program. II. The Distance to IC 1613: The Tip of the Red Giant Branch and RR Lyrae Period-luminosity Relations, *ApJ*, 845, 146, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...845..146H>

Hayes, C. R., Majewski, S. R., Hasselquist, S., Beaton, R. L., et al., Disk-like Chemistry of the Triangulum-Andromeda Overdensity as Seen by APOGEE, *ApJ*, 859, L8, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...859L...8H>

Hendel D., Scowcroft V., Johnston K. V., Beaton R. L., Madore B. F., et al., SMHASH: anatomy of the Orphan Stream using RR Lyrae stars, *MNRAS*, 479, 570-587, 2018.

<https://ui.adsabs.harvard.edu/#abs/2018MNRAS.479..570H>

Ho, I.-T., Seibert, M., Madore, B. F., Rich, J. A., et al., The Chemical Evolution Carousel of Spiral Galaxies: Azimuthal Variations of Oxygen Abundance in NGC1365, *ApJ*, 846, 39, 2017. <http://adsabs.harvard.edu/abs/2017ApJ...846...39H>

Hoeflich, P., Hsiao, E. Y., Ashall, C., Burns, C. R., Phillips, M. M., Morrell, N., et al., Light and Color Curve Properties of Type Ia Supernovae: Theory Versus Observations, *ApJ*, 846, 58, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...846...58H>

Holmbeck, E. M., Beers, T. C., Roederer, I. U., Hansen, T. T., et al., The R-Process Alliance: 2MASS J09544277+5246414, the Most Actinide-enhanced R-II Star Known, *ApJ*, 859, L24, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...859L..24H>

Holoien, T. W.-S., Brown, J. S., Stanek, K. Z., Shappee, B. J., Morrell, N., et al., The ASAS-SN bright supernova catalogue - III. 2016, *MNRAS*, 471, 4966-4981, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.471.4966H>

Hopkins, P. F., Wetzel, A., Kereš, D., et al, How to model supernovae in simulations of star and galaxy formation, *MNRAS*, 477, 1578-1603, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.477.1578H>

Hoyt, T. J., Freedman, W. L., Madore, B. F., Seibert, M., Beaton, R. L., Rich, J. A., The Near-infrared Tip of the Red Giant Branch. II. An Absolute Calibration in the Large Magellanic Cloud, *ApJ*, 858, 12, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...858...12H>

Icecube Collaboration, Aartsen, M. G., Ackermann, M., Shapsee, B. J., et al., Multiwavelength follow-up of a rare IceCube neutrino multiplet, *A&A*, 607, A115, 2017.

<http://adsabs.harvard.edu/abs/2017A%26A...607A.115I>

Jang, I. S., Hatt, D., Beaton, R. L., Madore, B. F., Rich, J. A., Seibert, M., The Carnegie–Chicago Hubble Program. III. The Distance to NGC 1365 via the Tip of the Red Giant Branch, *ApJ*, 852, 60, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...852...60J>

Ji, A. P., Frebel, A., From Actinides to Zinc: Using the Full Abundance Pattern of the Brightest Star in Reticulum II to Distinguish between Different r-process Sites, *ApJ*, 856, 138, 2018. <http://adsabs.harvard.edu/abs/2018ApJ...856..138J>

Jiang, L., Shen, Y., Bian, F., Blanc, G. A., Infante, L., Crane, J. D., Sheckman, S., Thompson, I., et al., A Magellan M2FS Spectroscopic Survey of Galaxies at $5.5 < z < 6.8$: Program Overview and a Sample of the Brightest Ly α Emitters, *ApJ*, 846, 134, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...846..134J>

Jiménez-Teja, Y., Dupke, R., Benítez, N., Kelson, D. D., et al., Unveiling the Dynamical State of Massive Clusters through the ICL Fraction, *ApJ*, 857, 79, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...857...79J>

Johnson, S. D., Chen, H.-W., Mulchaey, J. S., et al., The Extent of Chemically Enriched Gas around Star-forming Dwarf Galaxies, *ApJ*, 850, L10, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...850L..10J>

Johnston, K. V., Price-Whelan, A. M., Bergemann, M., Beaton, R. S., et al., Disk Heating, Galactoseismology, and the Formation of Stellar Halos, *Galax*, 5, 44, 2017.

<http://adsabs.harvard.edu/abs/2017Galax...5...44J>

Karoff, C., Metcalfe, T. S., Santos, Â. R. G., van Saders, J., et al., The Influence of Metallicity on Stellar Differential Rotation and Magnetic Activity, *ApJ*, 852, 46, 2018. <http://adsabs.harvard.edu/abs/2018ApJ...852...46K>

Kato, T., Isogai, K., Hamsch, F.-J., Shappee, B., et al., Survey of period variations of superhumps in SU UMa-type dwarf novae. IX. The ninth year (2016-2017), *PASJ*, 69, 75, 2017. <http://adsabs.harvard.edu/abs/2017PASJ...69...75K>

Katsianis, A., Blanc, G., Lagos, C. P., et al., The evolution of the star formation rate function in the EAGLE simulations: a comparison with UV, IR and H α observations from $z \sim 8$ to $z \sim 0$, *MNRAS*, 472, 919-939, 2017.
<http://adsabs.harvard.edu/abs/2017MNRAS.472..919K>

Kilpatrick, C. D., Foley, R. J., Kasen, D., Drout, M. R., Piro, A. L., Shappee, B. J., Boutsia, K., Di Mille, F., Madore, B. F., Morrell, N., Simon, J. D., et al., Electromagnetic evidence that SSS17a is the result of a binary neutron star merger, *Sci*, 358, 1583-1587, 2017. <http://adsabs.harvard.edu/abs/2017Sci...358.1583K>

Kilpatrick, C. D., Foley, R. J., Drout, M. R., Piro, A. L., et al., Connecting the progenitors, pre-explosion variability and giant outbursts of luminous blue variables with Gaia16cfr, *MNRAS*, 473, 4805-4823, 2018.
<http://adsabs.harvard.edu/abs/2018MNRAS.473.4805K>

Kim, J.-h., Ma, X., Grudić, M. Y., Wetzel, A., et al., Formation of globular cluster candidates in merging proto-galaxies at high redshift: a view from the FIRE cosmological simulations, *MNRAS*, 474, 4232-4244, 2018.
<http://adsabs.harvard.edu/abs/2018MNRAS.474.4232K>

Knebe, A., Pearce, F. R., Gonzalez-Perez, V., Benson, A., et al., Cosmic CARNage I: on the calibration of galaxy formation models, *MNRAS*, 475, 2936-2954, 2018.
<http://adsabs.harvard.edu/abs/2018MNRAS.475.2936K>

Knebe, A., Stoppacher, D., Prada, F., Benson, A., et al., MULTIDARK-GALAXIES: data release and first results, *MNRAS*, 474, 5206-5231, 2018.
<http://adsabs.harvard.edu/abs/2018MNRAS.474.5206K>

Koch, A., Hansen, T. T., Kunder, A., Detailed chemical abundance analysis of the thick disk star cluster Gaia 1, *A&A*, 609, A13, 2018.

<http://adsabs.harvard.edu/abs/2018A%26A...609A..13K>

Kochanek, C. S., Shappee, B. J., Stanek, K. Z., et al., The All-Sky Automated Survey for Supernovae (ASAS-SN) Light Curve Server v1.0, *PASP*, 129, 104502, 2017.

<http://adsabs.harvard.edu/abs/2017PASP..129j4502K>

Kollmeier, J. A., Zasowski, G., Rix, H.-W., Blanc, G. A., Crane, J. D., Seibert, M., Teske, J. K., van Saders, J. L., SDSS-V: Pioneering Panoptic Spectroscopy, *arXiv:1711.03234*, 2017.

<https://ui.adsabs.harvard.edu/#abs/2017arXiv171103234K>

Krisciunas, K., Contreras, C., Burns, C. R., Phillips, M. M., Morrell, N., Madore, B. F., et al., The Carnegie Supernova Project. I. Third Photometry Data Release of Low-redshift Type Ia Supernovae and Other White Dwarf Explosions, *AJ*, 154, 211, 2017.

<http://adsabs.harvard.edu/abs/2017AJ....154..211K>

Law, C. J., Milisavljevic, D., Crabtree, K. N., Drout, M. R., et al., TRES survey of variable diffuse interstellar bands, *MNRAS*, 470, 2835-2844, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.470.2835L>

Lee, B., Giavalisco, M., Whitaker, K., Lu, Y., The Intrinsic Characteristics of Galaxies on the SFR-M_{*} Plane at 1.2 < z < 4: I. The Correlation between Stellar Age, Central Density, and Position Relative to the Main Sequence, *ApJ*, 853, 131, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...853..131L>

Leroy, A. K., Schinnerer, E., Hughes, A., Blanc, G. A., et al., Cloud-scale ISM Structure and Star Formation in M51, *ApJ*, 846, 71, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...846...71L>

Li, K.-L., Metzger, B. D., Chomiuk, L., Shappee, B. J., et al., A nova outburst powered by shocks, *NatAs*, 1, 697-702, 2017.

<http://adsabs.harvard.edu/abs/2017NatAs...1..697L>

Li, T. S., Sheffield, A. A., Johnston, K. V., Beaton, R. L., et al., Exploring Halo Substructure with Giant Stars. XV. Discovery of a Connection between the Monoceros Ring and the Triangulum-Andromeda Overdensity?, *ApJ*, 844, 74, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...844...74L>

Li, T. S., Simon, J. D., Pace, A. B., Ji, A. P., et al., MagLiteS Collaboration, Ships Passing in the Night: Spectroscopic Analysis of Two Ultra-faint Satellites in the Constellation Carina, *ApJ*, 857, 145, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...857..145L>

Linden, S. T., Evans, A. S., Rich, J., et al., Massive Star Cluster Formation and Destruction in Luminous Infrared Galaxies in GOALS, *ApJ*, 843, 91, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...843...91L>

Line, M. R., Marley, M. S., Liu, M. C., Teske, J., et al., Uniform Atmospheric Retrieval Analysis of Ultracool Dwarfs. II. Properties of 11 T dwarfs, *ApJ*, 848, 83, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848...83L>

Lisenfeld, U., Alatalo, K., Zucker, C., et al., The role of molecular gas in galaxy transition in compact groups, *A&A*, 607, A110, 2017.

<http://adsabs.harvard.edu/abs/2017A%26A...607A.110L>

Littlefield, C., Garnavich, P., Kennedy, M., Shappee, B., et al., Long-term Photometric Variations in the Candidate White-dwarf Pulsar AR Scorpii from K2, CRTS, and ASAS-SN Observations, *ApJ*, 845, L7, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...845L...7L>

Liu, N., Fu, J. N., Zong, W., Morrell, N., Photometric Solutions of Three Eclipsing Binary Stars Observed from Dome A, Antarctica, *AJ*, 155, 168, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155..168L>

Lu, Y., Benson, A., Wetzel, A., Tonnesen, S., et al., The Importance of Preventive Feedback: Inference from Observations of the Stellar Masses and Metallicities of Milky Way Dwarf Galaxies, *ApJ*, 846, 66, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...846...66L>

Lunnan, R., Chornock, R., Berger, E., Drout, M. R., et al., Hydrogen-poor Superluminous Supernovae from the Pan-STARRS1 Medium Deep Survey, *ApJ*, 852, 81, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...852...81L>

Madore, B. F., Freedman, W. L., Hatt, D., Beaton, R. L., Rich, J. A., Seibert, M., The Near-infrared Tip of the Red Giant Branch. I. A Calibration in the Isolated Dwarf Galaxy IC 1613, *ApJ*, 858, 11, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...858...11M>

Mao, Y.-Y., Kovacs, E., Heitmann, K., Benson, A. J., et al., The LSST Dark Energy Science Collaboration, DESCQA: An Automated Validation Framework for Synthetic Sky Catalogs, *ApJS*, 234, 36, 2018.

<http://adsabs.harvard.edu/abs/2018ApJS..234...36M>

Martínez-Rodríguez, H., Badenes, C., Yamaguchi, H., Piro, A. L., et al., Observational Evidence for High Neutronization in Supernova Remnants: Implications for Type Ia Supernova Progenitors, *ApJ*, 843, 35, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...843...35M>

Mathur, S., Gupta, A., Page, K., Shappee, B. J., van Saders, J., et al., Space Telescope and Optical Reverberation Mapping Project. VII. Understanding the Ultraviolet Anomaly in NGC 5548 with X-Ray Spectroscopy, *ApJ*, 846, 55, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...846...55M>

Mayo, A. W., Vanderburg, A., Latham, D. W., Patel, R., et al., 275 Candidates and 149 Validated Planets Orbiting Bright Stars in K2 Campaigns 0–10, *AJ*, 155, 136, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155..136M>

Mazzali, P. A., Ashall, C., Pian, E., Phillips, M. M., et al., The nebular spectra of the transitional Type Ia Supernovae 2007on and 2011iv: broad, multiple components indicate aspherical explosion cores, *MNRAS*, 476, 2905-2917, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.476.2905M>

Mazzucchelli, C., Bañados, E., Venemans, B. P., et al., Physical Properties of 15 Quasars at $z \gtrsim$

6.5, *ApJ*, 849, 91, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...849...91M>

McWilliam, A., Piro, A. L., Badenes, C., Bravo, E., Evidence for a Sub-Chandrasekhar-mass Type Ia Supernova in the Ursa Minor Dwarf Galaxy, *ApJ*, 857, 97, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...857...97M>

Meidt, S. E., Leroy, A. K., Rosolowsky, E., Blanc, G., et al., A Model for the Onset of Self-gravitation and Star Formation in Molecular Gas Governed by Galactic Forces. I. Cloud-scale Gas Motions, *ApJ*, 854, 100, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...854..100M>

Merlin, E., Fontana, A., Castellano, M., Boutsia, K., et al., Chasing passive galaxies in the early Universe: a critical analysis in CANDELS GOODS-South, *MNRAS*, 473, 2098-2123, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.473.2098M>

Merson, A., Wang, Y., Benson, A., et al., Predicting H α emission-line galaxy counts for future galaxy redshift surveys, *MNRAS*, 474, 177-196, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.474..177M>

Metcalf, T. S., van Saders, J., Magnetic Evolution and the Disappearance of Sun-Like Activity Cycles, *SoPh*, 292, 126, 2017.

<http://adsabs.harvard.edu/abs/2017SoPh..292..126M>

Milisavljevic, D., Patnaude, D. J., Raymond, J. C., Drout, M. R., et al., iPTF15eqv: Multiwavelength Exposé of a Peculiar Calcium-rich Transient, *ApJ*, 846, 50, 2017. <http://adsabs.harvard.edu/abs/2017ApJ...846...50M>

Miller, A. A., Cao, Y., Piro, A. L., et al., Early Observations of the Type Ia Supernova iPTF 16abc: A Case of Interaction with Nearby, Unbound Material and/or Strong Ejecta Mixing, *ApJ*, 852, 100, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...852..100M>

Miller, T. B., Chapman, S. C., Aravena, M., Strom, A. L., A massive core for a cluster of galaxies at a redshift of 4.3, *Natur*, 556, 469-472, 2018.

<http://adsabs.harvard.edu/abs/2018Natur.556..469M>

Millholland, S., Laughlin, G., Teske, J., Crane, J., Shtetman, S., Thompson, I., New Constraints on Gliese 876—Exemplar of Mean-motion Resonance, *AJ*, 155, 106, 2018. <http://adsabs.harvard.edu/abs/2018AJ....155..106M>

<http://adsabs.harvard.edu/abs/2018AJ....155..106M>

Minniti, D., Saito, R. K., Forster, F., Morrell, N. I., Phillips, M. M., et al., The Emergence of the Infrared Transient VVV-WIT-06, *ApJ*, 849, L23, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...849L..23M>

Molino, A., Benítez, N., Ascaso, B., Kelson, D., et al., CLASH: accurate photometric redshifts with 14 HST bands in massive galaxy cluster cores, *MNRAS*, 470, 95-113, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.470...95M>

Morandi, A., Sun, M., Mulchaey, J., Nagai, D., Bonamente, M., Gas distribution and clumpiness in the galaxy group NGC 2563, *MNRAS*, 469, 2423-2433, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.469.2423M>

Morozova, V., Piro, A. L., Valenti, S., Measuring the Progenitor Masses and Dense Circumstellar Material of Type II Supernovae, *ApJ*, 858, 15, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...858...15M>

Muñoz, R. R., Côté, P., Santana, F. A., Simon, J. D., et al., A MegaCam Survey of Outer Halo Satellites. I. Description of the Survey, *ApJ*, 860, 65, 6/2018;

<http://adsabs.harvard.edu/abs/2018ApJ...860...65M>

Muñoz, R. R., Côté, P., Santana, F. A., Simon, J. D., et al., A MegaCam Survey of Outer Halo Satellites. III. Photometric and Structural Parameters, *ApJ*, 860, 66, 6/2018;

<http://adsabs.harvard.edu/abs/2018ApJ...860...66M>

Murguia-Berthier, A., Ramirez-Ruiz, E., Kilpatrick, C. D., Piro, A. L., Drout, M. R., Madore, B. F., Shappee, B. J., Simon, J. D., A Neutron Star Binary Merger Model for GW170817/GRB 170817A/SSS17a, *ApJ*, 848, L34, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848L..34M>

Nadler, E. O., Mao, Y.-Y., Wechsler, R. H., Garrison-Kimmel, S., Wetzel, A., Modeling the Impact of Baryons on Subhalo Populations with Machine Learning, *ApJ*, 859, 129, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...859..129N>

Nagasawa, D. Q., Marshall, J. L., Li, T. S., Hansen, T. T., Simon, J. D., Bernstein, R. A., et al., Chemical Abundance Analysis of Three α -poor, Metal-poor Stars in the Ultrafaint Dwarf Galaxy Horologium I, *ApJ*, 852, 99, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...852...99N>

Narloch, W., Kaluzny, J., Poleski, R., Thompson, I. B., A ground-based proper motion study of 12 nearby globular clusters, *MNRAS*, 471, 1446-1467, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.471.1446N>

Natale, G., Popescu, C. C., Tuffs, R. J., Pasetto, S., et al., Ray-tracing 3D dust radiative transfer with DART-Ray: code upgrade and public release, *A&A*, 607, A125, 2017.

<http://adsabs.harvard.edu/abs/2017A%26A...607A.125N>

Neugent, K. F., Massey, P., Morrell, N. I., Skiff, B., Georgy, C., A Runaway Yellow Supergiant Star in the Small Magellanic Cloud, *AJ*, 155, 207, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155..207N>

Newman, A. B., Smith, R. J., Conroy, C., Villaume, A., van Dokkum, P., The Initial Mass Function in the Nearest Strong Lenses from SNELLS: Assessing the Consistency of Lensing, Dynamical, and Spectroscopic Constraints, *ApJ*, 845, 157, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...845..157N>

Nucita, A. A., De Paolis, F., Saxton, R., Boutsia, K., Optical, Near-IR, and X-Ray Observations of SN 2015J and Its Host Galaxy, *ApJ*, 850, 111, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...850..111N>

Nyland, K., Davis, T. A., Nguyen, D. D., Alatalo, K., et al., A Multi-wavelength Study of the Turbulent Central Engine of the Low-mass AGN Hosted by NGC 404, *ApJ*, 845, 50, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...845...50N>

Nyland, K., Harwood, J. J., Mukherjee, D., Alatalo, K., et al., Revolutionizing Our Understanding of AGN Feedback and its Importance to Galaxy Evolution in the Era of the Next Generation Very Large Array, *ApJ*, 859, 23, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...859...23N>

Oemler, A., Jr., Abramson, L. E., Gladders, M. D., Dressler, A., et al., The Star Formation Histories of Disk Galaxies: The Live, the Dead, and the Undead, *ApJ*, 844, 45, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...844...45O>

O'Malley, E. M., Knaizev, A., McWilliam, A., Chaboyer, B., High-resolution Spectroscopic Abundances of Red Giant Branch Stars in NGC 6681, *ApJ*, 846, 23, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...846...23O>

Ono, Y., Ouchi, M., Harikane, Y., Rauch, M., et al., Great Optically Luminous Dropout Research Using Subaru HSC (GOLDRUSH). I. UV luminosity functions at $z \sim 4-7$ derived with the half-million dropouts on the 100 deg² sky, *PASJ*, 70, S10, 2018.

<http://adsabs.harvard.edu/abs/2018PASJ...70S..10O>

Osborn, H. P., Rodriguez, J. E., Kenworthy, M. A., Shappee, B. J., et al., Periodic eclipses of the young star PDS 110 discovered with WASP and KELT photometry, *MNRAS*, 471, 740-749, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.471..740O>

Ota, K., Venemans, B. P., Taniguchi, Y., Bañados, E., et al., Large-scale Environment of a $z = 6.61$ Luminous Quasar Probed by Ly α Emitters and Lyman Break Galaxies, *ApJ*, 856, 109, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...856..109O>

Oyarzún, G. A., Blanc, G. A., González, V., Mateo, M., Bailey, J. I., III, A Comprehensive Study of Ly α Emission in the High-redshift Galaxy Population, *ApJ*, 843, 133, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...843..133O>

Pan, Y.-C., Kilpatrick, C. D., Simon, J. D., Boutsia, K., Drout, M. R., Morrell, N., Osip, D., Piro, A. L., Shappee, B. J., et al., The Old Host-galaxy Environment of SSS17a, the First Electromagnetic Counterpart to a Gravitational-wave Source, *ApJ*, 848, L30, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848L..30P>

Pandya, V., Brennan, R., Somerville, R. S., Lu, Y., et al., The nature of massive transition galaxies in CANDELS, GAMA and cosmological simulations, *MNRAS*, 472, 2054-2084, 2017. <http://adsabs.harvard.edu/abs/2017MNRAS.472.2054P>

Pasetto, S., Grebel, E. K., Chiosi, C., et al., GalMod: A Galactic Synthesis Population Model, *ApJ*, 860, 120, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...860..120P>

Pastorello, A., Kochanek, C. S., Fraser, M., Shappee, B. J., et al., Supernovae 2016bdu and 2005gl, and their link with SN 2009ip-like transients: another piece of the puzzle, *MNRAS*, 474, 197-218, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.474..197P>

Peterson, B. W., Appleton, P. N., Bitsakis, T., Alatalo, K., et al., Herschel Spectroscopy of the Taffy Galaxies (UGC 12914/12915 = VV 254): Enhanced [C II] Emission in the Collisionally Formed Bridge, *ApJ*, 855, 141, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...855..141P>

Pietrukowicz, P., Dziembowski, W. A., Latour, M., di Mille, F., et al., Blue large-amplitude pulsators as a new class of variable stars, *NatAs*, 1, 0166, 2017.

<http://adsabs.harvard.edu/abs/2017NatAs...1E.166P>

Piro, A. L., Giacomazzo, B., Perna, R., The Fate of Neutron Star Binary Mergers, *ApJ*, 844, L19, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...844L..19P>

Piro, A. L., Kollmeier, J. A., Evidence for Cocoon Emission from the Early Light Curve of SSS17a, *ApJ*, 855, 103, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...855..103P>

Piro, A. L., Muhleisen, M., Arcavi, I., et al., Numerically Modeling the First Peak of the Type IIb SN 2016gkg, *ApJ*, 846, 94, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...846...94P>

Placco, V. M., Beers, T. C., Santucci, R. M., Hansen, T. T., et al., Spectroscopic Validation of Low-metallicity Stars from RAVE, *AJ*, 155, 256, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155..256P>

Placco, V. M., Holmbeck, E. M., Frebel, A., Ji, A. P., Hansen, T. T., et al., RAVE J203843.2-002333: The First Highly R-process-enhanced Star Identified in the RAVE Survey, *ApJ*, 844, 18, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...844...18P>

Poggianti, B. M., Jaffé, Y. L., Moretti, A., Tonnesen, S., et al., Ram-pressure feeding of supermassive black holes, *Natur*, 548, 304-309, 2017.

<http://adsabs.harvard.edu/abs/2017Natur.548..304P>

Pujol, A., Skibba, R. A., Gaztañaga, E., Benson, A., et al., nIFTy cosmology: the clustering consistency of galaxy formation models, *MNRAS*, 469, 749-762, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.469..749P>

Rigby, J. R., Bayliss, M. B., Sharon, K., Kelson, D. D., The Magellan Evolution of Galaxies Spectroscopic and Ultraviolet Reference Atlas (MegaSaura). I. The Sample and the Spectra, *AJ*, 155, 104, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155..104R>

Roberts-Borsani, G. W., Jiménez-Donaire, M. J., Daprà, M., Alatalo, K., et al., Multiwavelength Characterization of an ACT-selected, Lensed Dusty Star-forming Galaxy at $z = 2.64$, *ApJ*, 844, 110, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...844..110R>

Rozyczka, M., Narloch, W., Pietrukowicz, P., Thompson, I. B., et al., The Cluster AgeS Experiment (CASE). Detecting Aperiodic Photometric Variability with the Friends of Friends Algorithm, *AcA*, 68, 63-78, 2018.

<http://adsabs.harvard.edu/abs/2018AcA....68...63R>

Rozyczka, M., Thompson, I. B., Pych, W., et al., The Cluster AgeS Experiment (CASE). Variable Stars in the Field of the Globular Cluster M22, *AcA*, 67, 203-224, 2017.

<http://adsabs.harvard.edu/abs/2017AcA....67..203R>

Rudie, G. C., Newman, A. B., Murphy, M. T., A Unique View of AGN-driven Molecular Outflows: The Discovery of a Massive Galaxy Counterpart to a $Z = 2.4$ High-metallicity Damped Ly α Absorber, *ApJ*, 843, 98, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...843...98R>

Safarzadeh, M., Ji, A. P., Dooley, G. A., et al., Selecting ultra-faint dwarf candidate progenitors in cosmological N-body simulations at high redshifts, *MNRAS*, 476, 5006-5015, 2018. <http://adsabs.harvard.edu/abs/2018MNRAS.476.5006S>

Safarzadeh, M., Lu, Y., Hayward, C. C., Is a top-heavy initial mass function needed to reproduce the submillimetre galaxy number counts?, *MNRAS*, 472, 2462-2467, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.472.2462S>

Sakari, C. M., Placco, V. M., Hansen, T., et al., The r-process Pattern of a Bright, Highly r-process-enhanced Metal-poor Halo Star at $[Fe/H] \sim -2$, *ApJ*, 854, L20, 2018. <http://adsabs.harvard.edu/abs/2018ApJ...854L..20S>

Sand, D. J., Seth, A. C., Crnojević, D., Simon, J. D., et al., Hubble Space Telescope Imaging of the Ultra-compact High Velocity Cloud AGC 226067: A Stripped Remnant in the Virgo Cluster, *ApJ*, 843, 134, 7/2017;

<http://adsabs.harvard.edu/abs/2017ApJ...843..134S>

Sanderson, R., Wetzel, A., Sharma, S., Hopkins, P., Better Galactic Mass Models through Chemistry, *Galax*, 5, 43, 2017.

<http://adsabs.harvard.edu/abs/2017Galax...5...43S>

Schlawin, E., Burgasser, A. J., Karalidi, T., Gizis, J. E., Teske, J., Spectral Variability of Two Rapidly Rotating Brown Dwarfs: 2MASS J08354256-0819237 and 2MASS J18212815+1414010, *ApJ*, 849, 163, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...849..163S>

Schulze, S., Krühler, T., Leloudas, G., Gorosabel, J., Morrell, N., et al., Cosmic evolution and metal aversion in superluminous supernova host galaxies, *MNRAS*, 473, 1258-1285, 2018. <http://adsabs.harvard.edu/abs/2018MNRAS.473.1258S>

Schwab, J., Martínez-Rodríguez, H., Piro, A. L., Badenes, C., Exploring the Carbon Simmering Phase: Reaction Rates, Mixing, and the Convective Urca Process, *ApJ*, 851, 105, 2017. <http://adsabs.harvard.edu/abs/2017ApJ...851..105S>

Schweizer, F., Seitzer, P., Whitmore, B. C., Kelson, D. D., et al., The Second Nucleus of NGC 7727: Direct Evidence for the Formation and Evolution of an Ultracompact Dwarf Galaxy, *ApJ*, 853, 54, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...853...54S>

Scolnic, D. M., Jones, D. O., Rest, A., Drout, M., et al., The Complete Light-curve Sample of Spectroscopically Confirmed SNe Ia from Pan-STARRS1 and Cosmological Constraints from the Combined Pantheon Sample, *ApJ*, 859, 101, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...859..101S>

Shappee, B. J., Simon, J. D., Drout, M. R., Piro, A. L., Morrell, N., Holoien, T. W.-S., Kollmeier, J. A., Kelson, D. D., Madore, B. F., Alatalo, K., Bañados, E., Bernstein, R. A., Boutsia, K., Di Mille, F., Ji, A. P., et al., Early spectra of the gravitational wave source GW170817: Evolution of a neutron star merger, *Sci*, 358, 1574-1578, 2017.

<http://adsabs.harvard.edu/abs/2017Sci...358.1574S>

Shappee, B. J., Piro, A. L., Patel, S. G., et al., Strong Evidence against a Non-degenerate Companion in SN 2012cg, *ApJ*, 855, 6, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...855....6S>

Shibuya, T., Ouchi, M., Harikane, Y., Rauch, M., et al., SILVERRUSH. III. Deep optical and near-infrared spectroscopy for Ly α and UV-nebular lines of bright Ly α emitters at $z = 6-7$, *PASJ*, 70, S15, 2018.

<http://adsabs.harvard.edu/abs/2018PASJ...70S..15S>

Shivvers, I., Zheng, W., Van Dyk, S. D., Drout, M., et al., The nearby Type Ibn supernova 2015G: signatures of asymmetry and progenitor constraints, *MNRAS*, 471, 4381-4397, 2017. <http://adsabs.harvard.edu/abs/2017MNRAS.471.4381S>

Sicilia-Aguilar, A., Oprandi, A., Froebrich, D., Shappee, B. J., et al., The 2014-2017 outburst of the young star ASASSN-13db. A time-resolved picture of a very-low-mass star between EXors and FUors, *A&A*, 607, A127, 2017.

<http://adsabs.harvard.edu/abs/2017A%26A...607A.127S>

Siebert, M. R., Foley, R. J., Drout, M. R., Shappee, B. J., Madore, B. F., Piro, A. L., Morrell, N., Simon, J. D., The Unprecedented Properties of the First Electromagnetic Counterpart to a Gravitational-wave Source, *ApJ*, 848, L26, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848L..26S>

Simon, J. D., Shappee, B. J., Pojmański, G., van Saders, J., et al., Where Is the Flux Going? The Long-term Photometric Variability of Boyajian's Star, *ApJ*, 853, 77, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...853...77S>

Simonović, M., Baldauf, T., Zaldarriaga, M., Carrasco, J. J., Kollmeier, J. A., Cosmological perturbation theory using the FFTLog: formalism and connection to QFT loop integrals, *JCAP*, 4, 030, 2018.

<http://adsabs.harvard.edu/abs/2018JCAP...04..030S>

Smercina, A., Smith, J. D. T., Dale, D. A., French, K. D., et al., After the Fall: The Dust and Gas in E+A Post-starburst Galaxies, *ApJ*, 855, 51, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...855...51S>

Snedden, C., Preston, G. W., Chadid, M., Adamów, M., The RRc Stars: Chemical Abundances and Envelope Kinematics, *ApJ*, 848, 68, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848...68S>

Snedden, C., Preston, G. W., Kollmeier, J. A., Crane, J. D., Morrell, N., Sheckman, S. A., Thompson, I. B., Metal-rich RRc Stars in the Carnegie RR Lyrae Survey, *AJ*, 155, 45, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155...45S>

Soares-Santos, M., Holz, D. E., Annis, J., Drout, M. R., et al., Dark Energy Survey, Dark Energy Camera GW-EM Collaboration, The Electromagnetic Counterpart of the Binary Neutron Star Merger LIGO/Virgo GW170817. I. Discovery of the Optical Counterpart Using the Dark Energy Camera, *ApJ*, 848, L16, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...848L..16S>

Soraisam, M. D., Bildsten, L., Drout, M. R., et al., Variability of Red Supergiants in M31 from the Palomar Transient Factory, *ApJ*, 859, 73, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...859...73S>

Souto, D., Cunha, K., Smith, V. V., Teske, J., et al., Chemical Abundances of Main-sequence, Turnoff, Subgiant, and Red Giant Stars from APOGEE Spectra. I. Signatures of Diffusion in the Open Cluster M67, *ApJ*, 857, 14, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...857...14S>

Souto, D., Unterborn, C. T., Smith, V. V., Teske, J., et al., Stellar and Planetary Characterization of the Ross 128 Exoplanetary System from APOGEE Spectra, *ApJ*, 860, L15, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...860L..15S>

Stritzinger, M. D., Taddia, F., Burns, C. R., Phillips, M. M., Morrell, N., et al., The Carnegie Supernova Project I. Methods to estimate host-galaxy reddening of stripped-envelope supernovae, *A&A*, 609, A135, 2018.

<http://adsabs.harvard.edu/abs/2018A%26A...609A.135S>

Stritzinger, M. D., Anderson, J. P., Contreras, C., Morrell, N., Phillips, M. M., Burns, C. R., Madore, B. F., et al., The Carnegie Supernova Project I. Photometry data release of low-redshift stripped-envelope supernovae, *A&A*, 609, A134, 2018.

<http://adsabs.harvard.edu/abs/2018A%26A...609A.134S>

Sun, J., Leroy, A. K., Schrubba, A., Blanc, G. A., et al., Cloud-scale Molecular Gas Properties in 15 Nearby Galaxies, *ApJ*, 860, 172, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...860..172S>

Taddia, F., Stritzinger, M. D., Bersten, M., Burns, C., Morrell, N., Phillips, M. M., et al., The Carnegie Supernova Project I. Analysis of stripped-envelope supernova light curves, *A&A*, 609, A136, 2018.

<http://adsabs.harvard.edu/abs/2018A%26A...609A.136T>

Tartaglia, L., Sand, D. J., Valenti, S., Morrell, N., Phillips, M. M., Piro, A. L., et al., The Early Detection and Follow-up of the Highly Obscured Type II Supernova 2016ija/DLT16am, *ApJ*, 853, 62, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...853...62T>

Teske, J. K., Wang, S., Wolfgang, A., Shectman, S. A., Crane, J. D., Thompson, I. B., Magellan/PFS Radial Velocities of GJ 9827, a Late K dwarf at 30 pc with Three Transiting Super-Earths, *AJ*, 155, 148, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155..148T>

Thomas, A. D., Dopita, M. A., Kewley, L. J., Blanc, G. A., Interrogating Seyferts with NebulaBayes: Spatially Probing the Narrow-line Region Radiation Fields and Chemical Abundances, *ApJ*, 856, 89, 2018.

<http://adsabs.harvard.edu/abs/2018ApJ...856...89T>

Thöne, C. C., de Ugarte Postigo, A., Leloudas, G., Beletsky, Y., SN 2015bh: NGC 2770's 4th supernova or a luminous blue variable on its way to a Wolf-Rayet star?, *A&A*, 599, A129, 2017. <http://adsabs.harvard.edu/abs/2017A%26A...599A.129T>

Tinker, J. L., Hahn, C., Mao, Y.-Y., Wetzel, A. R., Conroy, C., Halo histories versus galaxy properties at $z = 0$ II: large-scale galactic conformity, *MNRAS*, 477, 935-945, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.477..935T>

Tinker, J. L., Wetzel, A. R., Conroy, C., Mao, Y.-Y., Halo histories versus Galaxy properties at z

= 0 - I. The quenching of star formation, *MNRAS*, 472, 2504-2516, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.472.2504T>

Tomičić, N., Kreckel, K., Groves, B., Blanc, G. A., et al., Attenuation Modified by DIG and Dust as Seen in M31, *ApJ*, 844, 155, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...844..155T>

Tonnesen, S., Smith, B. D., Kollmeier, J. A., Cen, R., Probing the Dependence of the Intergalactic Medium on Large-scale Environment Using the Low-redshift Ly α Forest, *ApJ*, 845, 47, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...845...47T>

Torrealba, G., Belokurov, V., Kuposov, S. E., Simon, J. D., et al., Discovery of two neighbouring satellites in the Carina constellation with MagLiteS, *MNRAS*, 475, 5085-5097, 4/2018;

<http://adsabs.harvard.edu/abs/2018MNRAS.475.5085T>

Treyer, M., Kraljic, K., Arnouts, S., Seibert, M., et al., Bland-Hawthorn, J., Group quenching and galactic conformity at low redshift, *MNRAS*, 477, 2684-2704, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.477.2684T>

Truong, P. N., Newman, A. B., Simon, J. D., et al, High-resolution Velocity Fields of Low-mass Disk Galaxies. I. CO Observations, *ApJ*, 843, 37, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...843...37T>

Tucker, E., Walker, M. G., Mateo, M., Crane, J. D., Shectman, S. A., Magellan/M2FS Spectroscopy of Galaxy Clusters: Stellar Population Model and Application to Abell 267, *AJ*, 154, 113, 2017.

<http://adsabs.harvard.edu/abs/2017AJ...154..113T>

Turner, J. D., Leiter, R. M., Biddle, L. I., Teske, J. K., et al., Investigating the physical properties of transiting hot Jupiters with the 1.5-m Kuiper Telescope, *MNRAS*, 472, 3871-3886, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.472.3871T>

Turner, M. L., Schaye, J., Crain, R. A., Rudie, G., et al., A comparison of observed and simulated absorption from H I, C IV, and Si IV around $z \approx 2$ star-forming galaxies suggests redshift-space distortions are due to inflows, *MNRAS*, 471, 690-705, 2017.

<http://adsabs.harvard.edu/abs/2017MNRAS.471..690T>

Vallely, P. J., Prieto, J. L., Stanek, K. Z., Shappee, B. J., Holoiien, T. W.-S., et al., The highly luminous Type Ibn supernova ASASSN-14ms, *MNRAS*, 475, 2344-2354, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.475.2344V>

Venemans, B. P., Walter, F., Decarli, R., Bañados, E., et al., Copious Amounts of Dust and Gas in a $z = 7.5$ Quasar Host Galaxy, *ApJ*, 851, L8, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...851L...8V>

Vogt, S. S., Butler, R. P., Burt, J., Teske, J. K., Shectman, S. A., Crane, J. D., Thompson, I. B., et al., A Six-planet System around the Star HD 34445, *AJ*, 154, 181, 2017.

<http://adsabs.harvard.edu/abs/2017AJ...154..181V>

Walborn, N. R., Gamen, R. C., Morrell, N. I., et al., Active Luminous Blue Variables in the Large Magellanic Cloud, *AJ*, 154, 15, 2017.

<http://adsabs.harvard.edu/abs/2017AJ...154...15W>

Wilson, M. L., Zabludoff, A. I., Keeton, C. R., French, K. D., et al., A Spectroscopic Survey of the Fields of 28 Strong Gravitational Lenses: Implications for H_0 , *ApJ*, 850, 94, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...850...94W>

Wilson, R. F., Teske, J., Majewski, S. R., et al., Elemental Abundances of Kepler Objects of Interest in APOGEE. I. Two Distinct Orbital Period Regimes Inferred from Host Star Iron Abundances, *AJ*, 155, 68, 2018.

<http://adsabs.harvard.edu/abs/2018AJ....155...68W>

Zahedy, F. S., Chen, H.-W., Rauch, M., Zabludoff, A., HST Detection of Extended Neutral Hydrogen in a Massive Elliptical at $z = 0.4$, *ApJ*, 846, L29, 2017.

<http://adsabs.harvard.edu/abs/2017ApJ...846L..29Z>

Zaldarriaga, M., Kushnir, D., Kollmeier, J. A., The expected spins of gravitational wave sources with isolated field binary progenitors, *MNRAS*, 473, 4174-4178, 2018.

<http://adsabs.harvard.edu/abs/2018MNRAS.473.4174Z>

Zasowski, G., Cohen, R. E., Chojnowski, S. D., Beaton, R. L., Kollmeier, J. A., Simon, J. D., et al., Target Selection for the SDSS-IV APOGEE-2 Survey, *AJ*, 154, 198, 2017.

<http://adsabs.harvard.edu/abs/2017AJ....154..198Z>

Plant Biology

Banf M, Rhee SY. (2017) Enhancing gene regulatory network inference through data integration with markov random fields. *Nature Scientific Reports*. 7:41174.

Bossi F, Fan J, Xiao J, Chandra L, Shen M, Dorone Y, Wagner D, Rhee SY (2017) Systematic discovery of novel eukaryotic transcriptional regulators using sequence homology independent prediction. *BMC Genomics*. 18(1):480

Brawley, SH, Blouin, NA, Ficko-Bleanc, E, Wheeler, GL, Lohr, M, Goodson, HV, Jenkins, JW, Blaby-Haas, CE, Helliwell, KE, Chan, CX, Marriage, T, Bhattacharya, D, Klein, AS, Badis, Y, Brodie, J, Cao, Y, Collén, J, Dittami, SM, Gachon, CMM, Green, BR, Karpowicz, S, Kim, JW, Kudahl, UJ, Lin, S, Michel, G, Mittag, M, Olson, BJSC, Pangilinanu, J, Pengu, Y, Qiu, H, Shuu, S, Singer, JT, Smith, AG, Sprechers. BN, Wagner, V, Wang, W, Wang, ZY, Yanu, J, Yarish, C, Zäuner-Riekz, S, Zhuangs, YY, Zou, Y, Lindquist, EA, Grimwood, J, Barry, K, Rokhsar, DS, Schmutzg, J, Stiller, JW, **Grossman, AR**, Prochnik, SE (2017) Thriving in a tough environment: Insights into the red algae from the genome of *Porphyra umbilicalis* (Bangioophyceae, Rhodophyta). *Proc Natl Acad Sci USA*. vol. 114 no. 31. E6361-E6370, doi: 10.1073/pnas.1703088114

Brodie, J, Ball, SG, Bouget, F-Y, Chan, CX, De Clerck, O, Cock, M, Gachon, C, **Grossman, AR**, Mock, T, Raven, J, Saha, M, Smith, A, Vardi, A, Yoon, HS, Bhattacharya, D (2017) Biotic interactions as drivers of algal origin and evolution. *New Phytologist*. doi: 10.1111/nph.14760.

Brodie, J, Chan, CX, De Clerck, O, Cock, JM, Coelho, SM, Gachon, C, **Grossman, AR**, Mock, T, Raven, J, Smith, A, Yoon, HS, Bhattacharya, D (2017) The algal genomic revolution. *Trends in Plant Sciences*. Jun 10. pii: S1360-1385(17)30105-X. doi: 10.1016/j.tplants.2017.05.005.

Brophy JAN, LaRue T, Dinneny JR (2018) Understanding and engineering plant form. *Seminars in Cell and Developmental Biology* S1084-9521(17)30382-8. doi: 10.1016/j.semcdb.2017.08.051.

Bu SL, Liu C, Liu N, Zhao JL, Ai LF, Chi H, Li KL, Chien CW, Burlingame AL, Zhang SW, **Wang ZY** (2017) Immunopurification and Mass Spectrometry Identifies Protein Phosphatase 2A (PP2A) and BIN2/GSK3 as Regulators of AKS Transcription Factors in Arabidopsis. *Mol Plant*. 10(2):345-348.

Caspari, O, Meyer, M, Tolleter, D, Wittkopp, T, Cunniffe, NJ, Lawson, T, **Grossman, AR**, Griffin, H (2017) Loss of chloroplast pyrenoid in *Chlamydomonas reinhardtii* causes limitations in CO₂ supply, but not thylakoid operating efficiency. *J Exp Biol*. <https://doi.org/10.17863/CAM.9862>.

Chau R, **Bhaya D**, Huang KC (2017) Emergent phototactic responses of cyanobacteria under complex light regimes. *Mbio*;8(2). pii: e02330-16. (featured in Commentary section: Kim).

Chavali A, Rhee SY. (2017) Bioinformatics tools for the identification of gene clusters that biosynthesize specialized metabolites. *Briefings in Bioinformatics*. bbx020. doi: 10.1093/bib/bbx020.

Chettoor, AM, and **Evan MMS** (2017) Imaging of auxin and cytokinin signaling in the maize female gametophyte. In, *Methods in Molecular Biology*, vol.1669, Plant Germline Development: Methods and Protocols, A. Schmidt, ed. In press.

Cuevas-Velazquez C, Dinneny JR (2018) Organization out of disorder: liquid-liquid phase separation in plants. *Current Opinion in Plant Biology* May 30;45(Pt A):68-74. doi: 10.1016/j.pbi.2018.05.005.

Deng Z, **Wang ZY**, Kutschera U (2017). Seedling development in maize cv. B73 and blue light-mediated proteomic changes in the tip vs. stem of the coleoptile. *Protoplasma* 254(3):1317-1322.

Dinneny JR (2018) Getting it right on GMOs. *Science* 360 (6396), 1407

Fan, J, Zheng, I, Bai, Y, Saroussi, S, **Grossman, AR** (2018) Flocculation of *Chlamydomonas reinhardtii* with different phenotypic traits by metal cations and high pH. *Frontiers in Plant Science*. Nov 20;8: 1997. doi: 10.3389/fpls.2017.01997.

Feng W, Kita D, Peaucelle A, Cartwright HN, Doah V, Duan Q, Liu MC, Maman J, Steinhorst L, Schmitz-Thom I, Yvon R, Kudla J, Wu HM, Cheung AY, and Dinneny JR (2018) The FERONIA receptor kinase maintains cell wall integrity during salt stress through Ca²⁺ signaling. *Current Biology* 28:5, 666-675

Friesner J, Assmann SM, Bastow R, Bailey-Serres J, Beynon J, Brendel V, Buell CR, Bucksch A, Busch W, Demura T, Dinneny JR, Doherty CJ, Eveland AL, Falter-Braun P, Gehan MA, Gonzales M, Grotewold E, Gutierrez R, Kramer U, Krouk G, Ma S, Markelz RJC, Megraw M, Meyers BC, Murray JAH, Provart NJ, Rhee SY, Smith R, Spalding EP, Taylor C, Teal TK, Torii KU, Town C, Vaughn M, Vierstra R, Ware D, Wilkins O, Williams C, Brady SM (2017) The Next Generation of Training for Arabidopsis Researchers: Bioinformatics and Quantitative Biology. *Plant Physiology*.175(4):1499-1509.

Friesner J, Assmann SM, Bastow R, Bailey-Serres J, Beynon J, Brendel V, Buell CR, Bucksch A, Busch W, Demura T, Dinneny JR, Doherty CJ, Eveland AL, Falter-Braun P, Gehan MA, Gonzales M, Grotewold E, Gutierrez R, Kramer U, Krouk G, Ma S, Markelz RJC, Megraw M, Meyers BC, Murray JAH, Provart NJ, Rhee S, Smith R, Spalding EP, Taylor C, Teal TK, Torii KU, Town C, Vaughn M, Vierstra R, Ware D, Wilkins O, Williams C, Brady SM (2017) The next generation of training for Arabidopsis researchers: bioinformatics and quantitative biology. *Plant Physiol*. 2017 Dec;175(4):1499-1509. doi: 10.1104/pp.17.01490.

Han L, Li L, Muehlbauer GJ, Fowler JE, and **Evans MMS**. RNA isolation and analysis of lncRNAs from gametophytes of maize. In, *Methods in Molecular Biology*, Plant Long Non-Coding RNAs: Methods and Protocols, JA Chekanova, ed., accepted.

Hong, H, Kim, JA, Han, M, Yoo, G, Song, HW, Chae, Y, Pyun, J-C, **Grossman, AR**, Ryu, WH (2018) Prolonged and Highly-efficient Intracellular Extraction of Photosynthetic Electrons from Single Algal Cells by Optimized Nanoelectrode Insertion. *Nano Research*. 11: 397-408.

Jin H, Wang Y, Idoine A, **Bhaya D** (2018) Construction of a shuttle vector for the model cyanobacterium *Synechocystis* sp. PCC6803 *Frontiers in Microbiol*;9:1662

Kaye, Y, Huang, W, Saroussi, S, Idoine, A, Clowez, S, Sanz-Luque, E, **Grossman, AR** (2018) *Chlamydomonas reinhardtii* Mitochondrial Alternative Oxidases Allows Survival in High Light. *J Biol Chem*. In Press.

Li X, Patena W, Fauser F, Jinkerson RE, Saroussi S, Ivanova N, Robertson JM, Yue R, Zhang R, Vilarrasa-Blasi J, Ramundo S, Blum SR, Goh A, Laudon IM, Lefebvre PA, **Grossman, AR**, Jonikas MC (2018) A genome-wide algal mutant library reveals a global view of genes required for eukaryotic photosynthesis. *Nature Genetics*. In Press.

Mathews, JL, Crowder, CM, Oakley, CA, Lutz, A, Roessner, U, Meyer, E, **Grossman, AR**, Weis, VM, Davy SK (2017) Optimum nutrient exchange and immune responses operate

in partner specificity in the cnidarian-dinoflagellate symbiosis. *Proc Natl Acad Sci U S A*. 2017 Dec 12;114(50):13194-13199.

Müller, N, Zou, Y, Wenzel, S, Künzel, S, Sasso, S, Weiß, D, Prager, K, **Grossman, AR**, Kottke, T, Mittag, M (2017) A plant cryptochrome controls key features of the circadian clock and the developmental cycle in *Chlamydomonas*. *Plant Physiol*. 174:185-201.

Nakamura M, Lindeboom JJ, Saltini M, Mulder BM, Ehrhardt DW (2018) SPR2 protects minus ends to promote severing and reorientation of plant cortical microtubule arrays. *J Cell Biol*. 217(3):915-927.

Ni W Xu SL, González-Grandío E, Chalkley RJ, Huhmer AFR, Burlingame AL, **Wang ZY**, Quail PH (2017) PPKs mediate direct signal transfer from phytochrome photoreceptors to transcription factor PIF3. *Nature Communication* 8:15236.

Oakley CA, Durand E, Wilkinson SP, Peng L, Weis VM, **Grossman, AR**, Davy SK (2017) Thermal shock induces host proteostasis disruption and endoplasmic reticulum stress in the model symbiotic cnidarian *Aiptasia*. *J Proteome Res*. 16(6):2121-2134.

Pollock, SV, Mukherjee, B, Bajsa-Hirschel, J, Machingura, MC, Mukherjee, A, **Grossman, AR**, Moroney, JC (2017) A robust protocol for efficient generation, and genomic characterization of insertional mutants of *Chlamydomonas reinhardtii*. *Plant Methods*. 13:22-30.

Provart NJ, Alonso J, Assmann SM, Bergmann D, Brady SM, Brkljacic J, Browse J, Chapple C, Colot V, Cutler S, Dangl J, Ehrhardt D, Friesner JD, Frommer WB, Grotewold E, Meyerowitz E, Nemhauser J, Nordborg M, Pikaard C, Shanklin J, Somerville C, Stitt M, Torii KU, Waese J, Wagner D, McCourt P (2017) 50 years of Arabidopsis research: highlights and future directions. *New Phytol*. 2016 Feb;209(3):921-44. doi: 10.1111/nph.13687.

Robbins NE and Dinneny JR (2018) Growth Is Required for Perception of Water Availability to Pattern Plant Root Branches. *Proc. Natl. Acad. Sci. U. S. A*. 1710709115v1-201710709.

Rosen M, Davison M, Fisher D and Bhaya D (2018) Characterizing fine-scale diversity in thermophilic *Synechococcus* population *PLoS One*, accepted

Rouchard H and Rhee SY (2017) System-level understanding of plant mineral nutrition in the big data era. *Current Opinion in Systems Biology* 4:71-77.

Saroussi, S, Sanz-Luque, E, Kim, R, **Grossman, AR** (2017) Nutrient scavenging and energy management: Acclimation responses in nitrogen and sulfur deprived *Chlamydomonas*. *Current Opinions in Plant Biology*. *Current Opinions in Plant Science*. 39:114-122. doi: 10.1016/j.pbi.2017.06.002.

Schlapfer P, Zhang P, Chuan W, Kim T, Chae L, Dreher K, Nilo-Poyanco R, Arvind Chavali, and Rhee SY (2017) Genome-wide prediction of metabolic enzymes, pathways, and gene clusters in plants. *Plant Physiology*. 173(4):2041-2059.

Schroda M, **Grossman AR** (2017) Christoph Beck (1941-2017): a Chlamydomonas biologist. *Photosyn Res*. Sep 18. doi: 10.1007/s11120-017-0431-6.

Sechet J, Htwe S, Urbanowicz B, Agyeman A, Feng W, Ishikawa T, Colomes M, Kumar KS, Kawai-Yamada M, Dinneny JR, O'Neill MA, Mortimer JC (2018) Suppression of Arabidopsis GGLT1 affects growth by reducing the L-galactose content and borate cross-linking of rhamnogalacturonan-II. *Plant J*. doi: 10.1111/tpj.14088

Silas S, Makarova KS, Shmakov S, Páez-Espino D, Mohr G, Liu Y, Davison M, Roux S, Krishnamurthy SR, Fu BXH, Hansen LL, Wang D, Sullivan MB, Millard A, Clokie MR, Bhaya D, Lambowitz AM, Kyrpides NC, Koonin EV, Fire AZ (2017) On the Origin of Reverse Transcriptase-Using CRISPR-Cas Systems and Their Hyperdiverse, Enigmatic Spacer Repertoires. *MBio*. 2017 Jul 11;8(4). pii: e00897-17.

Sproles, AE, Kirk, N., Kitchen, SA, Oakley, CA, Weis VM, **Grossman, AR**, Davy, SK (2016) Phylogenetic characterization of transporter proteins in the cnidarian-dinoflagellate symbiosis. *Mol Phylogenet Evol*. Dec 9. pii: S1055-7903(16)30328-1. doi: 10.1016/j.ympev.2017.12.007

Sun Y, Dinneny JR (2018) Q&A: How do gene regulatory networks control environmental responses in plants? *BMC Biol*. 2018 Apr 11;16(1):38. doi: 10.1186/s12915-018-0506-7.

Vollbrecht E and **Evans MMS** (2017) Gametophyte interactions establishing maize kernel development. In, *Maize Kernel Development*, B Larkins, ed. (Boston: CAB International), pp. 16-27. In press.

Wittkopp, T, Heinnickel, M, Kim, R, Yang, W, Niyogi, K, **Grossman, AR** (2018) The GreenCut protein CPLD49 and its function in maintaining the stability of the cytochrome b6f complex. *Plant Journal*. 94:1023-1037.

Wittkopp, TM, Duanmu, D, Schmollinger, S, Hu, W, Fan, Q, Blaby, IK, Merchant, S, **Grossman, AR**, Lagarias, JC (2017) Bilin-dependent photoacclimation in Chlamydomonas reinhardtii. *The Plant Cell*. Nov;29(11):2711-2726. doi: 10.1105/tpc.17.00149.

Wu R, Duan L, Pruneda-Paz JL, Oh DH, Pound M, Kay S, Dinneny JR (2018) The 6xABRE synthetic promoter enables the spatiotemporal analysis of ABA-mediated transcriptional regulation. *Plant Physiology* DOI: <https://doi.org/10.1104/pp.18.00401>

Xiang, T, Jinkerson, RE, Clowez, S, Tran, C, Krediet, CJ, Onishi, M, Pringle, JR, **Grossman, AR** (2018) Glucose-induced trophic shift of a clade B Symbiodinium strain and its physiological and molecular consequences. *Plant Physiol.* Dec 7. pii: pp.01572.2017. doi: 10.1104/pp.17.01572.

Xu SL, Chalkley RJ, Maynard JC, Wang W, Ni W, Jiang X, Shin K, Cheng L, Savage D, Hühmer AFR, Burlingame AL, **Wang ZY** (2017). Proteomic Analysis Reveals O-GlcNAc Modification on Proteins with Key Regulatory Functions in Arabidopsis. *PNAS* 114(8):E1536-E1543. doi: 10.1073/pnas.1610452114.

Yu FB, Willis L, Chau RM, Zambon A, Horowitz M, Bhaya D, Huang KC, Quake SR (2017). Long-term microfluidic tracking of coccoid cyanobacterial cells reveals robust control of division timing. *BMC Biol.*; 15 (1):11.

Zhang, R, Nowack, ECM, Price, DC, Bhattacharya, D, **Grossman, AR** (2017) Photoacclimation and transcriptional regulation of transferred genes in the photosynthetic amoeba *Paulinella chromatophora*. *Plant J.* doi: 10.1111/tpj.13488.

Zhu J-Y, Li Y, Cao D, Yang H, Oh E, Bi Y, Zhu S, **Wang ZY** (2017) The F-box protein KIB1 mediates brassinosteroid-induced inactivation and degradation of GSK3-like kinases in Arabidopsis. *Mol Cell*, in press. Cartwright H, **Ehrhardt DW**. Effective elimination of plastid and cell wall autofluorescence in plant tissue by fluorescence emission time-gating. In prep.

Department of Terrestrial Magnetism

Here updated through September 1, 2018. The list is regularly updated on the DTM web site (<http://dtm.carnegiescience.edu>).

- 7823 Agrosi, G., G. Tempesta, D. Mele, I. Allegretta, R. Terzano, S. B. Shirey, D. G. Pearson, and F. Nestola, Non-destructive, multi-method, internal analysis of multiple inclusions in a single diamond: first occurrence of mackinawite (Fe,Ni)_{1+x}S, *Am. Mineral.* 102, 2235-2243, 2017.
- 7860 Alexander, C. M. O'D., R. C. Greenwood, R. Bowden, J. M. Gibson, K. T. Howard, and I. A. Franchi, A mutli-technique [sic] search for the most primitive CO chondrites, *Geochim. Cosmochim. Acta* 221, 406-420, 2018.
- 7876 Alexander, C. M. O'D., K. D. McKeegan, and K. Altwegg, Water reservoirs in small planetary bodies: meteorites, asteroids, and comets, *Space Sci. Rev.* 214, 36, 2018.
- 7809 Alexander, C. M. O'D., L. R. Nittler, J. Davidson, and F. Ciesla, Measuring the level of interstellar inheritance in the solar protoplanetary disk, *Meteorit. Planet. Sci.* 52, 1797-1821, 2017.

- 7904 Bae, J., and Z. Zhu, Planet-driven spiral arms in protoplanetary disks. I. Formation mechanism, *Astrophys. J.* 859, 118, 2018.
- 7905 Bae, J., and Z. Zhu, Planet-driven spiral arms in protoplanetary disks. II. Implications, *Astrophys. J.* 859, 119, 2018.
- 7869 Bae, J., Z. Zhu, and L. Hartmann, On the formation of multiple concentric rings and gaps in protoplanetary disks, *Astrophys. J.* 850, 201, 2017.
- 7866 Bardalez Gagliuffi, D. C., J. Gagné, J. K. Faherty, and A. J. Burgasser, An L+T spectral binary with possible AB Doradus kinematics, *Astrophys. J.* 854, 101, 2018.
- 7831 Beamín, J. C., D. Minniti, J. B. Pullen, V. D. Ivanov, E. Bendek, A. Bayo, M. Gromadzki, R. Kurtev, P. W. Lucas, and R. P. Butler, Searching for faint comoving companions to the α Centauri system in the VVV survey infrared images, *Mon. Not. Roy. Astron. Soc.* 472, 3952-3958, 2017.
- 7886 Belton, M. J. S., O. R. Hainaut, K. J. Meech, B. E. A. Mueller, J. T. Kleyna, H. A. Weaver, M. W. Buie, M. Drahus, P. Guzik, R. J. Wainscoat, W. Waniak, B. Handzlik, S. Kurowski, S. Xu, S. S. Sheppard, M. Micheli, H. Ebeling, and J. V. Keane, The excited spin state of 1I/2017 U1 'Oumuamua, *Astrophys. J. Lett.* 856, L21, 2018.
- 7825 Bielskas, A., and S. J. Hardy, Open access publishing trends at two geoscience research organizations: Columbia University and Carnegie Institution for Science, in *Four Years of Earth Science Information: Exploring Data, Access, and More*, M. Hudson, ed., pp. 196-202, GSIS Proceedings, Vol. 44, Geoscience Information Society, Alexandria, Virginia, 2017.
- 7838 Bishop, B. T., S. L. Beck, G. Zandt, L. Wagner, M. Long, S. K. Antonijevic, A. Kumar, and H. Tavera, Causes and consequences of flat-slab subduction in southern Peru, *Geosphere* 13, 1392-1407, 2017.
- 7893 Bishop, B. T., S. L. Beck, G. Zandt, L. S. Wagner, M. D. Long, and H. Tavera, Foreland uplift during flat subduction: insights from the Peruvian Andes and Fitzcarrald Arch, *Tectonophysics* 731, 73-84, 2018.
- 7897 Bocchini, G. M., A. Brüstle, D. Becker, T. Meier, P. E. van Keken, M. Ruscic, G. A. Papadopoulos, M. Rische, and W. Friederich, Tearing, segmentation, and backstepping of subduction in the Aegean: new insights from seismicity, *Tectonophysics* 734, 96-118, 2018.
- 7880 Bochanski, J. J., J. K. Faherty, J. Gagné, O. Nelson, K. Coker, I. Smithka, D. Desir, and C. Vasquez, Fundamental properties of co-moving stars observed by *Gaia*, *Astron. J.* 155, 149, 2018.
- 7895 Boss, A. P., Supernovae and the formation of planetary systems, in *Handbook of Supernovae*, A. W. Alsabti and P. Murdin, eds., pp. 2401-2417, Springer, Cham, Switzerland, 2017.

- 7854 Brahm, R., J. D. Hartman, A. Jordán, G. Á. Bakos, N. Espinoza, M. Rabus, W. Bhatti, K. Penev, P. Sarkis, V. Suc, Z. Csubry, D. Bayliss, J. Bento, G. Zhou, L. Mancini, T. Henning, S. Ciceri, M. de Val-Borro, S. Shectman, J. D. Crane, P. Arriagada, P. Butler, J. Teske, I. Thompson, D. Osip, M. Díaz, B. Schmidt, J. Lázár, I. Papp, and P. Sári, HATS-43b, HATS-44b, HATS-45b, and HATS-46b: four short-period transiting giant planets in the Neptune-Jupiter mass range, *Astron. J.* 155, 112, 2018.
- 7931 Cameron, C. E., S. G. Prejean, M. L. Coombs, K. L. Wallace, J. A. Power, and D. C. Roman, Alaska Volcano Observatory alert and forecasting timeliness: 1989-2017, *Front. Earth Sci.* 6, 86, 2018.
- 7877 Canitano, A., M. Godano, Y.-J. Hsu, H.-M. Lee, A. T. Linde, and S. Sacks, Seismicity controlled by a frictional afterslip during a small-magnitude seismic sequence ($M_L < 5$) on the Chihshang Fault, Taiwan, *J. Geophys. Res. Solid Earth* 123, 2003-2018, doi:10.1002/2017JB015128, 2018.
- 7872 Canitano, A., Y.-J. Hsu, H.-M. Lee, A. T. Linde, and S. Sacks, Calibration for the shear strain of 3-component borehole strainmeters in eastern Taiwan through Earth and ocean tidal waveform modeling, *J. Geod.* 92, 223-240, 2018.
- 7906 Carlson, R. W., T. L. Grove, and J. M. Donnelly-Nolan, Origin of primitive tholeiitic and calc-alkaline basalts at Newberry Volcano, Oregon, *Geochem. Geophys. Geosyst.* 19, 1360-1377, doi:10.1029/2018GC007454, 2018.
- 7814 Cerpa, N. G., I. Wada, and C. R. Wilson, Fluid migration in the mantle wedge: influence of mineral grain size and mantle compaction, *J. Geophys. Res. Solid Earth* 122, 6247-6268, doi:10.1002/2017JB014046, 2017.
- 7822 Chambers, J., Steamworlds: atmospheric structure and critical mass of planets accreting icy pebbles, *Astrophys. J.* 849, 30, 2017.
- Chambers, J., Planet formation: an optimized population synthesis approach, *Astrophys. J.*, in press.
- Chandler, C., A. Curtis, M. Mommert, S. Sheppard, and C. Trujillo, SAFARI: Searching Asteroids For Activity Revealing Indicators, *Astron. J.*, in press.
- 7873 Chen, C.-W., H.-F. Huang, S. Hautmann, I. S. Sacks, A. T. Linde, and T. Taira, Resonance oscillations of the Soufrière Hills Volcano (Montserrat, W.I.) magmatic system induced by forced magma flow from the reservoir into the upper plumbing dike, *J. Volcanol. Geotherm. Res.* 350, 7-17, 2018.
- 7848 Chin, E. J., K. Shimizu, G. M. Bybee, and M. E. Erdman, On the development of the calc-alkaline and tholeiitic magma series: a deep crustal cumulate perspective, *Earth Planet. Sci. Lett.* 482, 277-287, 2018.

- 7813 Christiansen, J. L., A. Vanderburg, J. Burt, B. J. Fulton, K. Batygin, B. Benneke, J. M. Brewer, D. Charbonneau, D. R. Ciardi, A. C. Cameron, J. L. Coughlin, I. J. M. Crossfield, C. Dressing, T. P. Greene, A. W. Howard, D. W. Latham, E. Molinari, A. Mortier, F. Mullally, F. Pepe, K. Rice, E. Sinukoff, A. Sozzetti, S. E. Thompson, S. Udry, S. S. Vogt, T. S. Barman, N. E. Batalha, F. Bouchy, L. A. Buchhave, R. P. Butler, R. Cosentino, T. J. Dupuy, D. Ehrenreich, A. Fiorenzano, B. M. S. Hansen, T. Henning, L. Hirsch, B. P. Holden, H. T. Isaacson, J. A. Johnson, H. A. Knutson, M. Kosiarek, M. López-Morales, C. Lovis, L. Malavolta, M. Mayor, G. Micela, F. Motalebi, E. Petigura, D. F. Phillips, G. Piotto, L. A. Rogers, D. Sasselov, J. E. Schlieder, D. Ségransan, C. A. Watson, and L. M. Weiss, Three's company: an additional non-transiting super-Earth in the bright HD 3167 system, and masses for all three planets, *Astron. J.* 154, 122, 2017.
- 7812 Clements, T. D., T. J. Henry, A. D. Hoseny, W.-C. Jao, M. L. Silverstein, J. G. Winters, S. B. Dieterich, and A. R. Riedel, The solar neighborhood. XLI. A study of the wide main sequence for M dwarfs—long-term photometric variability, *Astron. J.* 154, 124, 2017.
- 7943 Crause, L. A., R. P. Butler, G. Nave, R. Kuhn, B. Lomberg, A. Kniazev, S. M. Crawford, and É. Depagne, Commissioning the SALT High Resolution Spectrograph's iodine cell, in *Ground-based and Airborne Instrumentation for Astronomy VII*, C. J. Evans, L. Simard, and H. Takami, eds., paper 107025S, SPIE Proceedings Vol. 10702, SPIE, Bellingham, Wash., 2018.
- 7826 Dai, F., J. N. Winn, D. Gandolfi, S. X. Wang, J. K. Teske, J. Burt, S. Albrecht, O. Barragán, W. D. Cochran, M. Endl, M. Fridlund, A. P. Hatzes, T. Hirano, L. A. Hirsch, M. C. Johnson, A. B. Justesen, J. Livingston, C. M. Persson, J. Prieto-Arranz, A. Vanderburg, R. Alonso, G. Antoniciello, P. Arriagada, R. P. Butler, J. Cabrera, J. D. Crane, F. Cusano, S. Csizmadia, H. Deeg, S. B. Dieterich, P. Eigmüller, A. Erikson, M. E. Everett, A. Fukui, S. Grziwa, E. W. Guenther, G. W. Henry, S. B. Howell, J. A. Johnson, J. Korth, M. Kuzuhara, N. Narita, D. Nespral, G. Nowak, E. Palle, M. Pätzold, H. Rauer, P. Montañés Rodríguez, S. A. Shectman, A. M. S. Smith, I. B. Thompson, V. Van Eylen, M. W. Williamson, and R. A. Wittenmyer, The discovery and mass measurement of a new ultra-short-period planet: K2-131b, *Astron. J.* 154, 226, 2017.
- 7819 De Gregorio, B. T., R. M. Stroud, L. R. Nittler, and A. L. D. Kilcoyne, Evidence for reduced, carbon-rich regions in the solar nebula from an unusual cometary dust particle, *Astrophys. J.* 848, 113, 2017.
- 7875 Denevi, B. W., N. L. Chabot, S. L. Murchie, K. J. Becker, D. T. Blewett, D. L. Domingue, C. M. Ernst, C. D. Hash, S. E. Hawkins III, M. R. Keller, N. R. Laslo, H. Nair, M. S. Robinson, F. P. Seelos, G. K. Stephens, F. S. Turner, and S. C. Solomon, Calibration, projection, and final image products of MESSENGER's Mercury Dual Imaging System, *Space Sci. Rev.* 214, 2, 2018.

- 7840 Desrochers, M.-E., É. Artigau, J. Gagné, R. Doyon, L. Malo, J. K. Faherty, and D. Lafrenière, BANYAN. X. Discovery of a wide, low-gravity L-type companion to a fast-rotating M3 dwarf, *Astrophys. J.* 852, 55, 2018.
- 7870 Díaz, M. R., J. S. Jenkins, M. Tuomi, R. P. Butler, M. G. Soto, J. K. Teske, F. Feng, S. A. Shectman, P. Arriagada, J. D. Crane, I. B. Thompson, and S. S. Vogt, The test case of HD 26965: difficulties disentangling weak Doppler signals from stellar activity, *Astron. J.* 155, 126, 2018.
- Dieterich, S. B., A. J. Weinberger, A. P. Boss, T. J. Henry, W.-C. Joa, J. Gagné, T. L. Astraatmadja, M. A. Thompson, and G. Anglada-Escude, Dynamical masses of Epsilon Indi B and C: two massive brown dwarfs at the edge of the stellar-substellar boundary, *Astrophys. J.*, in press.
- 7828 Donaldson, J. K., A. J. Weinberger, J. Gagné, A. P. Boss, and S. A. Keiser, New parallaxes for the Upper Scorpius OB association, *Astrophys. J.* 850, 11, 2017.
- Driscoll, P. E., Planetary interiors, magnetic fields, and habitability, in *Handbook of Exoplanets*, H. J. Deeg and J. A. Belmonte, eds., Springer, in press.
- 7930 Driscoll, P. E., and C. Wilson, Paleomagnetic biases inferred from numerical dynamos and the search for geodynamo evolution, *Front. Earth Sci.* 6, 113, 2018.
- 7841 Du, Z., C. Jackson, N. Bennett, P. Driscoll, J. Deng, K. K. M. Lee, E. Greenberg, V. B. Prakapenka, and Y. Fei, Insufficient energy from MgO exsolution to power early geodynamo, *Geophys. Res. Lett.* 44, 11376-11381, doi:10.1002/2017GL075283, 2017.
- 7932 Ebel, D. S., C. M. O'D. Alexander, and G. Libourel, Vapor-melt exchange: constraints on chondrite formation conditions and processes, in *Chondrules: Records of Protoplanetary Disk Processes*, S. S. Russell, H. C. Connolly, Jr., and A. N. Krot, eds., pp. 151-174, Cambridge University Press, New York, 2018.
- 7917 Ertel, S., D. Defrère, P. Hinz, B. Mennesson, G. M. Kennedy, W. C. Danchi, C. Gelino, J. M. Hill, W. F. Hoffmann, G. Rieke, A. Shannon, E. Spalding, J. M. Stone, A. Vaz, A. J. Weinberger, P. Willems, O. Absil, P. Arbo, V. P. Bailey, C. Beichman, G. Bryden, E. C. Downey, O. Durney, S. Esposito, A. Gaspar, P. Grenz, C. A. Haniff, J. M. Leisenring, L. Marion, T. J. McMahon, R. Millan-Gabet, M. Montoya, K. M. Morzinski, E. Pinna, J. Power, A. Puglisi, A. Roberge, E. Serabyn, A. J. Skemer, K. Stapelfeldt, K. Y. L. Su, V. Vaitheeswaran, and M. C. Wyatt, The HOSTS survey—exozodiacal dust measurements for 30 stars, *Astron. J.* 155, 194, 2018.

- 7944 Ertel, S., G. M. Kennedy, D. Defrère, P. Hinz, A. B. Shannon, B. Mennesson, W. C. Danchi, C. Gelino, J. M. Hill, W. F. Hoffman, G. Rieke, E. Spalding, J. M. Stone, A. Vaz, A. J. Weinberger, P. Willems, O. Absil, P. Arbo, V. P. Bailey, C. Beichman, G. Bryden, E. C. Downey, O. Durney, S. Esposito, A. Gaspar, P. Grenz, C. A. Haniff, J. M. Leisenring, L. Marion, T. J. McMahon, R. Millan-Gabet, M. Montoya, K. M. Morzinski, E. Pinna, J. Power, A. Puglisi, A. Roberge, E. Serabyn, A. J. Skemer, K. Stapelfeldt, K. Y. L. Su, V. Vaitheeswaran, and M. C. Wyatt, The HOSTS survey for exo-zodiacal dust: preliminary results and future prospects, in *Space Telescopes and Instrumentation 2018: Optical, Infrared, and Millimeter Wave*, M. Lystrup et al., eds., paper 106981V, SPIE Proceedings Vol. 10698, SPIE, Bellingham, Wash., 2018.
- 7929 Evans, A. J., J. C. Andrews-Hanna, J. W. Head III, J. M. Soderblom, S. C. Solomon, and M. T. Zuber, Reexamination of early lunar chronology with GRAIL data: terranes, basins, and impact fluxes *J. Geophys. Res. Planets* 123, 1596-1617, doi:10.1029/2017JE005421, 2018.
- 7939 Faherty, J. K., J. J. Bochanski, J. Gagné, O. Nelson, K. Coker, I. Smithka, D. Desir, and C. Vasquez, New and known moving groups and clusters identified in a *Gaia* comoving catalog, *Astrophys. J.* 863, 91, 2018.
- 7807 Feng, F., M. Tuomi, H. R. A. Jones, J. Barnes, G. Anglada-Escudé, S. S. Vogt, and R. P. Butler, Color difference makes a difference: four planet candidates around τ Ceti, *Astron. J.* 154, 135, 2017.
- 7940 Gagné, G., E. C. Gonzales, and J. K. Faherty, A *Gaia* DR2 confirmation that 2MASS J12074836–3900043 is a member of the TW Hya association, *Res. Notes AAS* 2, 17, 2018.
- 7851 Gagné, J., K. N. Allers, C. A. Theissen, J. K. Faherty, D. Bardalez Gagliuffi, and É. Artigau, 2MASS J13243553+6358281 is an early T-type planetary-mass object in the AB Doradus moving group, *Astrophys. J. Lett.* 854, L27, 2018.
- 7919 Gagné, J., and J. K. Faherty, BANYAN. XIII. A first look at nearby young associations with *Gaia* Data Release 2, *Astrophys. J.* 862, 138, 2018.
- 7941 Gagné, J., J. K. Faherty, and G. Fontaine, A pre- *Gaia* DR2 survey for nearby M dwarfs in young associations, *Res. Notes AAS* 2, 9, 2018.
- 7913 Gagné, J., G. Fontaine, A. Simon, and J. K. Faherty, A young ultramassive white dwarf in the AB Doradus moving group, *Astrophys. J. Lett.* 861, L13, 2018.
- 7887 Gagné, J., E. E. Mamajek, L. Malo, A. Riedel, D. Rodriguez, D. Lafrenière, J. K. Faherty, O. Roy-Loubier, L. Pueyo, A. C. Robin, and R. Doyon, BANYAN. XI. The BANYAN Σ multivariate Bayesian algorithm to identify members of young associations with 150 pc, *Astrophys. J.* 856, 23, 2018.
- 7908 Gagné, J., O. Roy-Loubier, J. K. Faherty, R. Doyon, and L. Malo, BANYAN. XII. New members of nearby young associations from GAIA-Tycho data, *Astrophys. J.* 860, 43, 2018.

7925 Gaia Collaboration, C. Babusiaux, F. van Leeuwen, M. A. Barstow, C. Jordi, A. Vallenari, D. Bossini, A. Bressan, T. Cantat-Gaudin, M. van Leeuwen, A. G. A. Brown, T. Prusti, J. H. J. de Bruijne, C. A. L. Bailer-Jones, M. Biermann, D. W. Evans, L. Eyer, F. Jansen, S. A. Klioner, U. Lammers, L. Lindegren, X. Luri, F. Mignard, C. Panem, D. Pourbaix, S. Randich, P. Sartoretti, H. I. Siddiqui, C. Soubiran, N. A. Walton, F. Arenou, U. Bastian, M. Cropper, R. Drimmel, D. Katz, M. G. Lattanzi, J. Bakker, C. Cacciari, J. Castañeda, L. Chaoul, N. Cheek, F. De Angeli, C. Fabricius, R. Guerra, B. Holl, E. Masana, R. Messineo, N. Mowlavi, K. Nienartowicz, P. Panuzzo, J. Portell, M. Riello, G. M. Seabroke, P. Tanga, F. Thévenin, G. Gracia-Abril, G. Comoretto, M. Garcia-Reinaldos, D. Teyssier, M. Altmann, R. Andrae, M. Audard, I. Bellas-Velidis, K. Benson, J. Berthier, R. Blomme, P. Burgess, G. Busso, B. Carry, A. Cellino, G. Clementini, M. Clotet, O. Creevey, M. Davidson, J. De Ridder, L. Delchambre, A. Dell'Oro, C. Ducourant, J. Fernández-Hernández, M. Fouesneau, Y. Frémat, L. Galluccio, M. García-Torres, J. González-Núñez, J. J. González-Vidal, E. Gosset, L. P. Guy, J.-L. Halbwachs, N. C. Hambly, D. L. Harrison, J. Hernández, D. Hestroffer, S. T. Hodgkin, A. Hutton, G. Jasiewicz, A. Jean-Antoine-Piccolo, S. Jordan, A. J. Korn, A. Krone-Martins, A. C. Lanzafame, T. Lebzelter, W. Löffler, M. Manteiga, P. M. Marrese, J. M. Martín-Fleitas, A. Moitinho, A. Mora, K. Muinonen, J. Osinde, E. Pancino, T. Pauwels, J.-M. Petit, A. Recio-Blanco, P. J. Richards, L. Rimoldini, A. C. Robin, L. M. Sarro, C. Siopis, M. Smith, A. Sozzetti, M. Süveges, J. Torra, W. van Reeve, U. Abbas, A. Abreu Aramburu, S. Accart, C. Aerts, G. Altavilla, M. A. Álvarez, R. Alvarez, J. Alves, R. I. Anderson, A. H. Andrei, E. Anglada Varela, E. Antiche, T. Antoja, B. Arcay, T. L. Astraatmadja, N. Bach, S. G. Baker, L. Balaguer-Núñez, P. Balm, C. Barache, C. Barata, D. Barbato, F. Barblan, P. S. Barklem, D. Barrado, M. Barros, S. Bartholomé Muñoz, J.-L. Bassilana, U. Becciani, M. Bellazzini, A. Berihuete, S. Bertone, L. Bianchi, O. Bienaymé, S. Blanco-Cuaresma, T. Boch, C. Boeche, A. Bombrun, R. Borrachero, S. Bouquillon, G. Bourda, A. Bragaglia, L. Bramante, M. A. Breddels, N. Brouillet, T. Brüsemeister, E. Brugaletta, B. Bucciarelli, A. Burlacu, D. Busonero, A. G. Butkevich, R. Buzzzi, E. Caffau, R. Cancelliere, G. Cannizzaro, R. Carballo, T. Carlucci, J. M. Carrasco, L. Casamiquela, M. Castellani, A. Castro-Ginard, P. Charlot, L. Chemin, A. Chiavassa, G. Cocozza, G. Costigan, S. Cowell, F. Crifo, M. Crosta, C. Crowley, J. Cuypers, C. Dafonte, Y. Damerджи, A. Dapergolas, P. David, M. David, P. de Laverny, F. De Luise, R. De March, D. de Martino, R. de Souza, A. de Torres, J. Debosscher, E. del Pozo, M. Delbo, A. Delgado, H. E. Delgado, S. Diakite, C. Diener, E. Distefano, C. Dolding, P. Drazinos, J. Durán, B. Edvardsson, H. Enke, K. Eriksson, P. Esquej, G. Eynard Bontemps, C. Fabre, M. Fabrizio, S. Faigler, A. J. Falcão, M. Farràs Casas, L. Federici, G. Fedorets, P. Fernique, F. Figueras, F. Filippi, K. Findeisen, A. Fonti, E. Fraile, M. Fraser, B. Frézouls, M. Gai, S. Galleti, D. Garabato, F. García-Sedano, A. Garofalo, N. Garralda, A. Gavel, P. Gavras, J. Gerssen, R. Geyer, P. Giacobbe, G. Gilmore, S. Girona, G. Giuffrida, F. Glass, M. Gomes, M. Granvik, A. Gueguen, A. Guerrier, J. Guiraud, R. Gutiérrez-Sánchez, R. Haignon, D. Hatzidimitriou, M. Hauser, M. Haywood, U. Heiter, A. Helmi, J. Heu, T. Hilger, D. Hobbs, W. Hofmann, G. Holland, H. E. Huckle, A. Hypki, V. Icardi, K. Janßen, G. J. Jevardat de Fombelle, P. G. Jonker, Á. L. Juhász, F. Julbe, A. Karamelas, A. Kewley, J. Klar, A. Kochoska, R. Kohley, K.

Kolenberg, M. Kontizas, E. Kontizas, S. E. Kuposov, G. Kordopatis, Z. Kostrzewa-Rutkowska, P. Koubsky, S. Lambert, A. F. Lanza, Y. Lasne, J.-B. Lavigne, Y. Le Fustec, C. Le Poncin-Lafitte, Y. Lebreton, S. Leccia, N. Leclerc, I. Lecoœur-Taibi, H. Lenhardt, F. Leroux, S. Liao, E. Licata, H. E. P. Lindstrøm, T. A. Lister, E. Livanou, A. Lobel, M. López, S. Managau, R. G. Mann, G. Mantelet, O. Marchal, J. M. Marchant, M. Marconi, S. Marinoni, G. Marschalkó, D. J. Marshall, M. Martino, G. Marton, N. Mary, D. Massari, G. Matijević, T. Mazeh, P. J. McMillan, S. Messina, D. Michalik, N. R. Millar, D. Molina, R. Molinaro, L. Molnár, P. Montegriffo, R. Mor, R. Morbidelli, T. Morel, D. Morris, A. F. Mulone, T. Muraveva, I. Musella, G. Nelemans, L. Nicastro, L. Noval, W. O'Mullane, C. Ordénovic, D. Ordóñez-Blanco, P. Osborne, C. Pagani, I. Pagano, F. Pailler, H. Palacin, L. Palaversa, A. Panahi, M. Pawlak, A. M. Piersimoni, F.-X. Pineau, E. Plachy, G. Plum, E. Poggio, E. Poujoulet, A. Prša, L. Pulone, E. Racero, S. Ragaini, N. Rambaux, M. Ramos-Lerate, S. Regibo, C. Reylé, F. Riclet, V. Ripepi, A. Riva, A. Rivard, G. Rixon, T. Roegiers, M. Roelens, M. Romero-Gómez, N. Rowell, F. Royer, L. Ruiz-Dern, G. Sadowski, T. Sagristà Sellés, J. Sahlmann, J. Salgado, E. Salguero, N. Sanna, T. Santana-Ros, M. Sarasso, H. Savietto, M. Schultheis, E. Sciacca, M. Segol, J. C. Segovia, D. Ségransan, I.-C. Shih, L. Siltala, A. F. Silva, R. L. Smart, K. W. Smith, E. Solano, F. Solitro, R. Sordo, S. Soria Nieto, J. Souchay, A. Spagna, F. Spoto, U. Stampa, I. A. Steele, H. Steidelmüller, C. A. Stephenson, H. Stoev, F. F. Suess, J. Surdej, L. Szabados, E. Szegedi-Elek, D. Tapiador, F. Taris, G. Tauran, M. B. Taylor, R. Teixeira, D. Terrett, P. Teyssandier, W. Thuillot, A. Titarenko, F. Torra Clotet, C. Turon, A. Ulla, E. Utrilla, S. Uzzi, M. Vaillant, G. Valentini, V. Valette, A. van Elteren, E. Van Hemelryck, M. Vaschetto, A. Vecchiato, J. Veljanoski, Y. Viala, D. Vicente, S. Vogt, C. von Essen, H. Voss, V. Votruba, S. Voutsinas, G. Walmsley, M. Weiler, O. Wertz, T. Wevers, Ł. Wyrzykowski, A. Yoldas, M. Žerjal, H. Ziaeeepour, J. Zorec, S. Zschocke, S. Zucker, C. Zurbach, and T. Zwitter, *Gaia* Data Release 2: observational Hertzsprung-Russell diagrams, *Astron. Astrophys.* 616, A10, 2018.

- 7926 Gaia Collaboration, A. G. A. Brown, A. Vallenari, T. Prusti, J. H. J. de Bruijne, C. Babusiaux, C. A. L. Bailer-Jones, M. Biermann, D. W. Evans, L. Eyer, F. Jansen, C. Jordi, S. A. Klioner, U. Lammers, L. Lindegren, X. Luri, F. Mignard, C. Panem, D. Pourbaix, S. Randich, P. Sartoretti, H. I. Siddiqui, C. Soubiran, F. van Leeuwen, N. A. Walton, F. Arenou, U. Bastian, M. Cropper, R. Drimmel, D. Katz, M. G. Lattanzi, J. Bakker, C. Cacciari, J. Castañeda, L. Chaoul, N. Cheek, F. De Angeli, C. Fabricius, R. Guerra, B. Holl, E. Masana, R. Messineo, N. Mowlavi, K. Nienartowicz, P. Panuzzo, J. Portell, M. Riello, G. M. Seabroke, P. Tanga, F. Thévenin, G. Gracia-Abril, G. Comoretto, M. Garcia-Reinaldos, D. Teyssier, M. Altmann, R. Andrae, M. Audard, I. Bellas-Velidis, K. Benson, J. Berthier, R. Blomme, P. Burgess, G. Busso, B. Carry, A. Cellino, G. Clementini, M. Clotet, O. Creevey, M. Davidson, J. De Ridder, L. Delchambre, A. Dell'Oro, C. Ducourant, J. Fernández-Hernández, M. Fouesneau, Y. Frémat, L. Galluccio, M. García-Torres, J. González-Núñez, J. J. González-Vidal, E. Gosset, L. P. Guy, J.-L. Halbwachs, N. C. Hambly, D. L. Harrison, J. Hernández, D. Hestroffer, S. T. Hodgkin, A. Hutton, G. Jasiewicz, A. Jean-Antoine-Piccolo, S. Jordan, A. J. Korn, A. Krone-Martins, A. C. Lanzafame, T. Lebzelter, W. Löffler, M.

Manteiga, P. M. Marrese, J. M. Martín-Fleitas, A. Moitinho, A. Mora, K. Muinonen, J. Osinde, E. Pancino, T. Pauwels, J.-M. Petit, A. Recio-Blanco, P. J. Richards, L. Rimoldini, A. C. Robin, L. M. Sarro, C. Siopis, M. Smith, A. Sozzetti, M. Süveges, J. Torra, W. van Reeve, U. Abbas, A. Abreu Aramburu, S. Accart, C. Aerts, G. Altavilla, M. A. Álvarez, R. Alvarez, J. Alves, R. I. Anderson, A. H. Andrei, E. Anglada Varela, E. Antiche, T. Antoja, B. Arcay, T. L. Astraatmadja, N. Bach, S. G. Baker, L. Balaguer-Núñez, P. Balm, C. Barache, C. Barata, D. Barbato, F. Barblan, P. S. Barklem, D. Barrado, M. Barros, M. A. Barstow, S. B. Bartholomé Muñoz, J.-L. Bassilana, U. Becciani, M. Bellazzini, A. Berihuete, S. Bertone, L. Bianchi, O. Bienaymé, S. Blanco-Cuaresma, T. Boch, C. Boeche, A. Bombrun, R. Borrachero, D. Bossini, S. Bouquillon, G. Bourda, A. Bragaglia, L. Bramante, M. A. Breddels, A. Bressan, N. Brouillet, T. Brüsemeister, E. Brugaletta, B. Bucciarelli, A. Burlacu, D. Busonero, A. G. Butkevich, R. Buzzì, E. Caffau, R. Cancelliere, G. Cannizzaro, T. Cantat-Gaudin, R. Carballo, T. Carlucci, J. M. Carrasco, L. Casamiquela, M. Castellani, A. Castro-Ginard, P. Charlot, L. Chemin, A. Chiavassa, G. Cocozza, G. Costigan, S. Cowell, F. Crifo, M. Crosta, C. Crowley, J. Cuypers, C. Dafonte, Y. Damerdjì, A. Dapergolas, P. David, M. David, P. de Laverny, F. De Luise, R. De March, D. de Martino, R. de Souza, A. de Torres, J. Debosscher, E. del Pozo, M. Delbo, A. Delgado, H. E. Delgado, P. Di Matteo, S. Diakite, C. Diener, E. Distefano, C. Dolding, P. Drazinos, J. Durán, B. Edvardsson, H. Enke, K. Eriksson, P. Esquej, G. Eynard Bontemps, C. Fabre, M. Fabrizio, S. Faigler, A. J. Falcão, M. Farràs Casas, L. Federici, G. Fedorets, P. Fernique, F. Figueras, F. Filippi, K. Findeisen, A. Fonti, E. Fraile, M. Fraser, B. Frézouls, M. Gai, S. Galleti, D. Garabato, F. García-Sedano, A. Garofalo, N. Garralda, A. Gavel, P. Gavras, J. Gerssen, R. Geyer, P. Giacobbe, G. Gilmore, S. Girona, G. Giuffrida, F. Glass, M. Gomes, M. Granvik, A. Gueguen, A. Guerrier, J. Guiraud, R. Gutiérrez-Sánchez, R. Haignon, D. Hatzidimitriou, M. Hauser, M. Haywood, U. Heiter, A. Helmi, J. Heu, T. Hilger, D. Hobbs, W. Hofmann, G. Holland, H. E. Huckle, A. Hypki, V. Icardi, K. Janßen, G. Jevardat de Fombelle, P. G. Jonker, Á. L. Juhász, F. Julbe, A. Karamelas, A. Kewley, J. Klar, A. Kochoska, R. Kohley, K. Kolenberg, M. Kontizas, E. Kontizas, S. E. Koposov, G. Kordopatis, Z. Kostrzewa-Rutkowska, P. Koubsky, S. Lambert, A. F. Lanza, Y. Lasne, J.-B. Lavigne, Y. Le Fustec, C. Le Poncin-Lafitte, Y. Lebreton, S. Leccia, N. Leclerc, I. Lecoeur-Taïbi, H. Lenhardt, F. Leroux, S. Liao, E. Licata, H. E. P. Lindstrøm, T. A. Lister, E. Livanou, A. Lobel, M. López, S. Managau, R. G. Mann, G. Mantelet, O. Marchal, J. M. Marchant, M. Marconi, S. Marinoni, G. Marschalkó, D. J. Marshall, M. Martino, G. Marton, N. Mary, D. Massari, G. Matijevič, T. Mazeh, P. J. McMillan, S. Messina, D. Michalik, N. R. Millar, D. Molina, R. Molinaro, L. Molnár, P. Montegriffo, R. Mor, R. Morbidelli, T. Morel, D. Morris, A. F. Mulone, T. Muraveva, I. Musella, G. Nelemans, L. Nicastro, L. Noval, W. O'Mullane, C. Ordénovic, D. Ordóñez-Blanco, P. Osborne, C. Pagani, I. Pagano, F. Pailler, H. Palacin, L. Palaversa, A. Panahi, M. Pawlak, A. M. Piersimoni, F.-X. Pineau, E. Plachy, G. Plum, E. Poggio, E. Pujoulet, A. Prša, L. Pulone, E. Racero, S. Ragaini, N. Rambaux, M. Ramos-Lerate, S. Regibo, C. Reylé, F. Riclet, V. Ripepi, A. Riva, A. Rivard, G. Rixon, T. Roegiers, M. Roelens, M. Romero-Gómez, N. Rowell, F. Royer, L. Ruiz-Dern, G. Sadowski, T. Sagristà Sellés, J. Sahlmann, J. Salgado, E.

Salguero, N. Sanna, T. Santana-Ros, M. Sarasso, H. Savietto, M. Schultheis, E. Sciacca, M. Segol, J. C. Segovia, D. Ségransan, I.-C. Shih, L. Siltala, A. F. Silva, R. L. Smart, K. W. Smith, E. Solano, F. Solitro, R. Sordo, S. Soria Nieto, J. Souchay, A. Spagna, F. Spoto, U. Stampa, I. A. Steele, H. Steidelmüller, C. A. Stephenson, H. Stoev, F. F. Suess, J. Surdej, L. Szabados, E. Szegedi-Elek, D. Tapiador, F. Taris, G. Tauran, M. B. Taylor, R. Teixeira, D. Terrett, P. Teysandier, W. Thuillot, A. Titarenko, F. Torra Clotet, C. Turon, A. Ulla, E. Utrilla, S. Uzzi, M. Vaillant, G. Valentini, V. Valette, A. van Elteren, E. Van Hemelryck, M. van Leeuwen, M. Vaschetto, A. Vecchiato, J. Veljanoski, Y. Viala, D. Vicente, S. Vogt, C. von Essen, H. Voss, V. Votruba, S. Voutsinas, G. Walmsley, M. Weiler, O. Wertz, T. Wevers, Ł. Wyrzykowski, A. Yoldas, M. Žerjal, H. Ziaeeepour, J. Zorec, S. Zschocke, S. Zucker, C. Zurbach, and T. Zwitter, *Gaia Data Release 2: summary of the contents and survey properties*, *Astron. Astrophys.* 616, A1, 2018.

- 7921 Gaia Collaboration, A. Helmi, F. van Leeuwen, P. J. McMillan, D. Massari, T. Antoja, A. C. Robin, L. Lindegren, U. Bastian, F. Arenou, C. Babusiaux, M. Biermann, M. A. Breddels, D. Hobbs, C. Jordi, E. Pancino, C. Reylé, J. Veljanoski, A. G. A. Brown, A. Vallenari, T. Prusti, J. H. J. de Bruijne, C. A. L. Bailer-Jones, D. W. Evans, L. Eyer, F. Jansen, S. A. Klioner, U. Lammers, X. Luri, F. Mignard, C. Panem, D. Pourbaix, S. Randich, P. Sartoretti, H. I. Siddiqui, C. Soubiran, N. A. Walton, M. Cropper, R. Drimmel, D. Katz, M. G. Lattanzi, J. Bakker, C. Cacciari, J. Castañeda, L. Chaoul, N. Cheek, F. De Angeli, C. Fabricius, R. Guerra, B. Holl, E. Masana, R. Messineo, N. Mowlavi, K. Nienartowicz, P. Panuzzo, J. Portell, M. Riello, G. M. Seabroke, P. Tanga, F. Thévenin, G. Gracia-Abril, G. Comoretto, M. Garcia-Reinaldos, D. Teyssier, M. Altmann, R. Andrae, M. Audard, I. Bellas-Velidis, K. Benson, J. Berthier, R. Blomme, P. Burgess, G. Busso, B. Carry, A. Cellino, G. Clementini, M. Clotet, O. Creevey, M. Davidson, J. De Ridder, L. Delchambre, A. Dell'Oro, C. Ducourant, J. Fernández-Hernández, M. Fouesneau, Y. Frémat, L. Galluccio, M. García-Torres, J. González-Núñez, J. J. González-Vidal, E. Gosset, L. P. Guy, J.-L. Halbwachs, N. C. Hambly, D. L. Harrison, J. Hernandez, D. Hestroffer, S. T. Hodgkin, A. Hutton, G. Jasniewicz, A. Jean-Antoine-Piccolo, S. Jordan, A. J. Korn, A. Krone-Martins, A. C. Lanzafame, T. Lebzelter, W. Löffler, M. Manteiga, P. M. Marrese, J.-M. Martín-Fleitas, A. Moitinho, A. Mora, K. Muinonen, J. Osinde, T. Pauwels, J. M. Petit, A. Recio-Blanco, P. J. Richards, L. Rimoldini, L. M. Sarro, C. Siopis, M. Smith, A. Sozzetti, M. Süveges, J. Torra, W. van Reeve, U. Abbas, A. A. Aramburu, S. Accart, C. Aerts, G. Altavilla, M. A. Álvarez, R. Alvarez, J. Alves, R. I. Anderson, A. H. Andrei, E. Anglada Varela, E. Antiche, B. Arcay, T. L. Astraatmadja, N. Bach, S. G. Baker, L. Balaguer-Núñez, P. Balm, C. Barache, C. Barata, D. Barbato, F. Barblan, P. S. Barklem, D. Barrado, M. Barros, M. A. Barstow, S. Bartholomé Muñoz, J.-L. Bassilana, U. Becciani, M. Bellazzini, A. Berihuete, S. Bertone, L. Bianchi, O. Bienaymé, S. Blanco-Cuaresma, T. Boch, C. Boeche, A. Bombrun, R. Borrachero, D. Bossini, S. Bouquillon, G. Bourda, A. Bragaglia, L. Bramante, A. Bressan, N. Brouillet, T. Brüsemeister, E. Brugaletta, B. Bucciarelli, A. Burlacu, D. Busonero, A. G. Butkevich, R. Buzzi, E. Caffau, R. Cancelliere, G. Cannizzaro, T. Cantat-Gaudin, R. Carballo, T. Carlucci, J. M. Carrasco, L. Casamiquela, M. Castellani, A. Castro-

Ginard, P. Charlot, L. Chemin, A. Chiavassa, G. Cocozza, G. Costigan, S. Cowell, F. Crifo, M. Crosta, C. Crowley, J. Cuypers, C. Dafonte, Y. Damerджи, A. Dapergolas, P. David, M. David, P. de Laverny, F. De Luise, R. De March, D. de Martino, R. de Souza, A. de Torres, J. Debosscher, E. del Pozo, M. Delbo, A. Delgado, H. E. Delgado, P. Di Matteo, S. Diakite, C. Diener, E. Distefano, C. Dolding, P. Drazinos, J. Durán, B. Edvardsson, H. Enke, K. Eriksson, P. Esquej, G. Eynard Bontemps, C. Fabre, M. Fabrizio, S. Faigler, A. J. Falcão, M. Farràs Casas, L. Federici, G. Fedorets, P. Fernique, F. Figueras, F. Filippi, K. Findeisen, A. Fonti, E. Fraile, M. Fraser, B. Frézouls, M. Gai, S. Galleti, D. Garabato, F. García-Sedano, A. Garofalo, N. Garralda, A. Gavel, P. Gavras, J. Gerssen, R. Geyer, P. Giacobbe, G. Gilmore, S. Girona, G. Giuffrida, F. Glass, M. Gomes, M. Granvik, A. Gueguen, A. Guerrier, J. Guiraud, R. Gutiérrez-Sánchez, W. Hofmann, G. Holland, H. E. Huckle, A. Hypki, V. Icardi, K. Janßen, G. Jevardat de Fombelle, P. G. Jonker, Á. L. Juhász, F. Julbe, A. Karmampelas, A. Kewley, J. Klar, A. Kochoska, R. Kohley, K. Kolenberg, M. Kontizas, E. Kontizas, S. E. Kuposov, G. Kordopatis, Z. Kostrzewa-Rutkowska, P. Koubsky, S. Lambert, A. F. Lanza, Y. Lasne, J.-B. Lavigne, Y. Le Fustec, C. Le Poncin-Lafitte, Y. Lebreton, S. Leccia, N. Leclerc, I. Lecoeur-Taibi, H. Lenhardt, F. Leroux, S. Liao, E. Licata, H. E. P. Lindstrøm, T. A. Lister, E. Livanou, A. Lobel, M. López, S. Managau, R. G. Mann, G. Mantelet, O. Marchal, J. M. Marchant, M. Marconi, S. Marinoni, G. Marschalkó, D. J. Marshall, M. Martino, G. Marton, N. Mary, G. Matijevič, T. Mazeh, S. Messina, D. Michalik, N. R. Millar, D. Molina, R. Molinaro, L. Molnár, P. Montegriffo, R. Mor, R. Morbidelli, T. Morel, D. Morris, A. F. Mulone, T. Muraveva, I. Musella, G. Nelemans, L. Nicastro, L. Noval, W. O'Mullane, C. Ordénovic, D. Ordóñez-Blanco, P. Osborne, C. Pagani, I. Pagano, F. Pailler, H. Palacin, L. Palaversa, A. Panahi, M. Pawlak, A. M. Piersimoni, F.-X. Pineau, E. Plachy, G. Plum, E. Poggio, E. Poujoulet, A. Prša, L. Pulone, E. Racero, S. Ragaini, N. Rambaux, M. Ramos-Lerate, S. Regibo, F. Riclet, V. Ripepi, A. Riva, A. Rivard, G. Rixon, T. Roegiers, M. Roelens, M. Romero-Gómez, N. Rowell, F. Royer, L. Ruiz-Dern, G. Sadowski, T. Sagristà Sellés, J. Sahlmann, J. Salgado, E. Salguero, N. Sanna, T. Santana-Ros, M. Sarasso, H. Savietto, M. Schultheis, E. Sciacca, M. Segol, J. C. Segovia, D. Ségransan, I.-C. Shih, L. Siltala, A. F. Silva, R. L. Smart, K. W. Smith, E. Solano, F. Solitro, R. Sordo, S. Soria Nieto, J. Souchay, A. Spagna, F. Spoto, U. Stampa, I. A. Steele, H. Steidelmüller, C. A. Stephenson, H. Stoev, F. F. Suess, J. Surdej, L. Szabados, E. Szegedi-Elek, D. Tapiador, F. Taris, G. Tauran, M. B. Taylor, R. Teixeira, D. Terrett, P. Teyssandier, W. Thuillot, A. Titarenko, F. Torra Clotet, C. Turon, A. Ulla, E. Utrilla, S. Uzzi, M. Vaillant, G. Valentini, V. Valette, A. van Elteren, E. Van Hemelryck, M. van Leeuwen, M. Vaschetto, A. Vecchiato, Y. Viala, D. Vicente, S. Vogt, C. von Essen, H. Voss, V. Votruba, S. Voutsinas, G. Walmsley, M. Weiler, O. Wertz, T. Wevems, Ł. Wyrzykowski, A. Yoldas, M. Žerjal, H. Ziaeepour, J. Zorec, S. Zschocke, S. Zucker, C. Zurbach, and T. Zwitter, *Gaia Data Release 2: kinematics of globular clusters and dwarf galaxies around the Milky Way*, *Astron. Astrophys.* 616, A12, 2018.

7924 Gaia Collaboration, D. Katz, T. Antoja, M. Romero-Gómez, R. Drimmel, C. Reylé, G. M. Seabroke, C. Soubiran, C. Babusiaux, P. Di Matteo, F. Figueras, E. Poggio, A. C. Robin, D. W. Evans, A. G. A. Brown, A. Vallenari, T. Prusti, J. H. J. de Bruijne, C. A. L.

Bailer-Jones, M. Biermann, L. Eyer, F. Jansen, C. Jordi, S. A. Klioner, U. Lammers, L. Lindegren, X. Luri, F. Mignard, C. Panem, D. Pourbaix, S. Randich, P. Sartoretti, H. I. Siddiqui, F. van Leeuwen, N. A. Walton, F. Arenou, U. Bastian, M. Cropper, M. G. Lattanzi, J. Bakker, C. Cacciari, J. Castañeda, L. Chaoul, N. Cheek, F. De Angeli, C. Fabricius, R. Guerra, B. Holl, E. Masana, R. Messineo, N. Mowlavi, K. Nienartowicz, P. Panuzzo, J. Portell, M. Riello, P. Tanga, F. Thévenin, G. Gracia-Abril, G. Comoretto, M. Garcia-Reinaldos, D. Teyssier, M. Altmann, R. Andrae, M. Audard, I. Bellas-Velidis, K. Benson, J. Berthier, R. Blomme, P. Burgess, G. Busso, B. Carry, A. Cellino, G. Clementini, M. Clotet, O. Creevey, M. Davidson, J. De Ridder, L. Delchambre, A. Dell'Oro, C. Ducourant, J. Fernández-Hernández, M. Fouesneau, Y. Frémat, L. Galluccio, M. García-Torres, J. González-Núñez, J. J. González-Vidal, E. Gosset, L. P. Guy, J.-L. Halbwachs, N. C. Hambly, D. L. Harrison, J. Hernández, D. Hestroffer, S. T. Hodgkin, A. Hutton, G. Jasniewicz, A. Jean-Antoine-Piccolo, S. Jordan, A. J. Korn, A. Krone-Martins, A. C. Lanzafame, T. Lebzelter, W. Löffler, M. Manteiga, P. M. Marrese, J. M. Martin-Fleitas, A. Moitinho, A. Mora, K. Muinonen, J. Osinde, E. Pancino, T. Pauwels, J.-M. Petit, A. Recio-Blanco, P. J. Richards, L. Rimoldini, L. M. Sarro, C. Siopis, M. Smith, A. Sozzetti, M. Süveges, J. Torra, W. van Reeve, U. Abbas, A. Abreu Aramburu, S. Accart, C. Aerts, G. Altavilla, M. A. Álvarez, R. Alvarez, J. Alves, R. I. Anderson, A. H. Andrei, E. Anglada Varela, E. Antiche, B. Arcay, T. L. Astraatmadja, N. Bach, S. G. Baker, L. Balaguer-Núñez, P. Balm, C. Barache, C. Barata, D. Barbato, F. Barblan, P. S. Barklem, D. Barrado, M. Barros, M. A. Barstow, S. Bartholomé Muñoz, J.-L. Basilana, U. Becciani, M. Bellazzini, A. Berihuete, S. Bertone, L. Bianchi, O. Bienaymé, S. Blanco-Cuaresma, T. Boch, C. Boeche, A. Bombrun, R. Borrachero, D. Bossini, S. Bouquillon, G. Bourda, A. Bragaglia, L. Bramante, M. A. Breddels, A. Bressan, N. Brouillet, T. Brüsemeister, E. Brugaletta, B. Bucciarelli, A. Burlacu, D. Busonero, A. G. Butkevich, R. Buzzi, E. Caffau, R. Cancelliere, G. Cannizzaro, T. Cantat-Gaudin, R. Carballo, T. Carlucci, J. M. Carrasco, L. Casamiquela, M. Castellani, A. Castro-Ginard, P. Charlot, L. Chemin, A. Chiavassa, G. Coccozza, G. Costigan, S. Cowell, F. Crifo, M. Crosta, C. Crowley, J. Cuypers, C. Dafonte, Y. Damerджи, A. Dapergolas, P. David, M. David, P. de Laverny, F. De Luise, R. De March, R. de Souza, A. de Torres, J. Debosscher, E. del Pozo, M. Delbo, A. Delgado, H. E. Delgado, S. Diakite, C. Diener, E. Distefano, C. Dolding, P. Drazinos, J. Durán, B. Edvardsson, H. Enke, K. Eriksson, P. Esquej, G. Eynard Bontemps, C. Fabre, M. Fabrizio, S. Faigler, A. J. Falcao, M. Farràs Casas, L. Federici, G. Fedorets, P. Fernique, F. Filippi, K. Findeisen, A. Fonti, E. Fraile, M. Fraser, B. Frézouls, M. Gai, S. Galletti, D. Garabato, F. García-Sedano, A. Garofalo, N. Garralda, A. Gavel, P. Gavras, J. Gerssen, R. Geyer, P. Giacobbe, G. Gilmore, S. Girona, G. Giuffrida, F. Glass, M. Gomes, M. Granvik, A. Gueguen, A. Guerrier, J. Guiraud, R. Gutiérrez-Sánchez, R. Haigron, D. Hatzidimitriou, M. Hauser, M. Haywood, U. Heiter, A. Helmi, J. Heu, T. Hilger, D. Hobbs, W. Hofmann, G. Holland, H. E. Huckle, A. Hypki, V. Icardi, K. Janßen, G. Jevardat de Fombelle, P. G. Jonker, Á. L. Juhász, F. Julbe, A. Karampelas, A. Kewley, J. Klar, A. Kochoska, R. Kohley, K. Kolenberg, M. Kontizas, E. Kontizas, S. E. Koposov, G. Kordopatis, Z. Kostrzewa-Rutkowska, P. Koubsky, S. Lambert, A. F. Lanza, Y. Lasne, J.-B. Lavigne, Y. Le Fustec, C. Le Poncin-Lafitte, Y. Lebreton, S. Leccia, N. Leclerc, I. Lecoeur-Taibi, H. Lenhardt, F. Leroux, S.

Liao, E. Licata, H. E. P. Lindstrøm, T. A. Lister, E. Livanou, A. Lobel, M. López, S. Managau, R. G. Mann, G. Mantelet, O. Marchal, J. M. Marchant, M. Marconi, S. Marinoni, G. Marschalkó, D. J. Marshall, M. Martino, G. Marton, N. Mary, D. Massari, G. Matijević, T. Mazeh, P. J. McMillan, S. Messina, D. Michalik, N. R. Millar, D. Molina, R. Molinaro, L. Molnár, P. Montegriffo, R. Mor, R. Morbidelli, T. Morel, D. Morris, A. F. Mulone, T. Muraveva, I. Musella, G. Nelemans, L. Nicastro, L. Noval, W. O'Mullane, C. Ordénovic, D. Ordóñez-Blanco, P. Osborne, C. Pagani, I. Pagano, F. Pailler, H. Palacin, L. Palaversa, A. Panahi, M. Pawlak, A. M. Piersimoni, F.-X. Pineau, E. Plachy, G. Plum, E. Poujoulet, A. Prša, L. Pulone, E. Racero, S. Ragaini, N. Rambaux, M. Ramos-Lerate, S. Regibo, F. Riclet, V. Ripepi, A. Riva, A. Rivard, G. Rixon, T. Roegiers, M. Roelens, N. Rowell, F. Royer, L. Ruiz-Dern, G. Sadowski, T. Sagristà Sellés, J. Sahlmann, J. Salgado, E. Salguero, N. Sanna, T. Santana-Ros, M. Sarasso, H. Savietto, M. Schultheis, E. Sciacca, M. Segol, J. C. Segovia, D. Ségransan, I.-C. Shih, L. Siltala, A. F. Silva, R. L. Smart, K. W. Smith, E. Solano, F. Solitro, R. Sordo, S. Soria Nieto, J. Souchay, A. Spagna, F. Spoto, U. Stampa, I. A. Steele, H. Steidelmüller, C. A. Stephenson, H. Stoev, F. F. Suess, J. Surdej, L. Szabados, E. Szegedi-Elek, D. Tapiador, F. Taris, G. Tauran, M. B. Taylor, R. Teixeira, D. Terrett, P. Teyssandier, W. Thuillot, A. Titarenko, F. Torra Clotet, C. Turon, A. Ulla, E. Utrilla, S. Uzzi, M. Vaillant, G. Valentini, V. Valette, A. van Elteren, E. Van Hemelryck, M. van Leeuwen, M. Vaschetto, A. Vecchiato, J. Veljanoski, Y. Viala, D. Vicente, S. Vogt, C. von Essen, H. Voss, V. Votruba, S. Voutsinas, G. Walmsley, M. Weiler, O. Wertz, T. Wevers, Ł. Wyrzykowski, A. Yoldas, M. Žerjal, H. Ziaeeepour, J. Zorec, S. Zschocke, S. Zucker, C. Zurbach, and T. Zwitter, *Gaia* Data Release 2: mapping the Milky Way disc kinematics, *Astron. Astrophys.* 616, A11, 2018.

- 7923 Gaia Collaboration, F. Mignard, S. A. Klioner, L. Lindegren, J. Hernández, U. Bastian, A. Bombrun, D. Hobbs, U. Lammers, D. Michalik, M. Ramos-Lerate, M. Biermann, J. Fernández-Hernández, R. Geyer, T. Hilger, H. I. Siddiqui, H. Steidelmüller, C. Babusiaux, C. Barache, S. Lambert, A. H. Andrei, G. Bourda, P. Charlot, A. G. A. Brown, A. Vallenari, T. Prusti, J. H. J. de Bruijne, C. A. L. Bailer-Jones, D. W. Evans, L. Eyer, F. Jansen, C. Jordi, X. Luri, C. Panem, D. Pourbaix, S. Randich, P. Sartoretti, C. Soubiran, F. van Leeuwen, N. A. Walton, F. Arenou, M. Cropper, R. Drimmel, D. Katz, M. G. Lattanzi, J. Bakker, C. Cacciari, J. Castañeda, L. Chaoul, N. Cheek, F. De Angeli, C. Fabricius, R. Guerra, B. Holl, E. Masana, R. Messineo, N. Mowlavi, K. Nienartowicz, P. Panuzzo, J. Portell, M. Riello, G. M. Seabroke, P. Tanga, F. Thévenin, G. Gracia-Abril, G. Comoretto, M. Garcia-Reinaldos, D. Teyssier, M. Altmann, R. Andrae, M. Audard, I. Bellas-Velidis, K. Benson, J. Berthier, R. Blomme, P. Burgess, G. Busso, B. Carry, A. Cellino, G. Clementini, M. Clotet, O. Creevey, M. Davidson, J. De Ridder, L. Delchambre, A. Dell'Oro, C. Ducourant, M. Fouesneau, Y. Frémat, L. Galluccio, M. García-Torres, J. González-Núñez, J. J. González-Vidal, E. Gosset, L. P. Guy, J.-L. Halbwachs, N. C. Hambly, D. L. Harrison, D. Hestroffer, S. T. Hodgkin, A. Hutton, G. Jasiewicz, A. Jean-Antoine-Piccolo, S. Jordan, A. J. Korn, A. Krone-Martins, A. C. Lanzafame, T. Lebzelter, W. Löffler, M. Manteiga, P. M. Marrese, J.-M. Martín-Fleitas, A. Moitinho, A. Mora, K. Muinonen, J. Osinde, E. Pancino, T. Pauwels, J. M. Petit, A. Recio-Blanco, P. J. Richards, L. Rimoldini, A. C.

Robin, L. M. Sarro, C. Siopis, M. Smith, A. Sozzetti, M. Süveges, J. Torra, W. van Reeve, U. Abbas, A. Abreu Aramburu, S. Accart, C. Aerts, G. Altavilla, M. A. Álvarez, R. Alvarez, J. Alves, R. I. Anderson, E. Anglada Varela, E. Antiche, T. Antoja, B. Arcay, T. L. Astraatmadja, N. Bach, S. G. Baker, L. Balaguer-Núñez, P. Balm, C. Barata, D. Barbato, F. Barblan, P. S. Barklem, D. Barrado, M. Barros, M. A. Barstow, S. Bartholomé Muñoz, J.-L. Bassilana, U. Becciani, M. Bellazzini, A. Berihuete, S. Bertone, L. Bianchi, O. Bienaymé, S. Blanco-Cuaresma, T. Boch, C. Boeche, R. Borrachero, D. Bossini, S. Bouquillon, A. Bragaglia, L. Bramante, M. A. Breddels, A. Bressan, N. Brouillet, T. Brüsemeister, E. Brugaletta, B. Bucciarelli, A. Burlacu, D. Busonero, A. G. Butkevich, R. Buzzì, E. Caffau, R. Cancelliere, G. Cannizzaro, T. Cantat-Gaudin, R. Carballo, T. Carlucci, J. M. Carrasco, L. Casamiquela, M. Castellani, A. Castro-Ginard, L. Chemin, A. Chiavassa, G. Cocozza, G. Costigan, S. Cowell, F. Crifo, M. Crosta, C. Crowley, J. Cuypers, C. Dafonte, Y. Damerджи, A. Dapergolas, P. David, M. David, P. de Laverny, F. De Luise, R. De March, R. de Souza, A. de Torres, J. Debosscher, E. del Pozo, M. Delbo, A. Delgado, H. E. Delgado, S. Diakite, C. Diener, E. Distefano, C. Dolding, P. Drazinos, J. Durán, B. Edvardsson, H. Enke, K. Eriksson, P. Esquej, G. Eynard Bontemps, C. Fabre, M. Fabrizio, S. Faigler, A. J. Falcão, M. Farràs Casas, L. Federici, G. Fedorets, P. Fernique, F. Figueras, F. Filippi, K. Findeisen, A. Fonti, E. Fraile, M. Fraser, B. Frézouls, M. Gai, S. Galleti, D. Garabato, F. García-Sedano, A. Garofalo, N. Garralda, A. Gavel, P. Gavras, J. Gerssen, P. Giacobbe, G. Gilmore, S. Girona, G. Giuffrida, F. Glass, M. Gomes, M. Granvik, A. Gueguen, A. Guerrier, J. Guiraud, R. Gutiérrez-Sánchez, R. Haigron, D. Hatzidimitriou, M. Hauser, M. Haywood, U. Heiter, A. Helmi, J. Heu, W. Hofmann, G. Holland, H. E. Huckle, A. Hypki, V. Icardi, K. Janßen, G. Jevardat de Fombelle, P. G. Jonker, A. L. Juhász, F. Julbe, A. Karamelas, A. Kewley, J. Klar, A. Kochoska, R. Kohley, K. Kolenberg, M. Kontizas, E. Kontizas, S. E. Kuposov, G. Kordopatis, Z. Kostrzewa-Rutkowska, P. Koubsky, A. F. Lanza, Y. Lasne, J.-B. Lavigne, Y. Le Fustec, C. Le Poncin-Lafitte, Y. Lebreton, S. Leccia, N. Leclerc, I. Lecoœur-Taibi, H. Lenhardt, F. Leroux, S. Liao, E. Licata, H. E. P. Lindstrøm, T. A. Lister, E. Livanou, A. Lobel, M. López, S. Managau, R. G. Mann, G. Mantelet, O. Marchal, J. M. Marchant, M. Marconi, S. Marinoni, G. Marschalkó, D. J. Marshall, M. Martino, G. Marton, N. Mary, D. Massari, G. Matijević, T. Mazeh, P. J. McMillan, S. Messina, N. R. Millar, D. Molina, R. Molinaro, L. Molnár, P. Montegriffo, R. Mor, R. Morbidelli, T. Morel, D. Morris, A. F. Mulone, T. Muraveva, I. Musella, G. Nelemans, L. Nicastro, L. Noval, W. O'Mullane, C. Ordénovic, D. Ordóñez-Blanco, P. Osborne, C. Pagani, I. Pagano, F. Pailler, H. Palacin, L. Palaversa, A. Panahi, M. Pawlak, A. M. Piersimoni, F.-X. Pineau, E. Plachy, G. Plum, E. Poggio, E. Poujoulet, A. Prša, L. Pulone, E. Racero, S. Ragaini, N. Rambaux, S. Regibo, C. Reylé, F. Riclet, V. Ripepi, A. Riva, A. Rivard, G. Rixon, T. Roegiers, M. Roelens, M. Romero-Gómez, N. Rowell, F. Royer, L. Ruiz-Dern, G. Sadowski, T. Sagristà Sellés, J. Sahlmann, J. Salgado, E. Salguero, N. Sanna, T. Santana-Ros, M. Sarasso, H. Savietto, M. Schultheis, E. Sciacca, M. Segol, J. C. Segovia, D. Ségransan, I.-C. Shih, L. Siltala, A. F. Silva, R. L. Smart, K. W. Smith, E. Solano, F. Solitro, R. Sordo, S. Soria Nieto, J. Souchay, A. Spagna, F. Spoto, U. Stampa, I. A. Steele, C. A. Stephenson, H. Stoev, F. F. Suess, J. Surdej, L. Szabados, E.

Szegedi-Elek, D. Tapiador, F. Taris, G. Tauran, M. B. Taylor, R. Teixeira, D. Terrett, P. Teyssandier, W. Thuillot, A. Titarenko, F. Torra Clotet, C. Turon, A. Ulla, E. Utrilla, S. Uzzi, M. Vaillant, G. Valentini, V. Valette, A. van Elteren, E. Van Hemelryck, M. van Leeuwen, M. Vaschetto, A. Vecchiato, J. Veljanoski, Y. Viala, D. Vicente, S. Vogt, C. von Essen, H. Voss, V. Votruba, S. Voutsinas, G. Walmsley, M. Weiler, O. Wertz, T. Wevers, Ł. Wyrzykowski, A. Yoldas, M. Žerjal, H. Ziaeeepour, J. Zorec, S. Zschocke, S. Zucker, C. Zurbach, and T. Zwitter, *Gaia* Data Release 2: the celestial reference frame (*Gaia*-CRF2), *Astron. Astrophys.* 616, A14, 2018.

- 7922 Gaia Collaboration, F. Spoto, P. Tanga, F. Mignard, J. Berthier, B. Carry, A. Cellino, A. Dell'Oro, D. Hestroffer, K. Muinonen, T. Pauwels, J.-M. Petit, P. David, F. De Angeli, M. Delbo, B. Frézouls, L. Galluccio, M. Granvik, J. Guiraud, J. Hernández, C. Ordénovic, J. Portell, E. Poujoulet, W. Thuillot, G. Walmsley, A. G. A. Brown, A. Vallenari, T. Prusti, J. H. J. de Bruijne, C. Babusiaux, C. A. L. Bailer-Jones, M. Biermann, D. W. Evans, L. Eyer, F. Jansen, C. Jordi, S. A. Klioner, U. Lammers, L. Lindegren, X. Luri, C. Panem, D. Pourbaix, S. Randich, P. Sartoretti, H. I. Siddiqui, C. Soubiran, F. van Leeuwen, N. A. Walton, F. Arenou, U. Bastian, M. Cropper, R. Drimmel, D. Katz, M. G. Lattanzi, J. Bakker, C. Cacciari, J. Castañeda, L. Chaoul, N. Cheek, C. Fabricius, R. Guerra, B. Holl, E. Masana, R. Messineo, N. Mowlavi, K. Nienartowicz, P. Panuzzo, M. Riello, G. M. Seabroke, F. Thévenin, G. Gracia-Abril, G. Comoretto, M. Garcia-Reinaldos, D. Teyssier, M. Altmann, R. Andrae, M. Audard, I. Bellas-Velidis, K. Benson, R. Blomme, P. Burgess, G. Busso, G. Clementini, M. Clotet, O. Creevey, M. Davidson, J. De Ridder, L. Delchambre, C. Ducourant, J. Fernández-Hernández, M. Fouesneau, Y. Frémat, M. García-Torres, J. González-Núñez, J. J. González-Vidal, E. Gosset, L. P. Guy, J.-L. Halbwachs, N. C. Hambly, D. L. Harrison, S. T. Hodgkin, A. Hutton, G. Jasiewicz, A. Jean-Antoine-Piccolo, S. Jordan, A. J. Korn, A. Krone-Martins, A. C. Lanzafame, T. Lebzelter, W. Löffler, M. Manteiga, P. M. Marrese, J. M. Martin-Fleitas, A. Moitinho, A. Mora, J. Osinde, E. Pancino, A. Recio-Blanco, P. J. Richards, L. Rimoldini, A. C. Robin, L. M. Sarro, C. Siopis, M. Smith, A. Sozzetti, M. Süveges, J. Torra, W. van Reeve, U. Abbas, A. Abreu Aramburu, S. Accart, C. Aerts, G. Altavilla, M. A. Álvarez, R. Alvarez, J. Alves, R. I. Anderson, A. H. Andrei, E. Anglada Varela, E. Antiche, T. Antoja, B. Arcay, T. L. Astraatmadja, N. Bach, S. G. Baker, L. Balaguer-Núñez, P. Balm, C. Barache, C. Barata, D. Barbato, F. Barblan, P. S. Barklem, D. Barrado, M. Barros, M. A. Barstow, S. Bartholomé Muñoz, J.-L. Bassilana, U. Becciani, M. Bellazzini, A. Berihuete, S. Bertone, L. Bianchi, O. Bienaymé, S. Blanco-Cuaresma, T. Boch, C. Boeche, A. Bombrun, R. Borrachero, D. Bossini, S. Bouquillon, G. Bourda, A. Bragaglia, L. Bramante, M. A. Breddels, A. Bressan, N. Brouillet, T. Brüsemeister, E. Brugaletta, B. Bucciarelli, A. Burlacu, D. Busonero, A. G. Butkevich, R. Buzzzi, E. Caffau, R. Cancelliere, G. Cannizzaro, T. Cantat-Gaudin, R. Carballo, T. Carlucci, J. M. Carrasco, L. Casamiquela, M. Castellani, A. Castro-Ginard, P. Charlot, L. Chemin, A. Chiavassa, G. Coccozza, G. Costigan, S. Cowell, F. Crifo, M. Crosta, C. Crowley, J. Cuypers, C. Dafonte, Y. Damerdj, A. Dapergolas, M. David, P. de Laverny, F. De Luise, R. De March, R. de Souza, A. de Torres, J. Debosscher, E. del Pozo, A. Delgado, H. E. Delgado, S. Diakite, C. Diener, E. Distefano, C. Dolding, P. Drazinos, J. Durán, B. Edvardsson, H. Enke, K.

Eriksson, P. Esquej, G. Eynard Bontemps, C. Fabre, M. Fabrizio, S. Faigler, A. J. Falcão, M. Farràs Casas, L. Federici, G. Fedorets, P. Fernique, F. Figueras, F. Filippi, K. Findeisen, A. Fonti, E. Fraile, M. Fraser, M. Gai, S. Galleti, D. Garabato, F. García-Sedano, A. Garofalo, N. Garralda, A. Gavel, P. Gavras, J. Gerssen, R. Geyer, P. Giacobbe, G. Gilmore, S. Girona, G. Giuffrida, F. Glass, M. Gomes, A. Gueguen, A. Guerrier, R. Gutiérrez-Sánchez, R. Haignon, D. Hatzidimitriou, M. Hauser, M. Haywood, U. Heiter, A. Helmi, J. Heu, T. Hilger, D. Hobbs, W. Hofmann, G. Holland, H. E. Huckle, A. Hypki, V. Icardi, K. Janßen, G. Jevardat de Fombelle, P. G. Jonker, Á. L. Juhász, F. Julbe, A. Karampelas, A. Kewley, J. Klar, A. Kochoska, R. Kohley, K. Kolenberg, M. Kontizas, E. Kontizas, S. E. Kuposov, G. Kordopatis, Z. Kostrzewa-Rutkowska, P. Koubsky, S. Lambert, A. F. Lanza, Y. Lasne, J.-B. Lavigne, Y. Le Fustec, C. Le Poncin-Lafitte, Y. Lebreton, S. Leccia, N. Leclerc, I. Lecoeur-Taibi, H. Lenhardt, F. Leroux, S. Liao, E. Licata, H. E. P. Lindstrøm, T. A. Lister, E. Livanou, A. Lobel, M. López, S. Managau, R. G. Mann, G. Mantelet, O. Marchal, J. M. Marchant, M. Marconi, S. Marinoni, G. Marschalkó, D. J. Marshall, M. Martino, G. Marton, N. Mary, D. Massari, G. Matijevič, T. Mazeh, P. J. McMillan, S. Messina, D. Michalik, N. R. Millar, D. Molina, R. Molinaro, L. Molnár, P. Montegriffo, R. Mor, R. Morbidelli, T. Morel, D. Morris, A. F. Mulone, T. Muraveva, I. Musella, G. Nelemans, L. Nicastro, L. Noval, W. O'Mullane, D. Ordóñez-Blanco, P. Osborne, C. Pagani, I. Pagano, F. Pailler, H. Palacin, L. Palaversa, A. Panahi, M. Pawlak, A. M. Piersimoni, F.-X. Pineau, E. Plachy, G. Plum, E. Poggio, A. Prša, L. Pulone, E. Racero, S. Ragaini, N. Rambaux, M. Ramos-Lerate, S. Regibo, C. Reylé, F. Riclet, V. Ripepi, A. Riva, A. Rivard, G. Rixon, T. Roegiers, M. Roelens, M. Romero-Gómez, N. Rowell, F. Royer, L. Ruiz-Dern, G. Sadowski, T. Sagristà Sellés, J. Sahlmann, J. Salgado, E. Salguero, N. Sanna, T. Santana-Ros, M. Sarasso, H. Savietto, M. Schultheis, E. Sciacca, M. Segol, J. C. Segovia, D. Ségransan, I.-C. Shih, L. Siltala, A. F. Silva, R. L. Smart, K. W. Smith, E. Solano, F. Solitro, R. Sordo, S. Soria Nieto, J. Souchay, A. Spagna, U. Stampa, I. A. Steele, H. Steidelmüller, C. A. Stephenson, H. Stoev, F. F. Suess, J. Surdej, L. Szabados, E. Szegedi-Elek, D. Tapiador, F. Taris, G. Tauran, M. B. Taylor, R. Teixeira, D. Terrett, P. Teyssandier, A. Titarenko, F. Torra Clotet, C. Turon, A. Ulla, E. Utrilla, S. Uzzi, M. Vaillant, G. Valentini, V. Valette, A. van Elteren, E. Van Hemelryck, M. van Leeuwen, M. Vaschetto, A. Vecchiato, J. Veljanoski, Y. Viala, D. Vicente, S. Vogt, C. von Essen, H. Voss, V. Votruba, S. Voutsinas, M. Weiler, O. Wertz, T. Wevers, Ł. Wyrzykowski, A. Yoldas, M. Žerjal, H. Ziaeeppour, J. Zorec, S. Zschocke, S. Zucker, C. Zurbach, and T. Zwitter, *Gaia* Data Release 2: observations of solar system objects, *Astron. Astrophys.* 616, A13, 2018.

7837 Garçon, M., M. Boyet, R. W. Carlson, M. F. Horan, D. Auclair, and T. D. Mock, Factors influencing the precision and accuracy of Nd isotope measurements by thermal ionization mass spectrometry, *Chem. Geol.* 476, 493-514, 2018.

7933 Glavin, D. P., C. M. O'D. Alexander, J. C. Aponte, J. P. Dworkin, J. E. Elsila, and H. Yabuta, The origin and evolution of organic matter in carbonaceous chondrites and links to their parent bodies, in *Primitive Meteorites and Asteroids: Physical, Chemical, and Spectroscopic Observations Paving the Way to Exploration*, N. Abreu, ed., pp. 205-271, Elsevier, Amsterdam, 2018.

- 7859 Groopman, E. E., and L. R. Nittler, Correlated XANES, TEM, and NanoSIMS of presolar graphite grains, *Geochim. Cosmochim. Acta* 221, 219-236, 2018.
- 7834 Guenther, E. W., O. Barragán, F. Dai, D. Gandolfi, T. Hirano, M. Fridlund, L. Fossati, J. Korth, J. Arraz-Prieto, D. Nespral, G. Antoniciello, H. Deeg, M. Hjorth, S. Grziwa, S. Albrecht, A. P. Hatzes, H. Rauer, S. Csizmadia, A. M. S. Smith, J. Cabrera, N. Narita, P. Arriagada, J. Burt, R. P. Butler, W. D. Cochran, J. D. Crane, P. Eig Müller, A. Erikson, J. A. Johnson, A. Kiilerich, D. Kubyshkina, S. Kunz, E. Palle, C. M. Persson, M. Pätzold, J. Prieto-Arranz, B. Sato, S. A. Shtetman, J. K. Teske, I. B. Thompson, V. Van Eylen, G. Nowak, A. Vanderburg, J. N. Winn, and R. A. Wittenmyer, K2-106, a system containing a metal-rich planet and a planet of lower density, *Astron. Astrophys.* 608, A93, 2017.
- 7862 Gyngard, F., M. Jadhav, L. R. Nittler, R. M. Stroud, and E. Zinner, Bonanza: an extremely large dust grain from a supernova, *Geochim. Cosmochim. Acta* 221, 60-86, 2018.
- 7855 Haugland, S. M., J. Ritsema, P. E. van Keken, and T. Nissen-Meyer, Analysis of PKP scattering using mantle mixing simulations and axisymmetric 3D waveforms, *Phys. Earth Planet. Inter.* 276, 226-233, 2018.
- 7839 Hauri, E. H., J. Maclennan, D. McKenzie, K. Gronvold, N. Oskarsson, and N. Shimizu, CO₂ content beneath northern Iceland and the variability of mantle carbon, *Geology* 46, 55-58, 2018.
- 7816 Hautmann, S., I. S. Sacks, A. T. Linde, and M. J. Roberts, Magma buoyancy and volatile ascent driving autocyclic eruptivity at Hekla Volcano (Iceland), *Geochem. Geophys. Geosyst.* 18, 3517-3529, doi:10.1002/2017GC007061, 2017.
- 7903 Henry, T. J., W.-C. Jao, J. G. Winters, S. B. Dieterich, C. T. Finch, P. A. Ianna, A. R. Riedel, M. L. Silverstein, J. P. Subasavage, and E. H. Vrijmoet, The Solar Neighborhood XLIV: RECONS discoveries within 10 parsecs, *Astron. J.* 155, 265, 2018.
- 7849 Horan, M. F., R. W. Carlson, R. J. Walker, M. Jackson, M. Garçon, and M. Norman, Tracking Hadean processes in modern basalts with 142-Neodymium, *Earth Planet. Sci. Lett.* 484, 184-191, 2018.
- 7914 Hsieh, H. H., M. Ishiguro, M. M. Knight, M. Micheli, N. A. Moskovitz, S. S. Sheppard, and C. A. Trujillo, The reactivation and nucleus characterization of main-belt comet 358P/PANSTARRS (P/2012 T1), *Astron. J.* 156, 39, 2018.
- 7894 Iliadis, C., L. N. Downen, J. José, L. R. Nittler, and S. Starrfield, On presolar stardust grains from CO classical novae, *Astrophys. J.* 855, 76, 2018.
- 7938 Ionov, D. A., L. S. Doucet, R. W. Carlson, A. V. Golovin, and O. B. Oleinikov, Lost in interpretation: facts and misconceptions about the mantle of the Siberian craton. A comment on: "Composition of the lithospheric mantle in the northern part of Siberian craton: constraints from peridotites in the Obnazhennaya kimberlite" by Sun et al. (2017), *Lithos* 314-315, 683-687, 2018.

- 7864 Ireland, T. R., Ávila J. N., M. Lugaro, S. Cristallo, P. Holden, P. Lanc, L. Nittler, C. M. O'D. Alexander, F. Gyngard, and E. Amari, Rare earth element abundances in presolar SiC, *Geochim. Cosmochim. Acta* 221, 200-218, 2018.
- 7912 Kaplan, H. H., R. E. Milliken, and C. M. O'D. Alexander, New constraints on the abundance and composition of organic matter on Ceres, *Geophys. Res. Lett.* 45, 5274-5282, doi:10.1029/2018GL077913, 2018.
- 7845 Kellogg, K., J. D. Kirkpatrick, S. Metchev, J. Gagné, and J. K. Faherty, Discovery of a possible early-T thick-disk subdwarf from the AllWISE2 Motion Survey, *Astron. J.* 155, 87, 2018.
- 7844 Kellogg, K., S. Metchev, A. Heinze, J. Gagné, and R. Kurtev, Characterizing the cloud decks of Luhman 16AB with medium-resolution spectroscopic monitoring, *Astrophys. J.* 849, 72, 2017.
- Kim, W.-Y., M. Gold, J. Ramsay, A. Meltzer, D. Wunsch, S. Baxter, V. Lekic, P. Goodling, K. Pearson, L. Wagner, D. Roman, and T. L. Pratt, M_w 4.2 Delaware earthquake of 30 November 2017, *Seismol. Res. Lett.*, in press.
- 7835 Laming, J. M., V. S. Heber, D. S. Burnett, Y. Guan, R. Hervig, G. R. Huss, A. J. G. Jurewicz, E. C. Koeman-Shields, K. D. McKeegan, L. R. Nittler, D. B. Reisenfeld, K. D. Rieck, J. Wang, R. C. Wiens, and D. S. Woolum, Determining the elemental and isotopic composition of the pre-solar nebula from *Genesis* data analysis: the case of oxygen, *Astrophys. J. Lett.* 851, L12, 2017.
- 7947 Line, M. R., M. S. Marley, M. C. Liu, B. Burningham, C. V. Morley, N. R. Hinkel, J. Teske, J. J. Fortney, R. Freedman, and R. Lupu, Uniform atmospheric retrieval analysis of ultracool dwarfs. II. Properties of 11 T dwarfs, *Astrophys. J.* 848, 83, 2017.
- Liu, N., R. Gallino, S. Bisterzo, A. M. Davis, R. Trappitsch, and L. R. Nittler, New constraints on the major neutron source in low-mass AGB stars, *Astrophys. J. Lett.*, in press.
- 7842 Liu, N., L. R. Nittler, C. M. O'D. Alexander, and J. Wang, Late formation of silicon carbide in type II supernovae, *Sci. Adv.* 4, eaao1054, 2018.
- 7836 Liu, N., A. Steele, L. R. Nittler, R. M. Stroud, B. T. De Gregorio, C. M. O'D. Alexander, and J. Wang, Coordinated EDX and micro-Raman analysis of presolar silicon carbide: a novel, non-destructive method to identify rare subgroup SiC, *Meteorit. Planet. Sci.* 52, 2550-2569, 2017.
- 7883 Liu, N., T. Stephan, P. Boehnke, L. R. Nittler, B. S. Meyer, C. M. O'D. Alexander, A. M. Davis, R. Trappitsch, and M. J. Pellin, Common occurrence of explosive hydrogen burning in type II supernovae, *Astrophys. J.* 855, 144, 2018.
- 7843 Lomax, J. R., J. P. Wisniewski, A. Roberge, J. K. Donaldson, J. H. Debes, E. M. Malumuth, and A. J. Weinberger, Optical coronagraphic spectroscopy of AU Mic: evidence of time variable colors? *Astron. J.* 155, 62, 2018.

- 7946 Long, J. D., J. R. Males, K. M. Morzinski, L. M. Close, F. Snik, M. A. Kenworthy, G. P. P. L. Otten, J. Monnier, V. Tolls, and A. Weinberger, The hunt for Sirius Ab: comparison of algorithmic sky and PSF estimation performance in deep coronagraphic thermal-IR high contrast imaging, in *Adaptive Optics Systems VI*, L. M. Close, L. Schreiber, and D. Schmidt, eds., paper 107032T, SPIE Proceedings Vol. 10703, SPIE, Bellingham, Wash., 2018.
- 7909 MacDonald, J., D. J. Mullan, and S. Dieterich, The magnetic binary GJ 65: a test of magnetic diffusivity effects, *Astrophys. J.* 860, 15, 2018.
- 7945 Mace, G., K. Sokal, J.-J. Lee, H. Oh, C. Park, H. Lee, J. Good, P. MacQueen, J. S. Oh, K. Kaplan, B. Kidder, M.-Y. Chun, I.-S. Yuk, U. Jeong, S. Pak, K.-M. Kim, J. Nah, S. Lee, Y.-S. Yu, N. Hwang, B.-G. Park, H. Kim, B. Chinn, A. Peck, R. Diaz, R. Rutten, L. Prato, G. Jacoby, F. Cornelius, B. Hardesty, W. DeGroff, E. Dunham, S. Levine, L. Nofi, R. Lopez-Valdivia, A. J. Weinberger, and D. T. Jaffe, IGRINS at the Discovery Channel Telescope and Gemini South, in *Ground-based and Airborne Instrumentation for Astronomy VII*, C. J. Evans, L. Simard, and H. Takami, eds., paper 107020Q SPIE Proceedings Vol. 10702, SPIE, Bellingham, Wash., 2018.
- 7850 MacGregor, M. A., A. J. Weinberger, D. J. Wilner, A. F. Kowalski, and S. R. Cranmer, Detection of a millimeter flare from Proxima Centauri, *Astrophys. J. Lett.* 855, L2, 2018.
- 7874 Maguire, R., J. Ritsema, M. Bonnin, P. E. van Keken, and S. Goes, Evaluating the resolution of deep mantle plumes in teleseismic traveltime tomography, *J. Geophys. Res. Solid Earth* 123, 384-400, doi:10.1002/2017JB014730, 2018.
- 7942 Males, J. R., L. M. Close, K. Miller, L. Schatz, D. Doelman, J. Lumbres, F. Snik, A. Rodack, J. Knight, K. Van Gorkom, J. D. Long, A. Hedglen, M. Kautz, N. Jovanovic, K. Morzinski, O. Guyon, E. Douglas, K. B. Follette, J. Lozi, C. Bohlman, O. Durney, V. Gasho, P. Hinz, M. Ireland, M. Jean, C. Keller, M. Kenworthy, B. Mazin, J. Noenickx, D. Alfred, K. Perez, A. Sanchez, C. Sauve, A. Weinberger, and A. Conrad, MagAO-X: project status and first laboratory results, in *Adaptive Optics Systems VI*, L. M. Close, L. Schreiber, and D. Schmidt, eds., paper 1070309, SPIE Proceedings Vol. 10703, SPIE, Bellingham, Wash., 2018.
- 7889 McAdam, M. M., J. M. Sunshine, K. T. Howard, C. M. Alexander, T. J. McCoy, and S. J. Bus, Spectral evidence for amorphous silicates in least-processed CO meteorites and their parent bodies, *Icarus* 306, 32-49, 2018.
- 7833 McCubbin, F. M., K. E. Vander Kaaden, P. N. Peplowski, A. S. Bell, L. R. Nittler, J. W. Boyce, L. G. Evans, L. P. Keller, S. M. Elardo, and T. J. McCoy, A low O/Si ratio on the surface of Mercury: evidence for silicon smelting? *J. Geophys. Res. Planets* 122, 2053-2076, doi:0.1002/2017JE005367, 2017.

- 7896 Meadows, V. S., G. N. Arney, E. W. Schwieterman, J. Lustig-Yaeger, A. P. Lincowski, T. Robinson, S. D. Domagal-Goldman, R. Deitrick, R. K. Barnes, D. P. Fleming, R. Luger, P. E. Driscoll, T. R. Quinn, and D. Crisp, The habitability of Proxima Centauri b: environmental states and observational discriminants, *Astrobiology* 18, 133-189, 2018.
- 7948 Merkel, A. W., R. J. Vervack, Jr., R. M. Killen, T. A. Cassidy, W. E. McClintock, L. R. Nittler, and M. H. Burger, Evidence connecting Mercury's magnesium exosphere to its magnesium-rich surface terrane, *Geophys. Res. Lett.* 45, 6790-6797, doi:10.1029/2018GL078407, 2018.
- 7856 Millholland, S., G. Laughlin, J. Teske, R. P. Butler, J. Burt, B. Holden, S. Vogt, J. Crane, S. Shectman, and I. Thompson, New constraints on Gliese 876—exemplar of mean-motion resonance, *Astron. J.* 155, 106, 2018.
- 7821 Mitchell, A. L., G. A. Gaetani, J. A. O'Leary, and E. H. Hauri, H₂O solubility in basalt at upper mantle conditions, *Contrib. Mineral. Petrol.* 172, 85, 2017.
- 7847 Mojzsis, S. J., O. Abramov, E. A. Frank, and R. Brasser, Thermal effects of late accretion to the crust and mantle of Mercury, *Earth Planet. Sci. Lett.* 482, 536-544, 2018.
- 7888 Morishige, M., and P. E. van Keken, Fluid migration in a subducting viscoelastic slab, *Geochem. Geophys. Geosyst.* 19, 337-355, doi:10.1002/2017GC007236, 2018.
- 7920 Mundl, A., R. J. Walker, J. R. Reimink, R. L. Rudnick, and R. M. Gaschnig, Tungsten-182 in the upper continental crust: evidence from glacial diamictites, *Chem. Geol.* 494, 144-152, 2018.
- 7852 Nakajima, M., and D. J. Stevenson, Inefficient volatile loss from the Moon-forming disk: reconciling the giant impact hypothesis and a wet Moon, *Earth Planet. Sci. Lett.* 487, 117-126, 2018.
- 7808 Naud, M.-E., É. Artigau, R. Doyon, L. Malo, J. Gagné, D. Lafrenière, C. Wolf, and E. A. Magnier, PSYM-WIDE: a survey for large-separation planetary-mass companions to late spectral type members of young moving groups, *Astron. J.* 154, 129, 2017.
- 7811 Naud, M.-E., É. Artigau, J. F. Rowe, R. Doyon, L. Malo, L. Albert, J. Gagné, and S. Bouchard, A search for photometric variability in the young T3.5 planetary-mass companion GU Psc b, *Astron. J.* 154, 138, 2017.
- 7900 Nesvold, E. R., A. Greenberg, N. Erasmus, E. van Heerden, J. L. Galache, E. Dahlstrom, and F. Marchis, The Deflector Selector: a machine learning framework for prioritizing hazardous object deflection technology development, *Acta Astronaut.* 146, 33-45, 2018.
- 7863 Nguyen, A. N., L. R. Nittler, C. M. O'D. Alexander, and P. Hoppe, Titanium isotopic compositions of rare presolar SiC grain types from the Murchison meteorite, *Geochim. Cosmochim. Acta* 221, 162-181, 2018.
- 7861 Nittler, L. R., Astrophysical implications of extraterrestrial materials: a special issue for Ernst K. Zinner, *Geochim. Cosmochim. Acta* 221, 1-5, 2018.

- 7881 Nittler, L. R., C. M. O'D. Alexander, J. Davidson, M. E. I. Riebe, R. M. Stroud, and J. Wang, High abundances of presolar grains and ^{15}N -rich organic matter in CO3.0 chondrite Dominion Range 08006, *Geochim. Cosmochim. Acta* 226, 107-131, 2018.
- 7885 Nittler, L. R., C. M. O'D. Alexander, N. Liu, and J. Wang, Extremely ^{54}Cr - and ^{50}Ti -rich presolar oxide grains in a primitive meteorite: formation in rare types of supernovae and implications for the astrophysical context of solar system birth, *Astrophys. J. Lett.* 856, L24, 2018.
- 7871 Peters, B. J., R. W. Carlson, J. M. D. Day, and M. F. Horan, Hadean silicate differentiation preserved by anomalous $^{142}\text{Nd}/^{144}\text{Nd}$ ratios in the Réunion hotspot source, *Nature* 555, 89-93, 2018.
- 7829 Peterson, M. E., A. E. Saal, M. D. Kurz, E. H. Hauri, J. S. Blusztajn, K. S. Harpp, R. Werner, and D. J. Geist, Submarine basaltic glasses from the Galapagos Archipelago: determining the volatile budget of the mantle plume, *J. Petrol.* 58, 1419-1450, 2017.
- 7878 Rasmussen, D. J., T. A. Plank, D. C. Roman, J. A. Power, R. J. Bodnar, and E. H. Hauri, When does eruption run-up begin? Multidisciplinary insight from the 1999 eruption of Shishaldin volcano, *Earth Planet. Sci. Lett.* 486, 1-14, 2018.
- 7907 Reimink, J. R., T. Chacko, R. W. Carlson, S. B. Shirey, J. A. Liu, R. A. Stern, A. M. Bauer, D. G. Pearson, and L. M. Heaman, Petrogenesis and tectonics of the Acasta Gneiss Complex derived from integrated petrology and ^{142}Nd and ^{182}W extinct nuclide-geochemistry, *Earth Planet. Sci. Lett.* 494, 12-22, 2018.
- 7853 Reiners, P. W., R. W. Carlson, P. R. Renne, K. M. Cooper, D. E. Granger, N. M. McLean, and B. Schoene, *Geochronology and Thermochronology*, American Geophysical Union/John Wiley & Sons, Hoboken, N.J., 464 pp., 2018.
- 7832 Riebe, M. E. I., K. C. Welten, M. M. M. Meier, R. Wieler, M. I. F. Barth, D. Ward, M. Laubenstein, A. Bischoff, M. W. Caffee, K. Nishiizumi, and H. Busemann, Cosmic-ray exposure ages of six chondritic Almahata Sitta fragments, *Meteorit. Planet. Sci.* 52, 2353-2374, 2017.
- 7820 Roberge, A., M. J. Rizzo, A. P. Lincowski, G. N. Arney, C. C. Stark, T. D. Robinson, G. F. Snyder, L. Pueyo, N. T. Zimmerman, T. Jansen, E. R. Nesvold, V. S. Meadows, and M. C. Turnbull, Finding the needles in the Haystacks: high-fidelity models of the modern and Archean solar system for simulating exoplanet observations, *Publ. Astron. Soc. Pacific* 129, 124401, 2017.
- Roman, D. C., and K. V. Cashman, Top-down precursory volcanic seismicity: implications for 'stealth' magma ascent and long-term eruption forecasting, *Front. Earth Sci.*, in press.
- 7824 Rutherford, M. J., J. W. Head, A. E. Saal, E. Hauri, and L. Wilson, Model for the origin, ascent, and eruption of lunar picritic magmas, *Am. Mineral.* 102, 2045-2053, 2017.

- 7858 Schrader, D. L., K. Nagashima, S. R. Waitukaitis, J. Davidson, T. J. McCoy, H. C. Connolly, and D. S. Laretta, The retention of dust in protoplanetary disks: evidence from agglomeratic olivine chondrules from the outer Solar System, *Geochim. Cosmochim. Acta* 223, 405-421, 2018.
- Sheppard, S., Y. Fernandez, and A. Moullet, The albedos, sizes, colors and satellites of dwarf planets compared with newly measured dwarf planet 2013 FY27, *Astron. J.*, in press.
- Sheppard, S., G. Williams, D. Tholen, C. Trujillo, M. Brozovic, A. Thirouin, M. Devogele, D. Fohring, R. Jacobson, and N. Moskovitz, New Jupiter satellites and moon-moon collisions, *Res. Notes AAS*, in press.
- 7817 Sheppard, S. S., The hunt for Planet X, *Sky & Telescope* 134 (no. 4), 16-21, 2017.
- 7901 Shirey, S., Fourth International Diamond School, *Gems Gemol.* 54 (no. 1), 107-110, 2018.
- 7916 Singer, B. S., H. Le Mével, J. M. Licciardi, L. Córdova, B. Tikoff, N. Garibaldi, N. L. Andersen, A. K. Diefenbach, and K. L. Feigl, Geomorphic expression of rapid Holocene silicic magma reservoir growth beneath Laguna del Maule, Chile, *Sci. Adv.* 4, eaat1513, 2018.
- Sio, C. K., M. Roskosz, N. Dauphas, N. R. Bennett, T. D. Mock, and A. Shahar, The isotope effect for Mg-Fe interdiffusion in olivine and its dependence on crystal orientation, composition and temperature, *Geochim. Cosmochim. Acta*, in press.
- 7936 Smit, K. V., and S. B. Shirey, Diamonds help solve the enigma of Earth's deep water, *Gems Gemol.* 54 (no. 2), 220-223, 2018.
- 7927 Smith, E. M., S. B. Shirey, S. H. Richardson, F. Nestola, E. S. Bullock, J. Wang, and W. Wang, Blue boron-bearing diamonds from Earth's lower mantle, *Nature* 560, 84-87, 2018.
- 7868 Smith, E. M., S. B. Shirey, and W. Wang, The very deep origin of the world's biggest diamonds, *Gems Gemol.* 53 (no. 4), 388-403, 2017.
- Solomon, S. C., L. R. Nittler, and B. J. Anderson, eds., *Mercury: the View after MESSENGER*, Cambridge University Press, in press.
- 7884 Sori, M. M., P. B. James, B. C. Johnson, J. M. Soderblom, S. C. Solomon, M. A. Wieczorek, and M. T. Zuber, Isostatic compensation of the lunar highlands, *J. Geophys. Res. Planets* 123, 646-665, doi:10.1002/2017JE005362, 2018.
- 7891 Souto, D., K. Cunha, V. V. Smith, C. Allende Prieto, D. A. García-Hernández, M. Pinsonneault, P. Holzer, P. Frinchaboy, J. Holtzman, J. A. Johnson, H. Jönsson, S. R. Majewski, M. Shetrone, J. Sobeck, G. Stringfellow, J. Teske, O. Zamora, G. Zasowski, R. Carrera, K. Stassun, J. G. Fernandez-Trincado, S. Villanova, D. Minniti, and F. Santana, Chemical abundances of main-sequence, turnoff, subgiant, and red giant stars from APOGEE spectra. I. Signatures of diffusion in the open cluster M67, *Astrophys. J.* 857, 14, 2018.

- 7911 Souto, D., C. T. Unterborn, V. V. Smith, K. Cunha, J. Teske, K. Covey, B. Rojas-Ayala, D. A. García-Hernández, K. Stassun, O. Zamora, T. Masseron, J. A. Johnson, S. R. Majewski, H. Jönsson, S. Gilhool, C. Blake, and F. Santana, Stellar and planetary characterization of the Ross 128 exoplanetary system from APOGEE spectra, *Astrophys. J. Lett.* 860, L15, 2018.
- Steele, A., L. G. Benning, R. Wirth, S. Siljeström, M. D. Fries, E. Hauri, P. G. Conrad, K. Rogers, J. Eigenbrode, A. Schreiber, A. Needham, J. H. Wang, F. M. McCubbin, D. Kilcoyne, and J. D. Rodriguez Blanco, Organic synthesis on Mars by electrochemical reduction of CO₂, *Sci. Adv.*, in press.
- 7827 Su, K. Y. L., M. A. MacGregor, M. Booth, D. J. Wilner, K. Flaherty, A. M. Hughes, N. M. Phillips, R. Malhotra, A. S. Hales, S. Morrison, S. Ertel, B. C. Matthews, W. R. F. Dent, and S. Casassus, ALMA 1.3 mm map of the HD 95086 system, *Astron. J.* 154, 225, 2017.
- 7918 Takigawa, A., R. M. Stroud, L. R. Nittler, C. M. O'D. Alexander, and A. Miyake, High-temperature dust condensation around an AGB star: evidence from a highly pristine presolar corundum, *Astrophys. J. Lett.* 862, L13, 2018.
- 7935 Taranovic, V., E. M. Ripley, C. Li, and S. B. Shirey, S, O, and Re-Os isotope studies of the Tamarack Igneous Complex: melt-rock interaction during the early stage of Midcontinent Rift development, *Econ. Geol.* 113, 1161-1179, 2018.
- 7910 Teague, R., J. Bae, E. A. Bergin, T. Birnstiel, and D. Foreman-Mackey, A kinematical detection of two embedded Jupiter-mass planets in HD 163296, *Astrophys. J. Lett.* 860, L12, 2018.
- 7882 Teske, J. K., S. Wang, A. Wolfgang, F. Dai, S. A. Shectman, R. P. Butler, J. D. Crane, and I. B. Thompson, Magellan/PFS radial velocities of GJ 9827, a late K dwarf at 30 pc with three transiting super-Earths, *Astron. J.* 155, 148, 2018.
- 7846 Theissen, C. A., A. J. Burgasser, D. C. Bardalez Gagliuffi, K. K. Hardegree-Ullman, J. Gagné, S. J. Schmidt, and A. A. West, 2MASS J11151597+1937266: a young, dusty, isolated, planetary-mass object with a potential wide stellar companion, *Astrophys. J.* 853, 75, 2018.
- 7830 Thirouin, A., and S. S. Sheppard, A possible dynamically cold classical contact binary: (126719) 2002 CC₂₄₉, *Astron. J.* 154, 241, 2017.
- 7902 Thirouin, A., and S. S. Sheppard, The Plutino population: an abundance of contact binaries, *Astron. J.* 155, 248, 2018.
- 7898 Tinney, C. G., J. D. Kirkpatrick, J. K. Faherty, G. N. Mace, M. Cushing, C. R. Gelino, A. J. Burgasser, S. S. Sheppard, and E. L. Wright, New Y and T dwarfs from WISE identified by methane imaging, *Astrophys. J. Suppl. Ser.* 236, 28, 2018.
- 7915 Tucker, J. M., S. Mukhopadhyay, and H. M. Gonnermann, Reconstructing mantle carbon and noble gas contents from degassed mid-ocean ridge basalts, *Earth Planet. Sci. Lett.* 496, 108-119, 2018.

- 7890 Tuomi, M., H. R. A. Jones, J. R. Barnes, G. Anglada-Escudé, R. P. Butler, M. Kiraga, and S. S. Vogt, AD Leonis: radial velocity signal of stellar rotation or spin-orbit resonance? *Astron. J.* 155, 192, 2018.
- 7937 Vacher, L. G., Y. Marrocchi, J. Villeneuve, M. J. Verdier-Paoletti, and M. Gounelle, Collisional and alteration history of the CM parent body, *Geochim. Cosmochim. Acta* 239, 213-234, 2018.
- Van Keken, P. E., I. Wada, G. A. Abers, B. R. Hacker, and K. Wang, Mafic high-pressure rocks are preferentially exhumed from warm subduction settings, *Geochem. Geophys. Geosyst.*, in press.
- 7892 Varmuza, K., P. Filzmoser, I. Hoffmann, J. Walach, H. Cottin, N. Fray, C. Briois, P. Modica, A. Bardyn, J. Silén, S. Siljeström, O. Stenzel, J. Kissel, and M. Hilchenbach, Significance of variables for discrimination: applied to the search of organic ions in mass spectra measured on cometary particles, *J. Chemom.* 32, e3001, 2018.
- 7899 Videen, G., E. Zubko, J. A. Arnold, B. MacCall, A. J. Weinberger, Y. Shkuratov, and O. Muñoz, On the interpolation of light-scattering responses from irregularly shaped particles, *J. Quant. Spectrosc. Radiat. Transfer* 211, 123-128, 2018.
- 7818 Vogt, S. S., R. P. Butler, J. Burt, M. Tuomi, G. Laughlin, B. Holden, J. K. Teske, S. A. Schectman, J. D. Crane, M. Díaz, I. B. Thompson, P. Arriagada, and S. Keiser, A six-planet system around the star HD 34445, *Astron. J.* 154, 181, 2017.
- 7928 Wagner, L. S., K. M. Fischer, R. Hawman, E. Hopper, and D. Howell, The relative roles of inheritance and long-term passive margin lithospheric evolution on the modern structure and tectonic activity in the southeastern United States, *Geosphere* 14, 1385-1410, 2018.
- 7815 Wallace, J., S. Tremaine, and J. Chambers, Collisional fragmentation is not a barrier to close-in planet formation, *Astron. J.* 154, 175, 2017.
- 7810 Westphal, A. J., J. C. Bridges, D. E. Brownlee, A. L. Butterworth, B. T. De Gregorio, G. Dominguez, G. J. Flynn, Z. Gainsforth, H. A. Ishii, D. Joswiak, L. R. Nittler, R. C. Ogliore, R. Palma, R. O. Pepin, T. Stephan, and M. E. Zolensky, The future of Stardust science, *Meteorit. Planet. Sci.* 52, 1859-1898, 2017.
- 7857 White, J. A., A. C. Boley, M. A. MacGregor, A. M. Hughes, and D. J. Wilner, ALMA and VLA observations of the HD 141569 system, *Mon. Not. Roy. Astron. Soc.* 474, 4500-4506, 2018.
- 7879 Wilner, D. J., M. A. MacGregor, S. M. Andrews, A. M. Hughes, B. Matthews, and K. Su, Resolved millimeter observations of the HR 8799 debris disk, *Astrophys. J.* 855, 56, 2018.
- 7865 Wittenmyer, R. A., M. I. Jones, J. Horner, S. R. Kane, J. P. Marshall, A. J. Mustill, J. S. Jenkins, P. A. Pena Rojas, J. Zhao, E. Villaver, R. P. Butler, and J. Clark, The Pan-Pacific Planet Search. VII. The most eccentric planet orbiting a giant star, *Astron. J.* 154, 274, 2017.

- 7867 Zhou, G., S. Rappaport, L. Nelson, C. X. Huang, A. Senhadji, J. E. Rodriguez, A. Vanderburg, S. Quinn, C. I. Johnson, D. W. Latham, G. Torres, B. L. Gary, T. G. Tan, M. C. Johnson, J. Burt, M. H. Kristiansen, T. L. Jacobs, D. LaCourse, H. M. Schwengeler, I. Terentev, A. Bieryla, G. A. Esquerdo, P. Berlind, M. L. Calkins, J. Bento, W. D. Cochran, M. Karjalainen, A. P. Hatzes, R. Karjalainen, B. Holden, and R. P. Butler, Occultations from an active accretion disk in a 72-day detached post-Algol system Detected by K2, *Astrophys. J.* 854, 109, 2018.
- 7934 Zubko, E., G. Videen, J. A. Arnold, B. MacCall, A. J. Weinberger, and Y. Shkuratov, Interpolating light-scattering properties of irregularly shaped, absorbing particles, *Optics Lett.* 43, 4308-4311, 2018.