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<b>Research Interests</b>	Planetary formation and differentiation Non-traditional isotope geochemistry Analytical development (MC-ICP-MS)	
<b>Employment</b>	Associate Professor, Washington University in St. Louis Faculty Fellow, McDonnell Center for the Space Sciences Assistant Professor, Washington University in St. Louis Origins Prize Postdoctoral Fellow, Harvard University Research Assistant, Washington University in St. Louis Research Assistant, Chinese Academy of Sciences	2023 – 2016 – 2016 – 2023 2014 – 2016 2009 – 2013 2008 – 2009
<b>Education</b>	Ph. D., Washington University in St. Louis M.S., Washington University in St. Louis B.S., China University of Geosciences	2013 2011 2008
<b>Awards</b>	F.G. Houtermans Award Harvard Origins of Life Initiative Prize Fellowship NASA Earth and Space Science Fellowship LPI Career Development Award Carl Tolman Prize for Outstanding Graduate Teaching Graduating with Honors and Academic Outstanding National People's Scholarship Zhongkai Mining Company Fellowship	2020 2014 – 2016 2012 – 2013 2012 2011 2008 2007 2006
<b>Grants</b>	NASA, OSIRIS-REx Sample Analysis Participating Scientist Program, principal investigator NASA, Emerging Worlds Program, principal investigator NASA, Apollo Next Generation Sample Analysis, co-I NASA, Emerging Worlds Program, co-investigator NASA, Solar System Workings Program, co-investigator	2022 – 2025 2021 – 2023 2019 – 2023 2018 – 2019 2017 – 2019
<b>Peer-Reviewed Publications</b>	<b>52 peer-reviewed journal publications; &gt;70 conference abstracts</b> <i>Asterisk (*) indicates first authors who are students/postdocs in my group</i>	

52. Li W., Liu X.-M., **Wang K.**, McManus J., Haley B. A., Takahashi Y., Shakouri M. and Hu Y. (2022) Potassium isotope signatures in modern marine sediments: Insights into early diagenesis. *Earth and Planetary Science Letters*, **599**, 117849. DOI:10.1016/j.epsl.2022.117849
51. Koefoed, P.\* , Pravdivtseva, O., Ogliore, R., Jiang, Y., Lodders, K., Neuman, M. and **Wang, K.** (2022) The dynamic formation process of the CB chondrite Gujba. *Geochimica et Cosmochimica Acta*, **332**, 33-56. DOI: 10.1016/j.gca.2022.06.021
50. Li, W., Liu, X.-M., **Wang, K.**, Takahashi, Y., Hu, Y. & Chadwick, O. A. (2022) Soil potassium isotope composition during four million years of ecosystem development in Hawai'i. *Geochimica et Cosmochimica Acta*, **332**, 57-77. DOI: 10.1016/j.gca.2022.06.025
49. Neuman, M.\* , Holzheid, A., Lodders, K., Fegley, B. Jr., Jolliff, B.L., Koefoed, P., Chen, H., and **Wang, K.** (2022) High temperature evaporation and isotopic fractionation of K and Cu. *Geochimica et Cosmochimica Acta*, **316**, 1-20. DOI:10.1016/j.gca.2021.09.035
48. Li, W., Liu, X.-M., **Wang, K.**, Hu, Y.-F., Suzuki, A., and Yoshimura, T. (2022) Potassium incorporation and isotope fractionation in cultured scleractinian corals. *Earth and Planetary Science Letters*, **581**, 117393. DOI: 10.1016/j.epsl.2022.117393
47. Tian, Z.\* , Magna, T., Day, J.M.D., Mezger, K., Scherer, E.E., Lodders, K., Hin, R.C., Koefoed, P., Bloom, H., and **Wang, K.** (2021) Potassium isotope composition of Mars reveals a mechanism of planetary volatile retention. *Proceedings of the National Academy of Sciences*, **118**, e2101155118. DOI:10.1073/pnas.2101155118
46. Kuhnel, W.W., Jacobsen, S. B., Li, Y., Ku, Y., Petaev, M.I., Huang, S., Wu, Z., and **Wang, K.** (2021) High-temperature inter-mineral potassium isotope fractionation: Implication on K-Ca-Ar chronology. *ACS Earth and Space Chemistry*, **5**, 2740-2754. DOI:10.1021/acsearthspacechem.1c00147
45. **Wang, K.**, Li, W., Li, S., Tian, Z., Koefoed, P., and Zheng, X-Y. (2021) Geochemistry and cosmochemistry of potassium stable isotopes. *GEOCHEMISTRY*, **81**, 125786. DOI:10.1016/j.chemer.2021.125786
44. Magna, T., Jiang, Y., Skála, R., **Wang, K.**, Sossi, P.A., and Zák, K. (2021) Potassium elemental and isotope constraints on the formation of tektites and element loss during impacts. *Geochimica et Cosmochimica Acta*, **312**, 321-342. DOI:10.1016/j.gca.2021.07.022
43. Liu, H., Xue, Y-Y., Zhang, G., Sun, W-D., Tian, Z., Tuller-Ross, B., and **Wang, K.** (2021) Potassium isotopic composition of low-temperature altered oceanic crust and its impact on the global K cycle. *Geochimica et Cosmochimica Acta*, **311**, 59-73. DOI:10.1016/j.gca.2021.08.001

42. Ionov, D., and **Wang, K.** (2021) Potassium distribution and isotope composition in the lithospheric mantle in relation to global Earth's reservoirs. *Geochimica et Cosmochimica Acta*, **309**, 151-170. DOI:10.1016/j.gca.2021.06.033
41. Liu, H., Xue, Y-Y., Wang, K., Sun, W-D., and **Wang, K.** (2021) Contributions of slab-derived fluids to ultrapotassic rocks indicated by K isotopes. *Lithos*, **396-397**, 106202. DOI:10.1016/j.lithos.2021.106202
40. Li, W., Liu, X.-M., **Wang, K.**, Joel Fodrie, F., Yoshimura, T., and Hu, Y.-F. (2021) Potassium phases and isotopic composition in modern marine biogenic carbonates. *Geochimica et Cosmochimica Acta*, **304**, 364-380. DOI:10.1016/j.gca.2021.04.018
39. Li, W., Liu, X-M., **Wang, K.**, and Koefoed, P. (2021) Lithium and potassium isotope fractionation during silicate rock dissolution: an experimental approach. *Chemical Geology*, **568**, 120142. DOI:10.1016/j.chemgeo.2021.120142
38. Moynier, F., Hu, Y., **Wang, K.**, Zhao, Y., Deng, Z., Moureau, J., Li, W., Simon, J., and Teng, F-Z. (2021) Potassium isotopic composition of various samples using a collision-cell inductively coupled plasma mass spectrometer, Nu Instrument Sapphire. *Chemical Geology*, **571**, 120144. DOI:10.1016/j.chemgeo.2021.120144
37. **Wang, K.**, Peucker-Ehrenbrink, B., Chen, H., Lee, H., and Hasenmueller, E.A. (2021) Dissolved potassium isotopic composition of major world rivers. *Geochimica et Cosmochimica Acta*, **294**, 145-159. DOI:10.1016/j.gca.2020.11.012
36. Jiang, Y., Koefoed, P., Pravdivtseva, O.V., Chen, H., Li, C-H., Huang, F., Qin, L-P., Liu, J., and **Wang, K.** (2021) Early Solar System aqueous activity: K isotope evidence from Allende. *Meteoritics & Planetary Science*, **56**, 61-76. DOI:10.1111/maps.13588
35. **Wang, K.**, Close, H.\*G., Tuller-Ross, B., and Chen, H. (2020) Global average potassium isotope composition of modern seawater. *ACS Earth and Space Chemistry*, **4**, 1010-1017. DOI:10.1021/acsearthspacechem.0c00047
34. Wang, A., Yan, Y., Jolliff, B. L., McLennan, S. M., **Wang, K.**, Shi, E., and Farrell, W. M. (2020) Chlorine release from common chlorides by Martian dust activity. *Journal of Geophysical Research: Planets*, **125**, e2019JE006283. DOI:10.1029/2019JE006283
33. Koefoed, P. \*, Pravdivtseva, O.V., Chen, H., Gerritzen, C., Thiemens, M.M., and **Wang, K.** (2020) Potassium isotope systematics of the LL4 chondrite Hamlet: Implications for chondrule formation and alteration. *Meteoritics & Planetary Science*, **55**, 1833-1847. DOI:10.1111/maps.13545

32. Tian, Z.\*, Jolliff, B.L., Korotev, R.L., Fegley, B. Jr., Lodders, K., Day, J.M.D., Chen, H., and **Wang, K.** (2020) Potassium isotopic composition of the Moon. *Geochimica et Cosmochimica Acta*, **280**, 263-280. DOI:10.1016/j.gca.2020.04.021
31. Day, J.M.D., Moynier, F., Sossi, P.A., **Wang, K.**, Meshik, A.P., Pradivtseva, O.V., Pettit, D.R. (2020) Moderately volatile element behavior at high temperature determined from nuclear detonation. *Geochemical Perspectives Letters*, **13**, 54-60. DOI:10.7185/geochemlet.2014
30. Liu, H., **Wang, K.**, Sun, W-D., Xiao, Y., Xue, Y-Y., and Tuller-Ross, B. (2020) Extremely light K in subducted low-T altered oceanic crust: Implications for K recycling in subduction zone. *Geochimica et Cosmochimica Acta*, **277**, 206-223. DOI:10.1016/j.gca.2020.03.025
29. Chen, H., Liu, X-M., and **Wang, K.** (2020) Potassium isotope fractionation during chemical weathering of basalts. *Earth and Planetary Science Letters*, **539**, 116192. DOI:10.1016/j.epsl.2020.116192
28. Bloom, H.\* , Lodders, K., Chen, H., Zhao, C., Tian, Z., Koefoed, P., Petř, M. K., Jiang, Y., and **Wang, K.** (2020) Potassium isotope compositions of carbonaceous and ordinary chondrites: Implications on the origin of volatile depletion in the early solar system. *Geochimica et Cosmochimica Acta*, **277**, 111-131. DOI:10.1016/j.gca.2020.03.018
27. Zhao, C.\* , Lodders, K., Bloom, H., Chen, H., Tian, Z., Koefoed, P., Petř, M. K. and **Wang, K.** (2020) Potassium isotopic compositions of enstatite meteorites. *Meteoritics & Planetary Science*, **55**, 1404-1417. DOI:10.1111/maps.13358
26. Chen, J., Jolliff, B.L., Wang, A., Korotev, R.L., **Wang, K.**, Carpenter, P.K., Chen, H., Ling, Z., Fu, X., Ni, Y., Cao, H., and Huang, Y. (2019) Petrogenesis and shock metamorphism of basaltic lunar meteorites Northwest Africa 4734 and 10597. *Journal of Geophysical Research: Planets*, **124**, 2583-2598. DOI:10.1029/2019JE006084
25. Jiang, Y., Chen, H., Fegley, B. Jr., Lodders, K., Hsu, W., Jacobsen, S.B., and **Wang, K.** (2019) Implications of K, Cu and Zn isotopes for the formation of tektites. *Geochimica et Cosmochimica Acta*, **259**, 170-187. DOI:10.1016/j.gca.2019.06.003
24. Tuller-Ross B.\*, Marty B., Chen H., Kelley K. A., Lee H. L., and **Wang K.** (2019) Potassium isotopic systematics of oceanic basalts. *Geochimica et Cosmochimica Acta*, **259**, 144-154. DOI:10.1016/j.gca.2019.06.001
23. Tian, Z.\*, Chen, H., Fegley, B. Jr., Lodders, K., Barrat, J-A., Day, J.M.D., and **Wang, K.** (2019) Potassium isotope compositions of Howardite-Eucrite-Diogenite meteorites. *Geochimica et Cosmochimica Acta*, **266**, 611-632. DOI:10.1016/j.gca.2019.08.012

22. Tuller-Ross B.\* , Savage P.S., Chen H., and **Wang K.** (2019) Potassium isotope fractionation during magmatic differentiation of basalt to rhyolite. *Chemical Geology*, **525**, 37-45. DOI: [10.1016/j.chemgeo.2019.07.017](https://doi.org/10.1016/j.chemgeo.2019.07.017)
21. Chen, H., Meshik, A.P., Pravdivtseva, O.V., Day, J.M.D., **Wang, K.** (2019) Potassium isotope fractionation during high-temperature evaporation determined from the Trinity nuclear test. *Chemical Geology*, **522**, 84-92. DOI:[10.1016/j.chemgeo.2019.04.028](https://doi.org/10.1016/j.chemgeo.2019.04.028)
20. Lockmiller, K.A., **Wang, K.**, Fike, D.A., Shaughnessy, A.R., Hasenmueller, E.A. (2019) Using multiple tracers (F<sup>-</sup>, B, δ<sup>11</sup>B, and optical brighteners) to distinguish between municipal drinking water and wastewater inputs to urban streams. *Science of the Total Environment*, **671**, 1245-1256. DOI:[10.1016/j.scitotenv.2019.03.352](https://doi.org/10.1016/j.scitotenv.2019.03.352)
19. Chen, H., Tian, Z., Tuller-Ross, B., Korotev, R. L., and **Wang, K.** (2019) High-precision potassium isotopic analysis by MC-ICP-MS: An inter-laboratory comparison and refined K atomic weight. *Journal of Analytical Atomic Spectrometry*, **34**, 160-171. DOI: [10.1039/C8JA00303C](https://doi.org/10.1039/C8JA00303C)
18. Li, Y., Wang, W., Huang, S., **Wang, K.**, and Wu, Z. (2018) First-principles investigation of the concentration effect on equilibrium fractionation of K isotopes in feldspars. *Geochimica et Cosmochimica Acta*, **245**, 374-385. DOI:[10.1016/j.gca.2018.11.006](https://doi.org/10.1016/j.gca.2018.11.006)
17. **Wang, K.**, and Korotev, R. (2018). Meteorites. In *Oxford Encyclopedia of Planetary Science*. Oxford University Press. DOI:[10.1093/acrefore/9780190647926.013.16](https://doi.org/10.1093/acrefore/9780190647926.013.16)
16. Wu, Z., Wang, A., Farrell, W. M., Yan, Y., **Wang, K.**, Houghton, J., and Jackson, A. W. (2018) Forming perchlorates on Mars through plasma chemistry during dust events. *Earth and Planetary Science Letters*, **504**, 94-105. DOI:[10.1016/j.epsl.2018.08.040](https://doi.org/10.1016/j.epsl.2018.08.040)
15. Parendo, C. A., Jacobsen, S. B. and **Wang, K.** (2017) K isotopes as a tracer of seafloor hydrothermal alteration. *Proceedings of the National Academy of Sciences*, **114**, 1827-1831. DOI: [10.1073/pnas.1609228114](https://doi.org/10.1073/pnas.1609228114)
14. **Wang, K.**, and Jacobsen, S. B. (2016) Potassium isotopic evidence for a high energy Giant Impact origin of the Moon. *Nature*, **538**, 487-490. DOI:[10.1038/nature19341](https://doi.org/10.1038/nature19341)
13. **Wang, K.**, and Jacobsen, S. B. (2016) An estimate of the Bulk Silicate Earth potassium isotopic composition based on MC-ICPMS measurements of basalts. *Geochimica et Cosmochimica Acta*, **178**, 223-232. DOI: [10.1016/j.gca.2015.12.039](https://doi.org/10.1016/j.gca.2015.12.039)

12. **Wang, K.**, Jacobsen, S. B., Sedaghatpour, F., Chen, H., Korotev, R.L. (2015) The earliest Lunar Magma Ocean differentiation recorded in Fe isotopes. *Earth and Planetary Sciences Letters*, **430**, 202-208. DOI: [10.1016/j.epsl.2015.08.019](https://doi.org/10.1016/j.epsl.2015.08.019)
11. Barrat, J. A., Rouxel, O., **Wang, K.**, Moynier, F., Yamaguchi, A., Bischoff, A. and Langlade, J. (2015) Early stages of core segregation recorded by Fe isotopes in an asteroidal mantle. *Earth and Planetary Sciences Letters*, **419**, 93-100. DOI: [10.1016/j.epsl.2015.03.026](https://doi.org/10.1016/j.epsl.2015.03.026)
10. **Wang, K.**, Savage, P.S., Moynier, F. (2014) The iron isotope composition of enstatite meteorites: Implications for their origin and the metal/sulfide Fe isotopic fractionation factor. *Geochimica et Cosmochimica Acta*, **142**, 149-165. DOI: [10.1016/j.gca.2014.07.019](https://doi.org/10.1016/j.gca.2014.07.019)
9. **Wang, K.**, Day, J.M.D., Korotev, R.L., Zeigler, R.A., Moynier, F. (2014) Iron isotope fractionation during sulfide-rich felsic partial melting in early planetesimals. *Earth and Planetary Sciences Letters*, **392**, 124-132. DOI: [10.1016/j.epsl.2014.02.022](https://doi.org/10.1016/j.epsl.2014.02.022)
8. Moynier, F., Fujii, T., **Wang, K.**, Foriel, J. (2013) Ab initio calculations of the Fe(II) and Fe(III) isotopic effects in citrates, nicotianamine, and phytosiderophore, and new Fe isotopic measurements in higher plants. *Comptes Rendus Geosciences*, **345**, 230-240. DOI: [10.1016/j.crte.2013.05.003](https://doi.org/10.1016/j.crte.2013.05.003)
7. **Wang, K.**, Moynier, F., Barrat, J-A., Zanda, B., Paniello, R.C., Savage, P.S. (2013) Homogeneous distribution of Fe isotopes in the early solar nebula. *Meteoritics & Planetary Sciences*, **48**, 354-364. DOI: [10.1111/maps.12060](https://doi.org/10.1111/maps.12060)
6. **Wang, K.**, Moynier, F., Podosek, F., Foriel, J. (2012) An iron isotope perspective on the origin of the nanophase metallic iron in lunar regolith. *Earth and Planetary Sciences Letters*, **337-338**, 17-24. DOI: [10.1016/j.epsl.2012.05.021](https://doi.org/10.1016/j.epsl.2012.05.021)
5. Bishop, MC, Moynier F., Weinstein, C., Fraboulet, J.G., **Wang, K.**, Foriel, J. (2012) The Cu isotopic composition of iron meteorites, *Meteoritics & Planetary Sciences*, **47**, 268-276. DOI: [10.1111/j.1945-5100.2011.01326.x](https://doi.org/10.1111/j.1945-5100.2011.01326.x)
4. **Wang, K.**, Moynier, F., Dauphas, N., Barrat, J.A., Craddock, P., Sio, C. (2012) Iron isotope fractionation in planetary crusts. *Geochimica et Cosmochimica Acta*, **89**, 31-45. DOI: [10.1016/j.gca.2012.04.050](https://doi.org/10.1016/j.gca.2012.04.050)
3. Moynier, F., Blichert-Toft, J., **Wang, K.**, Herzog, G., Albarede, F. (2011) Elusive <sup>60</sup>Fe in the early solar system. *The Astrophysical Journal*, **741**, 71. DOI: [10.1088/0004-637X/741/2/71](https://doi.org/10.1088/0004-637X/741/2/71)
2. Weinstein, C., Moynier, F., **Wang, K.**, Paniello, R., Foriel, J., Catalano, J., Pichat, S. (2011) Isotopic fractionation of Cu in plants. *Chemical Geology*, **286**, 266-271. DOI: [10.1016/j.chemgeo.2011.05.010](https://doi.org/10.1016/j.chemgeo.2011.05.010)

1. **Wang, K.**, Moynier, F., Podosek, F., Foriel, J. (2011)  $^{58}\text{Fe}$  and  $^{54}\text{Cr}$  in early solar system materials. *The Astrophysical Journal Letters*, **739**, L58.  
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### Invited Talks

Colloquium Lecture: Lamont-Doherty Earth Observatory, October 15, 2021.  
Colloquium Lecture: University of Washington, February 18, 2021.  
Summer School: Northwest University (China), August 16, 2020.  
F.G. Houtermans Award Talk: Goldschmidt 2020, Honolulu, USA, June 22, 2020.  
Public Talk: St. Louis County Library, October 8, 2019.  
Lectures: China University of Geosciences, Wuhan, China, September 17, 18, 2019.  
Invited Talk: Goldschmidt 2019, Barcelona, Spain, August 21, 2019.  
Annual Kieler-Woche Lecture: Universität Kiel, Germany, June 24, 2019.  
Summer School: University of Science and Technology of China, July 17, 2018.  
St. Louis Astronomical Society Monthly Meeting Lecture: March 16, 2018.  
Colloquium Lecture: University of Arizona, February 27, 2018.  
Colloquium Lecture: University of New Mexico, February 2, 2018.  
Colloquium Lecture: University of North Carolina, Chapel Hill, November 2, 2017.  
Summer School: Shandong University, Weihai, China, July 11 – 15, 2016.  
Invited Talk: Goldschmidt 2016, Yokohama, Japan, July 1, 2016.  
Seminar: University of Rochester, New York, February 14, 2014.  
Seminar: The University of Texas at El Paso, February 18, 2013.  
Seminar: Carnegie institution of Washington; February 12, 2013.

### Conference Presentations

70. Koefoed, P., Barrat, J.-A., Pravdivtseva, O., Alexander, C.M.O'D., Lodders, K., Oglione, R., and **Wang, K.** (2023) The potassium isotope composition of CI chondrites and the origin of isotopic variations among primitive planetary bodies. 86th Annual Meeting of The Meteoritical Society 2023 (Los Angeles, USA), Abstract#: [6131](#).

69. Vaci, Z., Gargano, A.M., Koefoed, P. and **Wang, K.** (2023) Potassium and chlorine isotope compositions of ordinary chondrites. 33<sup>rd</sup> Goldschmidt Conference (Lyon, France). Abstract#: [16035](#).

68. Neuman, M., Cornelison, D.M., Holzheid, A., Lodders, K., Fegley, B. Jr., and **Wang, K.** (2023) Knudsen effusion study of equilibrium isotope fractionation during evaporation in the early solar system. 33<sup>rd</sup> Goldschmidt Conference (Lyon, France). Abstract#: [18648](#).

67. Li, W., Coogan L.A., **Wang, K.**, Takahashi, Y., Shakouri M., Hu, Y., and Liu, X.-M. (2023) Hydrothermal origin of heavy K isotope composition in altered oceanic crust. 33<sup>rd</sup> Goldschmidt Conference (Lyon, France). Abstract#: [17348](#).

66. Haenecour, P., Smith, L. R., Neuman, M., Koefoed, P., **Wang, K.**, and Dominik, K., (2023) Major and trace element composition of carbonaceous chondrites: insight into their alteration histories. 54<sup>th</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [1825](#).

65. Neuman M., Koefoed, P., **Wang, K.**, Jolliff, B.L., Korotev, R.L., Morris, R.V., Broussard, M., and the ANGSA Science Team (2023) Composition of Apollo 17 double drive tube 73001 / 73002. 54<sup>th</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [1625](#).
64. Smith, L. R., Haenecour, P., Barnes, J., Dominik, K., Neuman, M., **Wang, K.**, Ogliore, R., and Koefoed, P. (2023) Abundance of presolar grains in the C3.00-ungrouped chondrite Chwichiya 002. 54<sup>th</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [2425](#).
63. Vaci, Z., Koefoed, P., Tian, Z., **Wang, K.**, Day, J. M. D., Barrat, J. A., and Agee, C. B. (2022) Potassium isotopic compositions of evolved achondrites. 85th Annual Meeting of The Meteoritical Society (Glasgow, Scotland), Abstract#: [6034](#).
62. Smith, L. R., Haenecour, P. H., Barnes, J. J., Domanik, K., Neuman, M., **Wang, K.**, and Ogliore, R. (2022) Phosphide-rich clasts in the C2-ungrouped Tarda meteorite. 85th Annual Meeting of The Meteoritical Society 2022 (Glasgow, Scotland), Abstract#: [6406](#).
61. Zhu, K., Becker, H., Jiang, Y., Koefoed, P., and **Wang, K.** (2022) Constraining the kinship between CB and CH chondrites and the formation of CB chondrules using Cr isotopes. 85th Annual Meeting of The Meteoritical Society (Glasgow, Scotland), Abstract#: [6388](#).
60. **Wang, K.** and Ionov, D. (2022) Potassium isotope evidence for slab-derived fluids in the sub-arc mantle. 32<sup>nd</sup> Goldschmidt Conference (Honolulu, USA). Abstract#: [9823](#).
59. Li, W., Liu, X.-M., **Wang, K.**, Hu, Y. and Chadwick, O. A. (2022) Soil potassium isotope composition during four million years of ecosystem development in Hawai'i. 32<sup>nd</sup> Goldschmidt Conference (Honolulu, USA). Abstract#: [9822](#).
58. Wang, X.-K., Liu, X.-M., Jurikova, H., **Wang, K.**, & Shakouri, M. (2022) Potassium isotope fractionation in cultured brachiopods *Magellania venosa*. 32<sup>nd</sup> Goldschmidt Conference (Honolulu, USA). Abstract#: [11304](#).
57. Zhang, X.J., Tian, Z., Day, J.M.D., Moynier, F., and **Wang, K.** (2022) Rubidium isotope composition of Mars. 53<sup>rd</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [1666](#).
56. Neuman, M., Gargano, A., Shearer, C.K., **Wang, K.**, Sharp, Z., and Ziegler, K. (2022) Volatile element evolution in the martian crust. Communications with the martian surface and atmosphere? 53<sup>rd</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [1385](#).
55. Morris, R. V., Haney, N. C., Agresti, D. G., Neuman, M. D., **Wang, K.**, Jolliff, B. L., Shearer, C. K., Schmitt, H. H., and ANGSA Science Team (2022) Stratigraphy of

the Apollo 17 landslide core 73002 from FMR maturity and VNIR and Mössbauer spectroscopy. 53<sup>rd</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [1849](#).

54. Tian, Z., Neuman, M., Koefoed, P., and **Wang, K.** (2022) Potassium isotope constraints on near-surface fractionation effects of bulk lunar soils and Apollo 15 deep drill core. 53<sup>rd</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [2798](#).

53. Valenciano, J.L., Neal, C. R., Neuman, M. D., **Wang, K.**, Jolliff, B. L., Shearer, C. K., and the ANGSA Science Team (2022) Major and trace element analysis of Apollo 17 drive tube 73002: first dissection. 53<sup>rd</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [2818](#).

52. Koefoed, P., Folco, L., Di Vincenzo, G., Nie, N.X., Glass, B. P., and **Wang, K.** (2022) The K isotope systematics of microtektites from the Australasian strewn field. 53<sup>rd</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [2272](#).

51. Smith, L. R., Haenecour, P., Barnes, J. J., Dominik, K., Neuman, M., **Wang, K.**, and Ogliore, R. (2022) Detailed coordinated analysis of the mineralogy, petrography and elemental composition of the carbonaceous chondrite falls Tarda and Kolang. 53<sup>rd</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [2832](#).

50. Smith, L. R., Haenecour, P., Barnes, J. J., Dominik, K., Neuman, M., **Wang, K.**, and Ogliore, R. (2022) Mineralogy, petrography and presolar components of the Chwichiya 002 ungrouped chondrite. 53<sup>rd</sup> Lunar and Planetary Science Conference (The Woodlands, TX), Abstract#: [2873](#).

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1. Huang, J., Xiao L., **Wang, K.** (2009) Xifeng circular basin: another failed potential crater in China. 40th Lunar and Planetary Science Conference (The Woodlands, TX). Abstract#: [1035](#).

**Service**

*Journal Reviewer*      Geochimica et Cosmochimica Acta (27); Earth and Planetary Sciences Letters (8); Chemical Geology (3); Meteoritics & Planetary Sciences (2); Proceedings of the National Academy of Sciences (2); American Mineralogist (2); The Planetary Science Journal (1); The Astrophysical Journal (1); Geology (1); Nature Geoscience (1); Nature Communications (1); Science Advances (1); Geochemical Perspectives Letters (1); Science China Earth Sciences (1)

*Proposal/Grant Reviewer*      National Aeronautics and Space Administration; National Science Foundation; German Research Foundation; European Research Council; Canada Foundation for Innovation

*Conference Session Chair/Organizer*      Lunar and Planetary Science Conference; Goldschmidt Conference

*Departmental Committees*      Co-chair, colloquia and visitors  
Member, undergraduate studies committee  
Member, graduate studies committee

**Teaching**      L19 EPSc 171A: The Solar System      2017 – 2023  
L19 EPSc 446: Stable Isotope Geochemistry      2017, 2021  
L19 EPSc 566: Advances in Stable Isotope Geochemistry      2018, 2020, 2022

**Mentoring**      Megan Broussard, Graduate Student, Washington University in St. Louis      2022 – present  
  
Camryn Smalling, Undergraduate, Washington University in St. Louis      2022 – 2023  
  
Miriam Gammerman, Undergraduate, Washington University in St. Louis      2021 – 2022

Judy Zhang, Undergraduate, Washington University in St. Louis	2021 – 2022
Juan Xu, Visiting Graduate Student, University of Science and Technology of China	2019 – 2020
Piers Koefoed, MCSS Postdoc Fellow, Washington University in St. Louis	2018 – present
Mason Neuman, Graduate Student, Washington University in St. Louis	2018 – present
Haiyang Liu, Visiting Postdoc Fellow, Institute of Oceanology, Chinese Academy of Sciences	2018 – 2019
Carina Gerritzen, Visiting Undergraduate, Universität zu Köln, Germany	2018
Chen Zhao, Visiting Undergraduate, China University of Geosciences, Wuhan	2018
Hannah Bloom, Undergraduate, Washington University in St. Louis	2017 – 2020
Brenna Tuller-Ross, Masters Student, Washington University in St. Louis	2017 – 2019
Heather Lee, Undergraduate, Washington University in St. Louis	2017
Annabel Shu, Undergraduate, Washington University in St. Louis	2017
Zhen Tian, Graduate Student, Washington University in St. Louis	2016 – 2021
Heng Chen, Postdoc Associate, Washington University in St. Louis	2016 – 2019
Wilson Kuhnel, Undergraduate, Harvard University	2015 – 2016

**Professional Affiliations**

Geochemical Society  
 Meteoritical Society  
 American Geophysical Union

**Selected  
Media Coverages**

**Forbes:** [Martian Blues: Did Planet's Size Affect Its Ability To Hold Onto Water?](#)

**NPR:** [Mars Had Liquid Water On Its Surface. Here's Why Scientists Think It Vanished](#)

**TIME:** [Mars Was Always Destined to Die](#)

**Forbes:** [Doomed From The Start, Mars May Have Never Had Enough Water For Life](#)

**Newsweek:** [How Mars Lost Its Water, the Key Ingredient of Life](#)

**POPULAR SCIENCE:** [Mars may be too small to have ever been habitable](#)

**Forbes:** [What a nuclear test can teach us about the Moon](#)

**NBC:** [Moon's birth may have vaporized most of Earth, study shows](#)

**POPULAR SCIENCE:** [New evidence shows the moon formed from melted bits of Earth](#)

**The Christian Science Monitor:** [Was the birth of our moon more violent than we thought?](#)

**RT:** [Boom rescaled: 'Extremely giant impact' may be behind making of Earth's moon](#)

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