



## UNM METALS Publications

### 2024

**Atanga R, Appell LL, Thompson MN, Lauer FT, Brearley A, Campen MJ, Castillo EF, In JG.** Single cell analysis of human colonoids exposed to uranium-bearing dust. *Environ Health Perspect.* 2024. *in press* DOI 10.1289/EHP13855

**Couig MP,** Lavin R, Rogers HH, Nugent SB. The Public Health Crisis Conceptual Model: Historical Application to the World's First Nuclear Bomb Test. *Social Sciences.* 2024; 13(4):186.  
<https://doi.org/10.3390/socsci13040186>

**Miller C, Neidhart A,** Hess K, **Ali AM,** Benavidez A, Spilde M, **Peterson E, Brearley A,** Wang X, Dhanapala BD, **Cerrato JM.** Uranium accumulation in environmentally relevant microplastics and agricultural soil at acidic and circumneutral pH. *Science of The Total Environment.* 2024 May 20;926:171834. <https://doi.org/10.1016/j.scitotenv.2024.171834>

Levin R, Villanueva CM, **Beene D,** Cradock AL, Donat-Vargas C, **Lewis J,** Martinez-Morata I, Minovi D, Nigra AE, Olson ED, Schaidler LA. US drinking water quality: exposure risk profiles for seven legacy and emerging contaminants. *Journal of Exposure Science & Environmental Epidemiology.* 2024 Jan;34(1):3-22. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10907308/>

### 2023

**Hoover JH,** Coker ES, **Erdei E, Luo L, Begay D, MacKenzie D,** NBCS Study Team, **Lewis J.** Preterm Birth and Metal Mixture Exposure among Pregnant Women from the Navajo Birth Cohort Study. *Environmental Health Perspectives.* 2023 Dec 18;131(12):127014.  
<https://doi.org/10.1289/EHP10361>

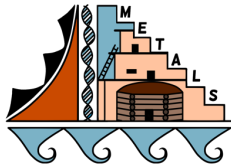
**Meza I, Hua H,** Gagnon K, **Mulchandani A, Gonzalez-Estrella J,** Burns PC, **Ali AM,** Spilde M, Peterson E, Lichtner P, **Cerrato JM.** Removal of Aqueous Uranyl and Arsenate Mixtures after Reaction with Limestone, PO<sub>4</sub><sup>3-</sup>, and Ca<sup>2+</sup>. *Environmental Science & Technology.* 2023 Nov 29.  
<https://doi.org/10.1021/acs.est.3c03809>

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Jiang M, Hu CJ, Rowe CL, Kang H, Gong X, Dagucon CP, Wang J, **Lin Y,** Sood A, Guo Y, Zhu Y. Application of artificial intelligence in quantifying lung deposition dose of black carbon in people with

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Huang Y, Gong X, Liu L, Luo L, Leng S, Lin Y. Maternal exposure to metal components of PM<sub>2.5</sub> and low birth weight in New Mexico, USA. *Environmental Science and Pollution Research*. 2023 Sep;30(43):98526-35. <https://doi.org/10.1007/s11356-023-29291-1>

**Erdei E**, **Shuey C**, **Miller C**, **Hoover J**, **Cajero M**, **Lewis J**. Metal mixture exposures and multiplexed autoantibody screening in Navajo communities exposed to uranium mine wastes. *Journal of Translational Autoimmunity*. 2023 Jan 1;6:100201. <https://doi.org/10.1016/j.jtauto.2023.100201>

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**Meza I**, **Gonzalez-Estrella J**, Burns PC, Rodriguez V, **Velasco CA**, Sigmon GE, Szymanowski JE,

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Forbes TZ, Applegate LM, **Ali AM**, Lichtner P, and **Cerrato JM**. Solubility and Thermodynamic Investigation of Meta-Autunite Group Uranyl Arsenate Solids with Monovalent Cations Na and K. *Environmental Science & Technology*. 2022 Dec 16. <https://doi.org/10.1021/acs.est.2c06648>

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**Shaikh N**, Qian J, Kim S, Phan H, **Lezama-Pacheco JS**, **Ali AM**, Cwiertny DM, Forbes TZ, Haes AJ, **Cerrato JM**. U (VI) Binding onto Electrospun Polymers Functionalized with Phosphonate Surfactants. *Journal of Environmental Chemical Engineering*. 2022 Aug 17:108448. <https://doi.org/10.1016/j.jece.2022.108448>

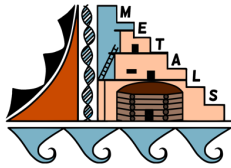
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**Cooper KL, Volk LB, Dominguez DR, Duran AD, Liu KK, Hudson LG.** Contribution of NADPH oxidase to the retention of UVR-induced DNA damage by arsenic. *Toxicology and Applied Pharmacology*. 2022 Jan 1;434:115799. <https://doi.org/10.1016/j.taap.2021.115799>

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**Hoover JH, Bolt AM, Burchiel SW, Cerrato JM, Dashner-Titus EJ, Erdei E, Estrella JG, Hayek EE, Hudson LG, Luo L, MacKenzie D., Medina S., Schilz J.R., Velasco C.A., Zychowski K., Lewis J.L.** A Transdisciplinary Approach for Studying Uranium Mobility, Exposure, and Human

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**Velasco CA, Brearley AJ, Gonzalez-Estrella J, Ali AM, Meza MI, Cabaniss SE, Thomson BM, Forbes TZ, Lezama Pacheco JS, Cerrato JM.** From Adsorption to Precipitation of U (VI): What is the Role of pH and Natural Organic Matter?. Environmental Science & Technology. 2021 Nov 19. <https://doi.org/10.1021/acs.est.1c05429>

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**Medina, S.**, **Lauer, F.T.**, **Castillo, E.F.**, **Bolt, A.M.**, **Ali, A.M.S.**, **Liu, K.J.** and **Burchiel, S.W.**, 2020. Exposures to uranium and arsenic alter intraepithelial and innate immune cells in the small intestine of male and female mice. *Toxicology and Applied Pharmacology*, p.115155.  
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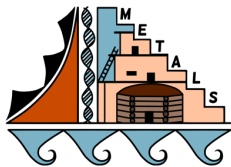
## 2019

**Velasco, C.A.**, **Artyushkova, K.**, **Ali, A.M.S.**, **Osburn, C.L.**, **Gonzalez-Estrella, J.**, **Lezama-Pacheco, J.S.**, **Cabaniss, S.E.** and **Cerrato, J.M.**, 2019. Organic functional group chemistry in mineralized deposits containing U (IV) and U (VI) from the Jackpile Mine in New Mexico. *Environmental science & technology*, 53(10), pp.5758-5767.  
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**El Hayek, E., Brearley, A.J.,** Howard, T., Hudson, P., Torres, C., Spilde, M.N., Cabaniss, S., **Ali, A.M.S. and Cerrato, J.M.**, 2019. Calcium in Carbonate Water Facilitates the Transport of U (VI) in Brassica juncea Roots and Enables Root-to-Shoot Translocation. *ACS Earth and Space Chemistry*, 3(10), pp.2190-2196.

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METALS Team members denoted in **bold text**; Trainees (Past and Present) denoted in **red Text**.



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