



Sulgiye Park

Postdoctoral Scholar, Geological Sciences

Bio

HONORS AND AWARDS

- Best Poster Award - 5th High Power Laser Workshop, High Power Laser Workshop
- Harriet Benson Award, Stanford University

STANFORD ADVISORS

- Rodney Ewing, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Geologic Analysis of the Democratic People's Republic of Korea's Uranium Resources and Mines** *SCIENCE & GLOBAL SECURITY*
Park, S., Puccioni, A., Tracy, C. L., Serbin, E., Ewing, R. C.
2020
- **Facile diamond synthesis from lower diamondoids.** *Science advances*
Park, S. n., Abate, I. I., Liu, J. n., Wang, C. n., Dahl, J. E., Carlson, R. M., Yang, L. n., Prakapenka, V. B., Greenberg, E. n., Devereaux, T. P., Jia, C. n., Ewing, R. C., Mao, et al
2020; 6 (8): eaay9405
- **Mechanical and structural properties of radiation-damaged allanite-(Ce) and the effects of thermal annealing** *PHYSICS AND CHEMISTRY OF MINERALS*
Reissner, C. E., Bismayer, U., Kern, D., Reissner, M., Park, S., Zhang, J., Ewing, R. C., Shelyug, A., Navrotsky, A., Paulmann, C., Skoda, R., Groat, L. A., Poellmann, et al
2019; 46 (10): 921–33
- **Phase transformations of Al-bearing high-entropy alloys $\text{Al}_x\text{CoCrFeNi}$ ($x=0, 0.1, 0.3, 0.75, 1.5$) at high pressure** *APPLIED PHYSICS LETTERS*
Wang, C., Tracy, C. L., Park, S., Liu, J., Ke, F., Zhang, F., Yang, T., Xia, S., Li, C., Wang, Y., Zhang, Y., Mao, W. L., Ewing, et al
2019; 114 (9)
- **Measurement of UO₂ surface oxidation using grazing-incidence x-ray diffraction: Implications for nuclear forensics** *JOURNAL OF NUCLEAR MATERIALS*
Tracy, C. L., Chen, C., Park, S., Davisson, M., Ewing, R. C.
2018; 502: 68–75
- **Review of recent experimental results on the behavior of actinide-bearing oxides and related materials in extreme environments** *PROGRESS IN NUCLEAR ENERGY*
Tracy, C. L., Lang, M., Zhang, F., Park, S., Palomares, R. I., Ewing, R. C.
2018; 104: 342–58
- **Radiation-induced disorder in compressed lanthanide zirconates** *PHYSICAL CHEMISTRY CHEMICAL PHYSICS*
Park, S., Tracy, C. L., Zhang, F., Park, C., Trautmann, C., Tkachev, S. N., Lang, M., Mao, W. L., Ewing, R. C.
2018; 20 (9): 6187–97

- **A(2)TiO(5) (A = Dy, Gd, Er, Yb) at High Pressure** *INORGANIC CHEMISTRY*
Park, S., Rittman, D. R., Tracy, C. L., Chapman, K. W., Zhang, F., Park, C., Tkachev, S. N., O'Quinn, E., Shamblin, J., Lang, M., Mao, W. L., Ewing, R. C.
2018; 57 (4): 2269–77
- **Swift-heavy ion irradiation response and annealing behavior of A(2)TiO(5) (A = Nd, Gd, and Yb)** *JOURNAL OF SOLID STATE CHEMISTRY*
Park, S., Tracy, C. L., Zhang, F., Palomares, R. I., Park, C., Trautmann, C., Lang, M., Mao, W. L., Ewing, R. C.
2018; 258: 108–16
- **High pressure synthesis of a hexagonal close-packed phase of the high-entropy alloy CrMnFeCoNi** *NATURE COMMUNICATIONS*
Tracy, C. L., Park, S., Rittman, D. R., Zinkle, S. J., Bei, H., Lang, M., Ewing, R. C., Mao, W. L.
2017; 8
- **Strain engineered pyrochlore at high pressure.** *Scientific reports*
Rittman, D. R., Turner, K. M., Park, S., Fuentes, A. F., Park, C., Ewing, R. C., Mao, W. L.
2017; 7 (1): 2236-?
- **Ion-irradiation-induced structural evolution in Ti4AlN3** *SCRIPTA MATERIALIA*
Wang, C., Yang, T., Chen, C., Park, S., Liu, S., Fang, Y., Yan, Z., Xue, J., Zhang, J., Wang, J., Ewing, R. C., Wang, Y.
2017; 133: 19-23
- **High-pressure behavior of A(2)B(2)O(7) pyrochlore (A=Eu, Dy; B=Ti, Zr)** *JOURNAL OF APPLIED PHYSICS*
Rittman, D. R., Turner, K. M., Park, S., Fuentes, A. F., Yan, J., Ewing, R. C., Mao, W. L.
2017; 121 (4)
- **Role of composition, bond covalency, and short-range order in the disordering of stannate pyrochlores by swift heavy ion irradiation** *PHYSICAL REVIEW B*
Tracy, C. L., Shamblin, J., Park, S., Zhang, F., Trautmann, C., Lang, M., Ewing, R. C.
2016; 94 (6)
- **Response of Gd2Ti2O7 and La2Ti2O7 to swift-heavy ion irradiation and annealing** *ACTA MATERIALIA*
Park, S., Lang, M., Tracy, C. L., Zhang, J., Zhang, F., Trautmann, C., Rodriguez, M. D., Kluth, P., Ewing, R. C.
2015; 93: 1-11