

## COMPRES PUBLICATIONS FOR 2014-2015 (254)

### ALS Beamline 12.2.2 (41)

#### 2014 (23)

- Abdul-Jabbar, N.M., B. Kalkan, G-Y. Huang, A.A. MacDowell, R. Gronsky, E.D. Bourret- Courchesne, and B.D. Wirth, "The role of stoichiometric vacancy periodicity in pressure- induced amorphization of the Ga<sub>2</sub>SeTe<sub>2</sub> semiconductor alloy," *Applied Physics Letters* 105, 051908 (2014). (doi:10.1063/1.4892549)
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- Kalkan, B., R.P. Dias, C.S. Yoo, S.M. Clark, and S. Sen, "Polyamorphism and Pressure- Induced Metallization at the Rigidity Percolation Threshold in Densified GeSe<sub>4</sub> Glass," *Journal of Physical Chemistry C* 118(10), 5110-5121 (2014). (doi:10.1021/jp4108602)
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- Xie, M., R. Mohammadi, C.L. Turner, R.B. Kaner, A. Kavner, and S.H. Tolbert, "Lattice stress states of superhard tungsten tetraboride from radial x-ray diffraction under nonhydrostatic compression," *Physical Review B: Condensed Matter and Materials Physics* 90, 104104 (2014). (doi:10.1103/PhysRevB.90.104104)
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Refereed Conference Proceedings (0)

**Theses (M.S., Ph.D., etc.) (1)**

Lerch, Andrew.T, "Synthesis, Structure, and Properties of Refractory Hard-Metal Borides," doctoral dissertation, University of California, Los Angeles, CA, 2014, advisor Richard B. Kaner.

Non-refereed Publications (magazine article, book review, etc.)(0)

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Refereed Journal Articles (18)

- Baumeister, Julie.L., Elisabet Hausrath, Amanda A Olsen, Oliver Tschauner, Christop Adcock, and Rodney V Metcalf, "Biogeochemical weathering of serpentinites; An examination of incipient dissolution affecting serpentine soil formation," *Applied geochemistry* 54, 74-84 (2015).  
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- Du, W., S.M. Clark, and D. Walker, "Thermo-compression of pyrope-grossular garnet solid solutions: Non-linear compositional dependence," *American Mineralogist* 100(1), 215-222 (2015). (doi:http://dx.doi.org/10.2138/am-2015-4752)
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- Marquardt, H., and L. Miyagi, "Slab stagnation in the shallow lower mantle linked to an increase in mantle viscosity," *Nature Geoscience* 8, 311-314 (2015).  
(doi:doi:10.1038/ngeo2393)
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structure of Ni<sub>3</sub>Al alloys under high pressure," *Journal of Alloys and Compounds* 619, 616-620 (January 2015).  
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measurements and first principles molecular dynamics simulations," *Journal of Chemical Physics* 143(14), 144506 (2015). (doi:10.1063/1.4932683)

Refereed Conference Proceedings (0)

**Theses (M.S., Ph.D., etc.) (0)**

Non-refereed Publications (magazine article, book review, etc.)(0)

**COMPRES/GSECARS Gas Loading Facility at the APS: Diamond Anvil Publications that acknowledge GSECARS in the APS Publication Database (82)**

**2014 (38)**

K. Burgess, V. Prakapenka, E. Hellebrand, P.V. Zinin, "Elastic characterization of platinum/rhodium alloy at high temperature by combined laser heating and laser ultrasonic techniques," *Ultrasonics* **54** (4), 963-966 (2014). DOI: 10.1016/j.ultras.2014.01.011

Ana Cernok, Tiziana Boffa Ballaran, Razvan Caracas, Nobuyoshi Miyajima, Elena Bykova, Vitali Prakapenka, Hanns-Peter Liermann, Leonid Dubrovinsky, "Pressure-induced phase transitions in coesite," *Am. Mineral.* **99** (4), 755-763 (2014). DOI: 10.2138/am.2014.4585

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- Brent Grocholski, Sang-Heon Shim, Elizabeth Cottrell, Vitali B. Prakapenka, "Crystal structure and compressibility of lead dioxide up to 140 GPa," *Am. Mineral.* **99** (1), 170-177 (2014). DOI: 10.2138/am.2014.4596
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