

# SHyNE Publications for Calendar Year 2018

## Internal User Papers (358)

- 1 Accardo, J. V. & Kalow, J. A. Reversibly tuning hydrogel stiffness through photocontrolled dynamic covalent crosslinks. *Chemical science* **9**, 5987-5993 (2018).
- 2 Ahn, S. *et al.* Pushing the limits on metal–organic frameworks as a catalyst support: NU-1000 supported tungsten catalysts for o-xylene isomerization and disproportionation. *Journal of the American Chemical Society* **140**, 8535-8543 (2018).
- 3 Aldrich, T. J. *et al.* Suppressing Defect Formation Pathways in the Direct C–H Arylation Polymerization of Photovoltaic Copolymers. *Macromolecules* **51**, 9140-9155 (2018).
- 4 Alexander, G. C., Fabini, D. H., Seshadri, R. & Kanatzidis, M. G. AuPb<sub>2</sub>I<sub>7</sub>: A Narrow Bandgap Au<sup>3+</sup> Iodide Semiconductor. *Inorganic chemistry* **57**, 804-810 (2018).
- 5 Allen, S. D., Bobbala, S., Karabin, N. B., Modak, M. & Scott, E. A. Benchmarking Bicontinuous Nanospheres against Polymersomes for in Vivo Biodistribution and Dual Intracellular Delivery of Lipophilic and Water-Soluble Payloads. *ACS applied materials & interfaces* **10**, 33857-33866 (2018).
- 6 Allen, S. D. *et al.* Polymersomes scalably fabricated via flash nanoprecipitation are non-toxic in non-human primates and associate with leukocytes in the spleen and kidney following intravenous administration. *Nano Research* **11**, 5689-5703 (2018).
- 7 An, D. *et al.* Evolution of Microstructure and Carbon Distribution During Heat Treatments of a Dual-Phase Steel: Modeling and Atom-Probe Tomography Experiments. *Metallurgical and Materials Transactions A* **50**, 436-450 (2019).
- 8 Bai, W. *et al.* Flexible Transient Optical Waveguides and Surface-Wave Biosensors Constructed from Monocrystalline Silicon. *Advanced Materials* **30**, 1801584, doi:10.1002/adma.201801584 (2018).
- 9 Baik, S.-I., Isheim, D. & Seidman, D. N. Systematic approaches for targeting an atom-probe tomography sample fabricated in a thin TEM specimen: Correlative structural, chemical and 3-D reconstruction analyses. *Ultramicroscopy* **184**, 284-292 (2018).
- 10 Baik, S.-I., Rawlings, M. J. & Dunand, D. C. Atom probe tomography study of Fe-Ni-Al-Cr-Ti ferritic steels with hierarchically-structured precipitates. *Acta Materialia* **144**, 707-715 (2018).
- 11 Baik, S.-I., Rawlings, M. J. & Dunand, D. C. Effect of hafnium micro-addition on precipitate microstructure and creep properties of a Fe-Ni-Al-Cr-Ti ferritic superalloy. *Acta Materialia* **153**, 126-135 (2018).
- 12 Baik, S.-I., Wang, S.-Y., Liaw, P. K. & Dunand, D. C. Increasing the creep resistance of Fe-Ni-Al-Cr superalloys via Ti additions by optimizing the B<sub>2</sub>/L<sub>21</sub> ratio in composite nano-precipitates. *Acta Materialia* **157**, 142-154 (2018).
- 13 Bal, V., Huang, Z., Han, K., Venkatesan, T. & Chandrasekhar, V. Strong spin-orbit coupling and magnetism in (111)(La 0.3 Sr 0.7)(Al 0.65 Ta 0.35) O<sub>3</sub>/SrTiO<sub>3</sub>. *Physical Review B* **98**, 085416 (2018).
- 14 Bao, J.-K. *et al.* Unique [Mn<sub>6</sub>Bi<sub>5</sub>]– Nanowires in KMn<sub>6</sub>Bi<sub>5</sub>: A Quasi-One-Dimensional Antiferromagnetic Metal. *Journal of the American Chemical Society* **140**, 4391-4400, doi:10.1021/jacs.8b00465 (2018).
- 15 Barry, P. *et al.* Design and performance of the antenna-coupled lumped-element kinetic inductance detector. *Journal of Low Temperature Physics* **193**, 176-183 (2018).
- 16 Bo, Z. *et al.* Synthesis and stabilization of small Pt nanoparticles on TiO<sub>2</sub> partially masked by SiO<sub>2</sub>. *Applied Catalysis A: General* **551**, 122-128 (2018).
- 17 Boamah, M. D., Isheim, D. & Geiger, F. M. Dendritic Oxide Growth in Zerovalent Iron Nanofilms Revealed by Atom Probe Tomography. *The Journal of Physical Chemistry C* **122**, 28225-28232 (2018).
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- 19 Bobbala, S., Allen, S. D. & Scott, E. A. Flash nanoprecipitation permits versatile assembly and loading of polymeric bicontinuous cubic nanospheres. *Nanoscale* **10**, 5078-5088 (2018).
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- 21 Bocchini, P. J., Sudbrack, C. K., Noebe, R. D. & Seidman, D. N. Temporal evolution of a model Co-Al-W superalloy aged at 650° C and 750° C. *Acta Materialia* **159**, 197-208 (2018).

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- 31 Chandra, K., Rugg, B. K., Ratner, M. A., Wasielewski, M. R. & Odom, T. W. Detecting and Visualizing Reaction  
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