

# SHyNE Publications for Calendar Year 2017

## Internal User Papers (279)

- 1 Alagha, S. *et al.* Electrical properties of lightly Ga-doped ZnO nanowires. *Semiconductor Science and Technology* **32**, 125010 (2017).
- 2 Aldrich, T. J. *et al.* Enhanced Fill Factor through Chalcogen Side-Chain Manipulation in Small-Molecule Photovoltaics. *ACS Energy Letters* **2**, 2415-2421 (2017).
- 3 Aldrich, T. J. *et al.* Enhancing Indacenodithiophene Acceptor Crystallinity via Substituent Manipulation Increases Organic Solar Cell Efficiency. *Chemistry of Materials* **29**, 10294-10298 (2017).
- 4 Amin, D. R. *et al.* Size control and fluorescence labeling of polydopamine melanin-mimetic nanoparticles for intracellular imaging. *Biomimetics* **2**, 17 (2017).
- 5 Antonov, S. *et al.*  $\sigma$  and  $\eta$  Phase formation in advanced polycrystalline Ni-base superalloys. *Materials Science and Engineering: A* **687**, 232-240 (2017).
- 6 Antonov, S. *et al.* The effect of Nb on grain boundary segregation of B in high refractory Ni-based superalloys. *Scripta Materialia* **138**, 35-38 (2017).
- 7 Antonov, S. *et al.* Comparison of Thermodynamic Predictions and Experimental Observations on B Additions in Powder-Processed Ni-Based Superalloys Containing Elevated Concentrations of Nb. *Metallurgical and Materials Transactions A*, 1-11 (2017).
- 8 Askar, S. *et al.* Molecular weight dependence of the intrinsic size effect on  $T_g$  in AAO template-supported polymer nanorods: A DSC study. *The Journal of Chemical Physics* **146**, 203323 (2017).
- 9 Banga, R. J. *et al.* Drug-loaded polymeric spherical nucleic acids: enhancing colloidal stability and cellular uptake of polymeric nanoparticles through DNA surface-functionalization. *Biomacromolecules* **18**, 483-489 (2017).
- 10 Banga, R. J. *et al.* Cross-linked Micellar spherical nucleic acids from Thermoresponsive templates. *Journal of the American Chemical Society* **139**, 4278-4281 (2017).
- 11 Barrick, E. J. *et al.* Effects of Heating and Cooling Rates on Phase Transformations in 10 Wt Pct Ni Steel and Their Application to Gas Tungsten Arc Welding. *Metallurgical and Materials Transactions A* **48**, 5890-5910 (2017).
- 12 Bartlett, L. *et al.* An Atom Probe Study of  $\kappa$ -carbide Precipitation in Austenitic Lightweight Steel and the Effect of Phosphorus. *Metallurgical and Materials Transactions A* **48**, 5500-5515 (2017).
- 13 Beniah, G. *et al.* Non-Isocyanate Polyurethane Thermoplastic Elastomer: Amide-Based Chain Extender Yields Enhanced Nanophase Separation and Properties in Polyhydroxyurethane. *Macromolecules* **50**, 4425-4434 (2017).
- 14 Beniah, G. *et al.* Functionalization of hydroxyl groups in segmented polyhydroxyurethane eliminates nanophase separation. *Journal of Polymer Science Part A: Polymer Chemistry* **55**, 3347-3351 (2017).
- 15 Bergeron, H. *et al.* Chemical vapor deposition of monolayer MoS<sub>2</sub> directly on ultrathin Al<sub>2</sub>O<sub>3</sub> for low-power electronics. *Applied Physics Letters* **110**, 053101 (2017).
- 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* (2017).
- 17 Bobel, A. *et al.* Equilibrium composition variation of Q-phase precipitates in aluminum alloys. *Acta Materialia* **138**, 150-160 (2017).
- 18 Bocchini, P. J. *et al.* Microstructural and creep properties of boron-and zirconium-containing cobalt-based superalloys. *Materials Science and Engineering: A* **682**, 260-269 (2017).
- 19 Bocchini, P. J. *et al.* Effect of Tungsten Concentration on Microstructures of Co-10Ni-6Al-(0, 2, 4, 6) W-6Ti (at.%) Cobalt-based Superalloys. *Materials Science and Engineering: A* (2017).
- 20 Bugaris, D. E. *et al.* Charge Density Wave in the New Polymorphs of RE<sub>2</sub>Ru<sub>3</sub>Ge<sub>5</sub> (RE = Pr, Sm, Dy). *Journal of the American Chemical Society* **139**, 4130-4143, doi:10.1021/jacs.7b00284 (2017).
- 21 Butun, S. *et al.* Quantifying Plasmon-Enhanced Light Absorption in Monolayer WS<sub>2</sub> Films. *ACS Applied Materials & Interfaces* **9**, 15044-15051 (2017).
- 22 Cabezas, M. D. *et al.* Nanopatterned Extracellular Matrices Enable Cell-Based Assays with a Mass Spectrometric Readout. *Nano letters* **17**, 1373-1377 (2017).
- 23 Cao, D. H. *et al.* Thin Films and Solar Cells Based on Semiconducting Two-Dimensional Ruddlesden-Popper (CH<sub>3</sub>(CH<sub>2</sub>)<sub>3</sub>NH<sub>3</sub>)<sub>2</sub>(CH<sub>3</sub>NH<sub>3</sub>)<sub>n-1</sub>Snn<sub>1</sub>3n+1 Perovskites. *ACS Energy Letters* **2**, 982-990, doi:10.1021/acseenergylett.7b00202 (2017).
- 24 Chae, W. H. *et al.* Substrate-induced strain and charge doping in CVD-grown monolayer MoS<sub>2</sub>. *Applied Physics Letters* **111**, 143106 (2017).
- 25 Chandra, K. *et al.* Separation of Stabilized MOPS Gold Nanostars by Density Gradient Centrifugation. *ACS Omega* **2**, 4878-4884 (2017).

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