Publications 2012 - 2017

Total number published, in press, or accepted: 301

* Joint publications between CMEDE consortium and ARL researchers

Ceramics

2017

1 An, Q. and Goddard, W. "Ductility in Crystalline Boron Subphosphide (B12P2) for Large Strain Indentation." J. Phys. Chem. C 121. 30 (2017): 16644-16649


10 Khan, A., Domnich, V., and Haber, R. "Boron carbide based ceramics: Problems and possible solutions." ACerS Bulletin 96. 6 (2017): 30-35


2016


subjected to laser shock compression."
Proceedings of the National Academy of Sciences 113. 43 (2016): 12088-12093

2015


9 Gao, Y., Rafaniello, B., Toksoy, M. F., Munhollon, T., and Haber, R. "Improvement of crystallization and particle size distribution of boric acid in the processing of a boron carbide precursor." RSC Adv. 5. 25 (2015): 19067-19073


2014

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2013


2012


Composites

2017


2 Bhaduri, A. and Graham-Brady, L. "An efficient adaptive sparse grid collocation method through

2016
6 *Guo, S., Casem, D., Hudspeth, M., Farbaniec, L., Sun, J., and Chen, W. "Transverse


2015


2014


2013


2012


Integrative

2017
1 Barnes, B. C., Leiter, K., Becker, R., Knap, J., and Brennan, J. K. "LAMMPS integrated materials engine (LIME) for efficient automation of particle-based simulations: application to equation of state generation." Modelling and Simulation in Materials Science and Engineering 25. 5 (2017): 55006-55006


2016


2015


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2 Grinfeld (a.k.a. Greenfield), M. "Thermodynamic models of phase transformations and failure waves." Wave Motion 50. 7 (2013): 1118-1126


4 Taylor, D. "Intermolecular Forces and Molecular Dynamics Simulation of 1,3,5-Triamino-2,4,6-trinitrobenzene (TATB) Using Symmetry Adapted Perturbation Theory." The Journal of Physical Chemistry A 117. 16 (2013): 3507-3520

2012
1 Gazonas, G. and Velo, A. P. "Analytical solutions for the resonance response of Goupillaud-type


Metals

2017


19 Wilkerson, J. "On the micromechanics of void dynamics at extreme rates." International Journal...
2016


10 Lloyd, J. and Becker, R. "Stress-based crystal analysis of yielding in rolled Mg AZ31B." Philosophical Magazine 96. 4 (2016): 370-386


2015

1 Aitken, Z. H., Fan, H., El-Awady, J. A., and Greer, J. "The effect of size, orientation and


2014

1 Agnew, S., Whittington, W., Oppedal, A., El, K. H., Shaeffer, M., Ramesh, K., Bhattacharyya, J., Delorme, R., and Davis, B. "Dynamic Behavior of a Rare-Earth-Containing Mg Alloy, WE43B-T5, Plate with Comparison to Conventional Alloy, AM30-F." JOM 66. 2 (2014): 277-290


Queyreau, S., Marian, J., Wirth, B. D., and Arsenlis, T. "Analytical integration of the forces induced by dislocations on a surface element." Modelling and Simulation in Materials Science and Engineering 22. 3 (2014): 35004-35004


2013


2012

Polymers

2017

2016
2015


2014


13 (2014): 2504-2517


2013


2012


Summary

*Published, in press, and accepted*

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