

The 2015 Cahn Prize Finalists

- December 2015 Structure, composition, and defect control during plasma spray deposition of ytterbium silicate coatings
Bradley T. Richards, Hengbei Zhao, Haydn N.G. Wadley
J Mater Sci (2015) 50:7939–7957
DOI 10.1007/s10853-015-9358-5 <https://rdcu.be/b0cct>
- November 2015 Inferring grain boundary structure–property relations from effective property measurements
Oliver K. Johnson, Lin Li, Michael J. Demkowicz, Christopher A. Schuh
J Mater Sci (2015) 50:6907–6919
DOI 10.1007/s10853-015-9241-4 <https://rdcu.be/b0ccw>
- October 2015 Detecting rare, abnormally large grains by x-ray diffraction
B.L. Boyce, T.A. Furnish, H.A. Padilla II, D. Van Campen, A. Mehta
J Mater Sci (2015) 50:6719–6729
DOI 10.1007/s10853-015-9226-3 <https://rdcu.be/b0cci>
- September 2015 Assessment of ultrathin yttria-stabilized zirconia foils for biomedical applications
C. Le Coadou, N. Karst, F. Emieux, O. Sicardy, A. Montani, G. Bernard-Granger, J. Chevalier, L. Gremillard, J.-P. Simonato
J Mater Sci (2015) 50:6197–6207
DOI 10.1007/s10853-015-9178-7 <https://rdcu.be/b0ccN>
- August 2015 Comparative investigation of different silane surface functionalizations of fullerene-like WS₂
Dietmar Haba, Thomas Griesser, Ulrich Müller, Andreas J. Brunner
J Mater Sci (2015) 50:5125–5135
DOI 10.1007/s10853-015-9039-4 <https://rdcu.be/b0ccQ>
- July 2015 Instrument for stable high temperature Seebeck coefficient and resistivity measurements under controlled oxygen partial pressure
Harlan J. Brown-Shaklee, Peter A. Sharma, Jon F. Ihlefeld
J Mater Sci (2015) 50:5005–5013
DOI 10.1007/s10853-015-9049-2 <https://rdcu.be/b0ccT>
- June 2015 Non-coherent Cu grain boundaries driven by continuous vacancy loading
W.S. Yu, M.J. Demkowicz
J Mater Sci (2015) 50:4047–4065
DOI 10.1007/s10853-015-8961-9 <https://rdcu.be/b0ccX>
- May 2015 First-principles-based kinetic Monte Carlo studies of diffusion of hydrogen in Ni–Al and Ni–Fe binary alloys
De Nyago Tafen
J Mater Sci (2015) 50:3361–3370
DOI 10.1007/s10853-015-8885-4 <https://rdcu.be/b0cc2>
- April 2015 Nanoscale morphologies at alloyed and irradiated metal-oxide bilayers
J.A. Aguiar, O. Anderoglu, S. Choudhury, J.K. Baldwin, Y. Wang, A. Misra, B.P. Uberuaga
J Mater Sci (2015) 50:2726–2734
DOI 10.1007/s10853-015-8824-4 <https://rdcu.be/b0cc4>
- March 2015 Topological and Euclidean metrics reveal spatially nonuniform structure in the entanglement of stochastic fiber bundles
T. Fast, A.E. Scott, H.A. Bale, B.N. Cox
J Mater Sci (2015) 50:2370–2398
DOI 10.1007/s10853-014-8766-2 <https://rdcu.be/b0cc9>
- February 2015 Phase transformation kinetics during continuous heating of a β -quenched Ti–10V–2Fe–3Al alloy
Pere Barriobero-Vila, Guillermo Requena, Fernando Warchomicka, Andreas Stark, Norbert Schell, Thomas Buslaps
J Mater Sci (2015) 50:1412–1426
DOI 10.1007/s10853-014-8701-6 <https://rdcu.be/b0cdh>
- January 2015 Morphology and oxygen vacancy investigation of strontium titanate-based photo electrochemical cells
D. Hertkorn, M. Benkler, U. Gleißner, F. Büker, C. Megnin, C. Müller, T. Hanemann, H. Reinecke
J Mater Sci (2015) 50:40–48
DOI 10.1007/s10853-014-8563-y <https://rdcu.be/b0cdk>