The 2012 Cahn Prize Finalists

December 2012 Wetting of calcium fluoride by liquid metals

S Barzilai, N Froumin, E Glickman, D Fuks, N Frage

https://rdcu.be/b0b9T

J Mater Sci 47(24) 8404–8418

November 2012 First principles calculations of oxygen vacancy-ordering effects in resistance change memory

materials incorporating binary transition metal oxides

B Magyari-Kope, SG Park, HD Lee, Y Nishi

https://rdcu.be/b0b9Y

J Mater Sci 47, 7498–7514

October 2012 Room temperature fracture processes of a near-alpha titanium alloy following elevated temperature

exposure

AL Pilchak, WJ Porter, R John

https://rdcu.be/b0b90

J Mater Sci 47(20) 7235–7253

September 2012 The effect of indentation-induced microcracks on the elastic modulus of hydroxyapatite

X Fan, ED Case, MJ Baumann

https://rdcu.be/b0b93

J Mater Sci 47(17) 6333-6345

August 2012 Phase transformations and segregation in Fe–Ni alloys and nanoalloys

M Byshkin, M Hou https://rdcu.be/b0b96

J Mater Sci 47(15) 5784-5793

July 2012 Dislocation structure at a {1210}/<1010> low-angle tilt grain boundary in LiNbO₃

A Nakamura, E Tochigi, J Nakamura, I Kishida, Y Yokogawa

https://rdcu.be/b0cac

J Mater Sci 47(13) 5086-5096

June 2012 Preparation of mesoscopic gold rings and split rings by selective wetting of the contact points

between the spheres within colloidal crystals

S Kaufmann, H Schletter, D Lehmann, F Haidu, DRT Zahn, M Hietschold and WA Goedel

https://rdcu.be/b0caf

J Mater Sci 47, 4530–4539

May 2012 Quasi chemical and defect correlation models for intermetallic compounds with B2-structure: new

applications

Olga Semenova and Regina Krachler

https://rdcu.be/b0cap

J Mater Sci 47(10) 4439-4448

April 2012 Connecting the macro and microstrain responses in technical porous ceramics. Part II:

microcracking

G Bruno, AM Efremov, CP An, BR Wheaton and DJ Hughes

https://rdcu.be/b0cat

J Mater Sci 47, 3674–3689

March 2012 Surface form memory in NiTi shape memory alloys by laser shock Indentation

X Fei, DS Grummon, C Ye, GJ Cheng and YT Cheng

https://rdcu.be/b0caw

J Mater Sci 47

February 2012 Structure of multilayer ZrO₂/SrTiO₃

WL Cheah, MW Finnis

J Mater Sci 47

January 2012 Studying grain boundary regions in polycrystalline materials using spherical nano-indentation and

orientation imaging microscopy

S Pathak, J Michler, K Wasmer, SR Kalidindi

https://rdcu.be/b0caw

J Mater Sci 47(5) 2088–2094