Graeme Murch

List of Publications by Year
in descending order

23 papers	393 citations	623188 14 h-index	839053 18 g-index
23 all docs	23 docs citations	23 times ranked	293 citing authors

#	Article	IF	Citations
1	Molecular dynamics simulation of the alloying reaction in Al-coated Ni nanoparticle. Computational Materials Science, 2010, 47, 712-720.	1.4	56
2	Mechanical and Microstructural Characterization of an AZ91â€“Activated Carbon Syntactic Foam. Materials, 2019, 12, 3.	1.3	36
3	Molecular dynamics simulation and theoretical analysis of carbon diffusion in cementite. Acta Materialia, 2009, 57, 846-853.	3.8	30
4	Reaction of a Ni-coated Al nanoparticle to formB2-NiAl: A molecular dynamics study. Philosophical Magazine Letters, 2009, 89, 815-830.	0.5	26
5	Molecular dynamics simulation of alloying in a Ti-coated Al nanoparticle. Intermetallics, 2012, 22, 193-202.	1.8	24
6	Molecular dynamics determination of the timeâ€“temperatureâ€“transformation diagram for crystallization of an undercooled liquid Ni50Al50 alloy. Acta Materialia, 2011, 59, 6412-6419.	3.8	23
7	Impact loading of functionally graded metal syntactic foams. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2022, 839, 142831.	2.6	22
8	Molecular dynamics simulation of the thermophysical properties of an undercooled liquid Ni50Al50 alloy. Computational Materials Science, 2010, 50, 465-473.	1.4	21
9	Interdiffusion and surface-sandwich ordering in initial Ni-coreâ€“Pd-shell nanoparticle. Physical Chemistry Chemical Physics, 2009, 11, 3233.	1.3	20
10	Molecular dynamics study of reaction pathways in an Al-coated Ni nanoparticle. Intermetallics, 2011, 19, 934-941.	1.8	19
11	Molecular dynamics simulation of alloying in an Al-coated Ti nanoparticle. Computational Materials Science, 2013, 79, 316-325.	1.4	19
12	Molecular dynamics study of density, surface energy and self-diffusion in a liquid Ni50Al50 alloy. Computational Materials Science, 2010, 50, 331-337.	1.4	16
13	Molecular dynamics simulation of surface segregation in a (110) B2-NiAl thin film. Physical Chemistry Chemical Physics, 2011, 13, 1214-1221.	1.3	16
14	Molecular dynamics simulation of diffusion in a (110) B2-NiAl film. Intermetallics, 2011, 19, 848-854.	1.8	16
15	Formation of a Hollow Binary Alloy Nanosphere: A Kinetic Monte Carlo Study. Journal of Nano Research, 0, 7, 11-17.	0.8	11
16	The Synthesis, Stability and Shrinkage of Hollow Nanoparticles: An Overview. Journal of Nano Research, 2009, 7, 19-26.	0.8	9
17	Theoretical Analysis and Atomistic Modelling of Diffusion and Stability of Pure Element Hollow Nanospheres and Nanotubes. Defect and Diffusion Forum, 0, 277, 21-26.	0.4	5
18	A structural model for surface-enhanced stabilization in some metallic glass formers. Philosophical Magazine Letters, 2013, 93, 50-57.	0.5	5

#	Article	IF	Citations
19	Phonon Thermal Conductivity of F.C.C. Cu by Molecular Dynamics Simulation. Defect and Diffusion Forum, 0, 336, 169-184.	0.4	5
20	Stability and Shrinkage by Diffusion in Hollow Nanotubes. Defect and Diffusion Forum, 2007, 266, 39-47.	0.4	4
21	Modelling of the Formation of Pd-Ni Alloy Nanoparticles by Interdiffusion. Defect and Diffusion Forum, 0, 277, 207-212.	0.4	4
22	Vibrational contribution to thermal transport in liquid cooper: Equilibrium molecular dynamics study. Computational Materials Science, 2015, 96, 229-236.	1.4	4
23	Atomic Mechanism of Carbon Diffusion in Cementite. Defect and Diffusion Forum, 0, 277, 101-106.	0.4	2