Michael Greenwood

List of Publications by Year
in descending order

16 papers	824 citations	686830 13 h-index	996533 15 g-index
16 all docs	16 docs citations	16 times ranked	437 citing authors

#	Article	IF	Citations
1	Free Energy Functionals for Efficient Phase Field Crystal Modeling of Structural Phase Transformations. Physical Review Letters, 2010, 105, 045702.	2.9	170
2	Phase-field-crystal methodology for modeling of structural transformations. Physical Review E, 2011, 83, 031601.	0.8	107
3	Modeling structural transformations in binary alloys with phase field crystals. Physical Review B, 2011, 84, .	1.1	94
4	MULTISCALE MODELING OF SOLIDIFICATION: PHASE-FIELD METHODS TO ADAPTIVE MESH REFINEMENT. International Journal of Modern Physics B, 2005, 19, 4525-4565.	1.0	81
5	Adaptive mesh computation of polycrystalline pattern formation using a renormalization-group reduction of the phase-field crystal model. Physical Review E, 2007, 76, 056706.	0.8	72
6	Crossover Scaling of Wavelength Selection in Directional Solidification of Binary Alloys. Physical Review Letters, 2004, 93, 246101.	2.9	62
7	Multicomponent phase-field crystal model for structural transformations in metal alloys. Physical Review B, 2013, 87, .	1.1	56
8	Quantitative 3D phase field modelling of solidification using next-generation adaptive mesh refinement. Computational Materials Science, 2018, 142, 153-171.	1.4	45
9	Phase field crystal model of solute drag. Acta Materialia, 2012, 60, 5752-5761.	3.8	30
10	Characterizing the microstructural effect of build direction during solidification of laser-powder bed fusion of Al-Si alloys in the dilute limit: A phase-field study. Acta Materialia, 2021, 214, 116983.	3.8	29
11	Competition between surface energy and elastic anisotropies in the growth of coherent solid-state dendrites. Acta Materialia, 2009, 57, 2613-2623.	3.8	26
12	Quantitative phase-field modeling of solidification in binary alloys with nonlinear phase coexistence curves. Physical Review B, 2008, 77, .	1.1	20
13	Morphology of monolayer films on quasicrystalline surfaces from the phase field crystal model. Journal of Physics Condensed Matter, 2012, 24, 135002.	0.7	19
14	Phase-field simulations of velocity selection in rapidly solidified binary alloys. Physical Review E, 2006, 74, 031602.	0.8	11
15	Phase separation and its relationship with thermoelectric properties in tin-substituted magnesium silicide synthesized from melt. Scripta Materialia, 2019, 166, 128-133.	2.6	2
16	Phase-Field Simulation of Solidification Behavior of AlSi10Mg Alloys Manufactured Through Direct Metal Laser Sintering. Minerals, Metals and Materials Series, 2020, , 299-307.	0.3	0