Michael Greenwood

List of Publications by Citations

16 papers	675 citations	12 h-index	16 g-index
16 ext. papers	759 ext. citations	4.3 avg, IF	3.79 L-index

#	Paper	IF	Citations
16	Free energy functionals for efficient phase field crystal modeling of structural phase transformations. *Physical Review Letters*, **2010**, 105, 045702	7.4	136
15	Phase-field-crystal methodology for modeling of structural transformations. *Physical Review E*, **2011**, 83, 031601	2.4	86
14	Modeling structural transformations in binary alloys with phase field crystals. *Physical Review B*, **2011**, 84,	3.3	85
13	MULTISCALE MODELING OF SOLIDIFICATION: PHASE-FIELD METHODS TO ADAPTIVE MESH REFINEMENT. *International Journal of Modern Physics B*, **2005**, 19, 4525-4565	1.1	70
12	Adaptive mesh computation of polycrystalline pattern formation using a renormalization-group reduction of the phase-field crystal model. *Physical Review E*, **2007**, 76, 056706	2.4	66
11	Crossover scaling of wavelength selection in directional solidification of binary alloys. *Physical Review Letters*, **2004**, 93, 246101	7.4	56
10	Multicomponent phase-field crystal model for structural transformations in metal alloys. *Physical Review B*, **2013**, 87,	3.3	46
9	Quantitative 3D phase field modelling of solidification using next-generation adaptive mesh refinement. *Computational Materials Science*, **2018**, 142, 153-171	3.2	27
8	Phase field crystal model of solute drag. *Acta Materialia*, **2012**, 60, 5752-5761	8.4	26
7	Competition between surface energy and elastic anisotropies in the growth of coherent solid-state dendrites. *Acta Materialia*, **2009**, 57, 2613-2623	8.4	24
6	Morphology of monolayer films on quasicrystalline surfaces from the phase field crystal model. *Journal of Physics Condensed Matter*, **2012**, 24, 135002	1.8	18
5	Quantitative phase-field modeling of solidification in binary alloys with nonlinear phase coexistence curves. *Physical Review B*, **2008**, 77,	3.3	18
4	Phase-field simulations of velocity selection in rapidly solidified binary alloys. *Physical Review E*, **2006**, 74, 031602	2.4	11
3	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	8.4	4
2	Phase separation and its relationship with thermoelectric properties in tin-substituted magnesium silicide synthesized from melt. *Scripta Materialia*, **2019**, 166, 128-133	5.6	2
1	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	