

David J Srolovitz

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

488
papers

25,655
citations

84
h-index

140
g-index

504
ext. papers

27,618
ext. citations

5.9
avg, IF

7.06
L-index

#	Paper	IF	Citations
488	A highly distorted ultraelastic chemically complex Elinvar alloy.. <i>Nature</i> , 2022 , 602, 251-257	50.4	4
487	Tracking the sliding of grain boundaries at the atomic scale.. <i>Science</i> , 2022 , 375, 1261-1265	33.3	12
486	Disconnection-Mediated Migration of Interfaces in Microstructures: II. diffuse interface simulations. <i>Acta Materialia</i> , 2021 , 227, 117463	8.4	2
485	Functional Grain Boundaries in Two-Dimensional Transition-Metal Dichalcogenides. <i>Accounts of Chemical Research</i> , 2021 , 54, 4191-4202	24.3	2
484	Chemical-Affinity Disparity and Exclusivity Drive Atomic Segregation, Short-Range Ordering, and Cluster Formation in High-Entropy Alloys. <i>Acta Materialia</i> , 2021 , 206, 116638	8.4	12
483	The Adatom Concentration Profile: A Paradigm for Understanding Two-Dimensional MoS Morphological Evolution in Chemical Vapor Deposition Growth. <i>ACS Nano</i> , 2021 , 15, 6839-6848	16.7	5
482	Equation of motion for grain boundaries in polycrystals. <i>Npj Computational Materials</i> , 2021 , 7,	10.9	2
481	Disconnection-mediated migration of interfaces in microstructures: I. continuum model. <i>Acta Materialia</i> , 2021 , 117178	8.4	5
480	Simultaneously enhancing the ultimate strength and ductility of high-entropy alloys via short-range ordering. <i>Nature Communications</i> , 2021 , 12, 4953	17.4	13
479	Specialising neural network potentials for accurate properties and application to the mechanical response of titanium. <i>Npj Computational Materials</i> , 2021 , 7,	10.9	3
478	Grain Boundary Triple Junction Dynamics: A Continuum Disconnection Model. <i>SIAM Journal on Applied Mathematics</i> , 2020 , 80, 1101-1122	1.8	5
477	Distribution of Topological Types in Grain-Growth Microstructures. <i>Physical Review Letters</i> , 2020 , 125, 015501	7.4	5
476	Grain growth stagnation in thin films due to shear-coupled grain boundary migration. <i>Scripta Materialia</i> , 2020 , 180, 83-87	5.6	5
475	The grain boundary mobility tensor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 4533-4538	11.5	17
474	Large-area epitaxial growth of curvature-stabilized ABC trilayer graphene. <i>Nature Communications</i> , 2020 , 11, 546	17.4	25
473	On the temperature dependence of grain boundary mobility. <i>Acta Materialia</i> , 2020 , 194, 412-421	8.4	12
472	Grain-boundary topological phase transitions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 33077-33083	11.5	8

471	Composition-induced type I and direct bandgap transition metal dichalcogenides alloy vertical heterojunctions. <i>Nanoscale</i> , 2020 , 12, 201-209	7.7	6
470	From ion to atom to dendrite: Formation and nanomechanical behavior of electrodeposited lithium. <i>MRS Bulletin</i> , 2020 , 45, 891-904	3.2	6
469	Strain engineering of 2D semiconductors and graphene: from strain fields to band-structure tuning and photonic applications. <i>Light: Science and Applications</i> , 2020 , 9, 190	16.7	68
468	Lattice Strain Formation through Spin-Coupled Shells of MoS ₂ on Mo ₂ C for Bifunctional Oxygen Reduction and Oxygen Evolution Reaction Electrocatalysts. <i>Advanced Materials Interfaces</i> , 2019 , 6, 1900948	4.6	28
467	Mechanochemical Effects of Adsorbates at Nanoelectromechanical Switch Contacts. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 39238-39247	9.5	2
466	Grain boundary shear coupling is not a grain boundary property. <i>Acta Materialia</i> , 2019 , 167, 241-247	8.4	21
465	Disconnection description of triple-junction motion. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019 , 116, 8756-8765	11.5	23
464	Grain growth and solid-state dewetting of Bi-Crystal Ni-Fe thin films on sapphire. <i>Acta Materialia</i> , 2019 , 168, 237-249	8.4	10
463	A Continuum Multi-Disconnection-Mode model for grain boundary migration. <i>Journal of the Mechanics and Physics of Solids</i> , 2019 , 133, 103731	5	10
462	The MoSeS dynamic omnigami paradigm for smart shape and composition programmable 2D materials. <i>Nature Communications</i> , 2019 , 10, 5210	17.4	10
461	The Coupling of Grain Growth and Twinning in FCC Metals. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019 , 580, 012026	0.4	1
460	The effect of randomness on the strength of high-entropy alloys. <i>Acta Materialia</i> , 2019 , 166, 424-434	8.4	46
459	Application of Onsager's variational principle to the dynamics of a solid toroidal island on a substrate. <i>Acta Materialia</i> , 2019 , 163, 154-160	8.4	11
458	Mechanical twinning in phosphorene. <i>Extreme Mechanics Letters</i> , 2018 , 19, 15-19	3.9	7
457	Grain-boundary kinetics: A unified approach. <i>Progress in Materials Science</i> , 2018 , 98, 386-476	42.2	154
456	Atomistic insights into the nanosecond long amorphization and crystallization cycle of nanoscale Ge ₂ Sb ₂ Te ₅ : An ab initio molecular dynamics study. <i>Physical Review Materials</i> , 2018 , 2,	3.2	12
455	Solid-state dewetting on curved substrates. <i>Physical Review Materials</i> , 2018 , 2,	3.2	5
454	Domain morphology and mechanics of the H/T? transition metal dichalcogenide monolayers. <i>Physical Review Materials</i> , 2018 , 2,	3.2	12

453	Anomalous diffusion along metal/ceramic interfaces. <i>Nature Communications</i> , 2018 , 9, 5251	17.4	33
452	Observation of Anisotropic Charge Density Wave in Layered 1T-TiSe ₂ . <i>Microscopy and Microanalysis</i> , 2018 , 24, 230-231	0.5	
451	Machine learning determination of atomic dynamics at grain boundaries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018 , 115, 10943-10947	11.5	42
450	Self-healing of low angle grain boundaries by vacancy diffusion and dislocation climb. <i>Scripta Materialia</i> , 2018 , 155, 155-159	5.6	11
449	Point defect sink efficiency of low-angle tilt grain boundaries. <i>Journal of the Mechanics and Physics of Solids</i> , 2017 , 101, 166-179	5	13
448	Dynamic Phase Engineering of Bendable Transition Metal Dichalcogenide Monolayers. <i>Nano Letters</i> , 2017 , 17, 2473-2481	11.5	29
447	MoS ₂ edges and heterophase interfaces: energy, structure and phase engineering. <i>2D Materials</i> , 2017 , 4, 025080	5.9	13
446	The grain-boundary structural unit model redux. <i>Acta Materialia</i> , 2017 , 133, 186-199	8.4	35
445	Triple junction drag effects during topological changes in the evolution of polycrystalline microstructures. <i>Acta Materialia</i> , 2017 , 128, 345-350	8.4	6
444	Folding Sheets with Ion Beams. <i>Nano Letters</i> , 2017 , 17, 249-254	11.5	16
443	Mechanisms of Contact, Adhesion, and Failure of Metallic Nanoasperities in the Presence of Adsorbates: Toward Conductive Contact Design. <i>ACS Nano</i> , 2017 , 11, 490-500	16.7	15
442	Synthesis and Physical Properties of Phase-Engineered Transition Metal Dichalcogenide Monolayer Heterostructures. <i>ACS Nano</i> , 2017 , 11, 8619-8627	16.7	34
441	Nanocrystalline copper films are never flat. <i>Science</i> , 2017 , 357, 397-400	33.3	28
440	Equation of Motion for a Grain Boundary. <i>Physical Review Letters</i> , 2017 , 119, 246101	7.4	30
439	Reconciling grain growth and shear-coupled grain boundary migration. <i>Nature Communications</i> , 2017 , 8, 1764	17.4	83
438	Stable Equilibria of Anisotropic Particles on Substrates: A Generalized Winterbottom Construction. <i>SIAM Journal on Applied Mathematics</i> , 2017 , 77, 2093-2118	1.8	15
437	Anisotropic charge density wave in layered 1T-TiSe ₂ . <i>Physical Review Materials</i> , 2017 , 1,	3.2	8
436	Twisted Bilayer Graphene: Moiré with a Twist. <i>Nano Letters</i> , 2016 , 16, 5923-7	11.5	112

435	Structure and energetics of interlayer dislocations in bilayer graphene. <i>Physical Review B</i> , 2016 , 93,	3.3	23
434	A Theoretical Examination of Diffusive Molecular Dynamics. <i>SIAM Journal on Applied Mathematics</i> , 2016 , 76, 2175-2195	1.8	8
433	Elastic interaction of hydrogen atoms on graphene: A multiscale approach from first principles to continuum elasticity. <i>Physical Review B</i> , 2016 , 94,	3.3	1
432	Solid-state dewetting and island morphologies in strongly anisotropic materials. <i>Scripta Materialia</i> , 2016 , 115, 123-127	5.6	21
431	Static and dynamic elastic properties of fractal-cut materials. <i>Extreme Mechanics Letters</i> , 2016 , 6, 103-114.9	14.9	25
430	The inverse hall-petch relation in nanocrystalline metals: A discrete dislocation dynamics analysis. <i>Journal of the Mechanics and Physics of Solids</i> , 2016 , 88, 252-266	5	58
429	Grain-boundary metastability and its statistical properties. <i>Acta Materialia</i> , 2016 , 104, 259-273	8.4	78
428	Relaxation of low-angle grain boundary structure by climb of the constituent dislocations. <i>Scripta Materialia</i> , 2016 , 114, 35-40	5.6	8
427	Statistical topology of perturbed two-dimensional lattices. <i>Journal of Statistical Mechanics: Theory and Experiment</i> , 2016 , 2016, 043103	1.9	5
426	When twins collide: Twin junctions in nanocrystalline nickel. <i>Acta Materialia</i> , 2016 , 113, 301-310	8.4	32
425	Thermally induced failure mechanism transition and its correlation with short-range order evolution in metallic glasses. <i>Extreme Mechanics Letters</i> , 2016 , 9, 215-225	3.9	20
424	Three-dimensional formulation of dislocation climb. <i>Journal of the Mechanics and Physics of Solids</i> , 2015 , 83, 319-337	5	38
423	Sharp interface model for solid-state dewetting problems with weakly anisotropic surface energies. <i>Physical Review B</i> , 2015 , 91,	3.3	24
422	The interplay between grain boundary structure and defect sink/annealing behavior. <i>IOP Conference Series: Materials Science and Engineering</i> , 2015 , 89, 012004	0.4	8
421	Topological framework for local structure analysis in condensed matter. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E5769-76	11.5	66
420	Measurement of the cleavage energy of graphite. <i>Nature Communications</i> , 2015 , 6, 7853	17.4	175
419	Surface roughness imparts tensile ductility to nanoscale metallic glasses. <i>Extreme Mechanics Letters</i> , 2015 , 5, 88-95	3.9	22
418	van der Waals bilayer energetics: Generalized stacking-fault energy of graphene, boron nitride, and graphene/boron nitride bilayers. <i>Physical Review B</i> , 2015 , 92,	3.3	74

4 ¹⁷	Geometric and topological properties of the canonical grain-growth microstructure. <i>Physical Review E</i> , 2015 , 92, 063308	2.4	39
4 ¹⁶	Electron-beam driven relaxation oscillations in ferroelectric nanodisks. <i>Applied Physics Letters</i> , 2015 , 107, 152902	3.4	7
4 ¹⁵	Friction between silicon and diamond at the nanoscale. <i>Journal Physics D: Applied Physics</i> , 2015 , 48, 255303	3.0	20
4 ¹⁴	Novel materials solutions and simulations for nanoelectromechanical switches 2015 ,		5
4 ¹³	Current-induced switching of magnetic tunnel junctions: Effects of field-like spin-transfer torque, pinned-layer magnetization orientation, and temperature. <i>Applied Physics Letters</i> , 2014 , 104, 022413	3.4	5
4 ¹²	Atomic-scale analysis of liquid-gallium embrittlement of aluminum grain boundaries. <i>Acta Materialia</i> , 2014 , 73, 312-325	8.4	75
4 ¹¹	Influence of flexoelectric coupling on domain patterns in ferroelectrics. <i>Physical Review B</i> , 2014 , 89,	3.3	48
4 ¹⁰	Mechanisms of failure in nanoscale metallic glass. <i>Nano Letters</i> , 2014 , 14, 5858-64	11.5	68
4 ⁰⁹	Polycrystal deformation in a discrete dislocation dynamics framework. <i>Acta Materialia</i> , 2014 , 75, 92-105	8.4	46
4 ⁰⁸	Atomistic, generalized Peierls-Nabarro and analytical models for (111) twist boundaries in Al, Cu and Ni for all twist angles. <i>Acta Materialia</i> , 2014 , 69, 162-174	8.4	31
4 ⁰⁷	Engineering the shape and structure of materials by fractal cut. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014 , 111, 17390-5	11.5	196
4 ⁰⁶	Planar fault energies of copper at large strain: A density functional theory study. <i>Journal of Applied Physics</i> , 2014 , 116, 103512	2.5	3
4 ⁰⁵	Effect of strain on the stacking fault energy of copper: A first-principles study. <i>Physical Review B</i> , 2013 , 88,	3.3	55
4 ⁰⁴	Manipulating ferroelectric domains in nanostructures under electron beams. <i>Physical Review Letters</i> , 2013 , 111, 165702	7.4	38
4 ⁰³	Superplastic nanocrystalline ceramics at room temperature and high strain rates. <i>Scripta Materialia</i> , 2013 , 69, 525-528	5.6	16
4 ⁰²	Anatomy of nanomaterial deformation: Grain boundary sliding, plasticity and cavitation in nanocrystalline Ni. <i>Acta Materialia</i> , 2013 , 61, 5807-5820	8.4	33
4 ⁰¹	Statistical topology of three-dimensional Poisson-Voronoi cells and cell boundary networks. <i>Physical Review E</i> , 2013 , 88, 063309	2.4	30
4 ⁰⁰	Microstructure versus flaw: mechanisms of failure and strength in nanostructures. <i>Nano Letters</i> , 2013 , 13, 5703-9	11.5	48

399	Structure and energy of (111) low-angle twist boundaries in Al, Cu and Ni. <i>Acta Materialia</i> , 2013 , 61, 1327-1337	8.4	44
398	Nanostructure and surface effects on yield in Cu nanowires. <i>Acta Materialia</i> , 2013 , 61, 1831-1842	8.4	60
397	Nanocrystallization in driven amorphous materials. <i>Acta Materialia</i> , 2013 , 61, 3242-3248	8.4	6
396	Comparison of molecular dynamics simulation methods for the study of grain boundary migration. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2013 , 21, 045017	2	42
395	In-situ transmission electron microscopy and first-principles study of Au (100) surface dislocation dynamics. <i>Surface Science</i> , 2013 , 608, 154-164	1.8	3
394	Large-scale molecular dynamics simulations of wear in diamond-like carbon at the nanoscale. <i>Applied Physics Letters</i> , 2013 , 103, 073118	3.4	55
393	Deconstructing the high-temperature deformation of phase-separating alloys. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2013 , 21, 075011	2	2
392	Self-assembly of free-standing graphene nano-ribbons. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2012 , 376, 973-977	2.3	16
391	Complete topology of cells, grains, and bubbles in three-dimensional microstructures. <i>Physical Review Letters</i> , 2012 , 109, 095505	7.4	41
390	Statistical topology of cellular networks in two and three dimensions. <i>Physical Review E</i> , 2012 , 86, 051128	8.4	19
389	Phase field approach for simulating solid-state dewetting problems. <i>Acta Materialia</i> , 2012 , 60, 5578-5598	8.4	61
388	Size-dependent deformation of nanocrystalline Pt nanopillars. <i>Nano Letters</i> , 2012 , 12, 6385-92	11.5	137
387	Nanowire failure: long = brittle and short = ductile. <i>Nano Letters</i> , 2012 , 12, 910-4	11.5	91
386	Stress-driven migration of simple low-angle mixed grain boundaries. <i>Acta Materialia</i> , 2012 , 60, 1395-1408	8.4	32
385	Domain patterns in free-standing nanoferroelectrics. <i>Acta Materialia</i> , 2012 , 60, 3632-3642	8.4	19
384	Graphene defect polarity dynamics. <i>Carbon</i> , 2012 , 50, 2870-2876	10.4	20
383	Depletion-layer-induced size effects in ferroelectric thin films: A Ginzburg-Landau model study. <i>Physical Review B</i> , 2012 , 86,	3.3	13
382	Nonlinear geometric effects in mechanical bistable morphing structures. <i>Physical Review Letters</i> , 2012 , 109, 114302	7.4	89

381	The amorphization and crystallization of Ge ₂ Sb ₂ Te ₅ : an ab initio molecular dynamics study. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1431, 14		1
380	Bistable Structures Exhibiting Snap-Through Instability: From Slap Bracelets to the Venus Flytrap 2012 ,		1
379	Engineering materials properties in codimension > 0. <i>Journal of Materials Research</i> , 2012 , 27, 619-626	2.5	1
378	Pseudoelastic deformation during nanoscale adhesive contact formation. <i>Physical Review Letters</i> , 2011 , 107, 096101	7.4	23
377	Properties on the edge: graphene edge energies, edge stresses, edge warping, and the Wulff shape of graphene flakes. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2011 , 19, 054002	2	16
376	Size effect in compression of single-crystal gold microparticles. <i>Acta Materialia</i> , 2011 , 59, 5202-5215	8.4	111
375	Loss of interface coherency around a misfitting spherical inclusion. <i>Acta Materialia</i> , 2011 , 59, 5398-5410	8.4	31
374	Deformation mechanisms, length scales and optimizing the mechanical properties of nanotwinned metals. <i>Acta Materialia</i> , 2011 , 59, 6890-6900	8.4	70
373	A more accurate three-dimensional grain growth algorithm. <i>Acta Materialia</i> , 2011 , 59, 6837-6847	8.4	60
372	Surface morphology induced localized electric field and piezoresponse enhancement in nanostructured thin films. <i>ACS Nano</i> , 2011 , 5, 1067-72	16.7	4
371	Nanoindentation size effect in single-crystal nanoparticles and thin films: A comparative experimental and simulation study. <i>Acta Materialia</i> , 2011 , 59, 2309-2321	8.4	85
370	Size and shape evolution of faceted bicrystal nanoparticles of gold on sapphire. <i>Acta Materialia</i> , 2011 , 59, 2872-2881	8.4	35
369	Tunable helical ribbons. <i>Applied Physics Letters</i> , 2011 , 98, 011906	3.4	81
368	Material Properties in Codimension > 0: graphene edge properties. <i>Materials Research Society Symposia Proceedings</i> , 2010 , 1258, 1		
367	Dislocation climb strengthening in systems with immobile obstacles: Three-dimensional level-set simulation study. <i>Physical Review B</i> , 2010 , 81,	3.3	10
366	Analysis and design principles for shear-mode piezoelectric energy harvesting with ZnO nanoribbons. <i>Smart Materials and Structures</i> , 2010 , 19, 055027	3.4	30
365	Mobility of low-angle grain boundaries in pure metals. <i>Philosophical Magazine</i> , 2010 , 90, 3107-3128	1.6	52
364	First-principles study of graphene edge properties and flake shapes. <i>Physical Review B</i> , 2010 , 81,	3.3	95

363	Dislocation cross-slip in heteroepitaxial multilayer films. <i>Acta Materialia</i> , 2010 , 58, 226-234	8.4	10
362	Spontaneous bending of piezoelectric nanoribbons: Mechanics, polarization, and space charge coupling. <i>Journal of the Mechanics and Physics of Solids</i> , 2010 , 58, 73-85	5	22
361	A more accurate two-dimensional grain growth algorithm. <i>Acta Materialia</i> , 2010 , 58, 364-372	8.4	28
360	Atomistic simulations of stress and microstructure evolution during polycrystalline Ni film growth. <i>Physical Review B</i> , 2009 , 79,	3.3	30
359	Grain boundaries exhibit the dynamics of glass-forming liquids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009 , 106, 7735-40	11.5	141
358	Surface morphology effects on polarization switching in nanoscale ferroelectrics. <i>Nanotechnology</i> , 2009 , 20, 445709	3.4	10
357	Quantitative analysis of a new model for the sintering of columnar thermal barrier coatings. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2009 , 509, 46-56	5.3	6
356	Local stress calculation in simulations of multicomponent systems. <i>Journal of Computational Physics</i> , 2009 , 228, 8467-8479	4.1	43
355	Molecular dynamics investigation of patterning via cold welding. <i>Journal of the Mechanics and Physics of Solids</i> , 2009 , 57, 776-787	5	7
354	Abnormal grain growth induced by sub-boundary-enhanced solid-state wetting: Analysis by phase-field model simulations. <i>Acta Materialia</i> , 2009 , 57, 838-845	8.4	68
353	Sintering and microstructure evolution in columnar thermal barrier coatings. <i>Acta Materialia</i> , 2009 , 57, 1035-1048	8.4	16
352	Effect of material properties on liquid metal embrittlement in the Al ₃ Ti system. <i>Acta Materialia</i> , 2009 , 57, 1546-1553	8.4	50
351	Grain boundary finite length faceting. <i>Acta Materialia</i> , 2009 , 57, 4278-4287	8.4	19
350	DislocationEwin interaction mechanisms for ultrahigh strength and ductility in nanotwinned metals. <i>Acta Materialia</i> , 2009 , 57, 4508-4518	8.4	160
349	Low-angle grain boundary migration in the presence of extrinsic dislocations. <i>Acta Materialia</i> , 2009 , 57, 5013-5022	8.4	30
348	Testing a curvature driven moving finite element grain growth model with the generalized three dimensional von Neumann relation. <i>International Journal of Materials Research</i> , 2009 , 100, 543-549	0.5	8
347	Molecular dynamics simulations of the stability of and defects in ZnO nanosheets. <i>Computational Materials Science</i> , 2008 , 44, 86-90	3.2	3
346	Effects of boundary inclination and boundary type on shear-driven grain boundary migration. <i>Philosophical Magazine</i> , 2008 , 88, 243-256	1.6	51

345	Compressive film stress in a thin, tensile heteroepitaxial film. <i>Applied Physics Letters</i> , 2008 , 93, 011903	3.4	2
344	Mechanism for material transfer in asperity contact. <i>Journal of Applied Physics</i> , 2008 , 104, 124312	2.5	26
343	First-principles study of In, Ga, and N adsorption on In _x Ga _{1-x} N (0001) and (0001̄) surfaces. <i>Physical Review B</i> , 2008 , 77,	3.3	8
342	Multiscale kinetic model for polarization switching in ferroelectric polymer thin films. <i>Physical Review B</i> , 2008 , 78,	3.3	11
341	Anisotropic coalescence behaviors of GaN islands grown by metal-organic chemical vapor deposition. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2008 , 5, 1589-1593		2
340	Solid-liquid phase diagrams for binary metallic alloys: Adjustable interatomic potentials. <i>Physical Review B</i> , 2007 , 75,	3.3	10
339	Properties and determination of the interface stiffness. <i>Acta Materialia</i> , 2007 , 55, 467-471	8.4	26
338	Atomistic simulation of the deformation of gold nanopillars. <i>Acta Materialia</i> , 2007 , 55, 2085-2099	8.4	96
337	Atomic motion during the migration of general [0 0 1] tilt grain boundaries in Ni. <i>Acta Materialia</i> , 2007 , 55, 4527-4533	8.4	37
336	Atomistic simulation of multicycle asperity contact. <i>Acta Materialia</i> , 2007 , 55, 4759-4768	8.4	30
335	Anomalous diffusion in dilute solid solutions. <i>Acta Materialia</i> , 2007 , 55, 5289-5296	8.4	3
334	A micromechanical continuum model for the tensile behavior of shape memory metal nanowires. <i>Journal of the Mechanics and Physics of Solids</i> , 2007 , 55, 1729-1761	5	24
333	The von Neumann relation generalized to coarsening of three-dimensional microstructures. <i>Nature</i> , 2007 , 446, 1053-5	50.4	213
332	Effect of temperature on single asperity contact and separation in Au. <i>Scripta Materialia</i> , 2007 , 57, 885-888	5	9
331	Onset of plasticity in gold nanopillar compression. <i>Nano Letters</i> , 2007 , 7, 101-7	11.5	71
330	Thermodynamic and kinetic properties of surface dislocations on Au(001) from atomistic simulations. <i>Physical Review B</i> , 2007 , 75,	3.3	5
329	Mechanism of Shear-Induced Alignment in Bilayer Thin Films of Spherical Particles. <i>Physical Review Letters</i> , 2007 , 98,	7.4	13
328	Molecular dynamics simulation of Ga penetration along β symmetric tilt grain boundaries in an Al bicrystal. <i>Physical Review B</i> , 2007 , 76,	3.3	27

327	Nanospot welding and contact evolution during cycling of a model microswitch. <i>Journal of Applied Physics</i> , 2007 , 101, 124303	2.5	11
326	Dislocation junctions as barriers to threading dislocation migration. <i>Applied Physics Letters</i> , 2007 , 90, 011905	3.4	5
325	First-principles simulations of Si vacancy diffusion in erbium silicide. <i>Physical Review B</i> , 2007 , 76,	3.3	1
324	Grain-boundary grooving and agglomeration of alloy thin films with a slow-diffusing species. <i>Physical Review Letters</i> , 2007 , 98, 085503	7.4	32
323	Molecular dynamics simulation of Ga penetration along grain boundaries in Al: a dislocation climb mechanism. <i>Physical Review Letters</i> , 2007 , 99, 025501	7.4	26
322	Thin film compressive stresses due to adatom insertion into grain boundaries. <i>Physical Review Letters</i> , 2007 , 99, 036102	7.4	74
321	Dislocation injection, reconstruction, and atomic transport on {001} Au terraces. <i>Physical Review Letters</i> , 2007 , 98, 036103	7.4	16
320	Mechanisms of silicon diffusion in erbium silicide. <i>Physical Review B</i> , 2007 , 75,	3.3	4
319	Size effects in ferroelectric thin films: 180° domains and polarization relaxation. <i>Physical Review B</i> , 2007 , 76,	3.3	23
318	Interplay Between Grain Boundary Grooving, Stress, and Dealloying in the Agglomeration of NiSi _{1-x} Ge _x Films. <i>Electrochemical and Solid-State Letters</i> , 2007 , 10, H53		8
317	A comparison of crystal-grain interfacial free energies using different Al potentials. <i>Journal of Non-Crystalline Solids</i> , 2007 , 353, 3565-3569	3.9	24
316	Kinetic Monte Carlo study of radiation-induced segregation in model metallic alloys. <i>Philosophical Magazine</i> , 2007 , 87, 3945-3958	1.6	10
315	Simulation of the interaction between Fe impurities and point defects in V. <i>Physical Review B</i> , 2007 , 76,	3.3	48
314	Grain boundary energy and grain growth in Al films: Comparison of experiments and simulations. <i>Scripta Materialia</i> , 2006 , 54, 1059-1063	5.6	51
313	Phase-field model for grain boundary grooving in multi-component thin films. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2006 , 14, 433-443	2	15
312	Determination of grain boundary stiffness from molecular dynamics simulation. <i>Applied Physics Letters</i> , 2006 , 88, 121927	3.4	8
311	First-principles calculation of the thermodynamics of In _x Ga _{1-x} N alloys: Effect of lattice vibrations. <i>Physical Review B</i> , 2006 , 73,	3.3	81
310	Effects of surface defects on surface stress of Cu(001) and Cu(111). <i>Physical Review B</i> , 2006 , 74,	3.3	32

309	Capillarity and electromigration effects on asperity contact evolution in microelectromechanical systems switches. <i>Journal of Applied Physics</i> , 2006 , 100, 054502	2.5	6
308	First-principles study of wurtzite InN (0001) and (0001 $\bar{1}$) surfaces. <i>Physical Review B</i> , 2006 , 74,	3.3	41
307	Characterization of atomic motion governing grain boundary migration. <i>Physical Review B</i> , 2006 , 74,	3.3	53
306	Pyramidal structural defects in erbium silicide thin films. <i>Applied Physics Letters</i> , 2006 , 88, 021908	3.4	18
305	Crystal-melt interfacial free energies in hcp metals: A molecular dynamics study of Mg. <i>Physical Review B</i> , 2006 , 73,	3.3	281
304	Dislocation climb effects on particle bypass mechanisms. <i>Philosophical Magazine</i> , 2006 , 86, 3937-3957	1.6	60
303	Film/substrate interface stability in thin films. <i>Journal of Applied Physics</i> , 2006 , 99, 043504	2.5	19
302	Stress and morphology evolution during island growth. <i>Physical Review Letters</i> , 2006 , 96, 186103	7.4	45
301	Simulation and analysis of the migration mechanism of Σ tilt grain boundaries in an fcc metal. <i>Acta Materialia</i> , 2006 , 54, 623-633	8.4	41
300	Simultaneous grain boundary migration and grain rotation. <i>Acta Materialia</i> , 2006 , 54, 1707-1719	8.4	148
299	Level set simulation of dislocation dynamics in thin films. <i>Acta Materialia</i> , 2006 , 54, 2371-2381	8.4	17
298	Adhesion effects in material transfer in mechanical contacts. <i>Acta Materialia</i> , 2006 , 54, 5305-5312	8.4	52
297	Atomistic simulation of stress evolution during island growth. <i>Journal of the Mechanics and Physics of Solids</i> , 2006 , 54, 2527-2543	5	19
296	Crystal morphology evolution in film growth: A general approach. <i>Journal of Crystal Growth</i> , 2006 , 296, 86-96	1.6	5
295	Kinetic Monte Carlo method for dislocation migration in the presence of solute. <i>Physical Review B</i> , 2005 , 71,	3.3	9
294	Shear ordering in thin films of spherical block copolymer. <i>Langmuir</i> , 2005 , 21, 11518-27	4	33
293	Effect of Fe segregation on the migration of a non-symmetric Σ tilt grain boundary in Al. <i>Journal of Materials Research</i> , 2005 , 20, 208-218	2.5	93
292	Systematic prediction of kinetically limited crystal growth morphologies. <i>Physical Review Letters</i> , 2005 , 95, 155503	7.4	98

291	Stochastic simulation of dislocation glide in tantalum and Ta-based alloys. <i>Journal of the Mechanics and Physics of Solids</i> , 2005 , 53, 1223-1247	5	23
290	Curvature driven grain boundary migration in aluminum: molecular dynamics simulations. <i>Acta Materialia</i> , 2005 , 53, 79-86	8.4	95
289	Simulation of faceted film growth in three dimensions: microstructure, morphology and texture. <i>Acta Materialia</i> , 2005 , 53, 1191-1204	8.4	78
288	Self-interstitial transport in vanadium. <i>Acta Materialia</i> , 2005 , 53, 1985-1994	8.4	18
287	A size effect in grain boundary migration: A molecular dynamics study of bicrystal thin films. <i>Acta Materialia</i> , 2005 , 53, 5273-5279	8.4	14
286	Reaction layer growth in a substrate/polycrystalline film system. <i>Acta Materialia</i> , 2005 , 53, 5189-5202	8.4	2
285	Oxygen Diffusion in Yttria-Stabilized Zirconia: A New Simulation Model. <i>Journal of the American Ceramic Society</i> , 2005 , 87, 1821-1830	3.8	125
284	Effects of Lanthanide Dopants on Oxygen Diffusion in Yttria-Stabilized Zirconia. <i>Journal of the American Ceramic Society</i> , 2005 , 88, 2143-2151	3.8	19
283	Mobility of Σ tilt grain boundaries: Inclination dependence. <i>Scripta Materialia</i> , 2005 , 52, 1193-1198	5.6	34
282	Point defect dynamics in bcc metals. <i>Physical Review B</i> , 2005 , 71,	3.3	20
281	Grain boundary self-diffusion in Ni: Effect of boundary inclination. <i>Journal of Materials Research</i> , 2005 , 20, 1146-1153	2.5	24
280	Level Set Dislocation Dynamics Method 2005 , 2307-2323		
279	Origins of Lateral Modulations in Lattice-mismatched Films 2004 , 1-11		1
278	Asperity Contact Evolution: Capillarity and Electromigration Effects 2004 , 33		
277	Apparent hysteresis in a driven system with self-organized drag. <i>Physical Review Letters</i> , 2004 , 92, 160603	3.4	24
276	Electrostatic field-induced surface instability. <i>Applied Physics Letters</i> , 2004 , 85, 4917-4919	3.4	25
275	Surface stress-driven instabilities of a free film. <i>Applied Physics Letters</i> , 2004 , 85, 2487-2489	3.4	10
274	Development of an interatomic potential for phosphorus impurities in α -iron. <i>Journal of Physics Condensed Matter</i> , 2004 , 16, S2629-S2642	1.8	442

273	Grain shape, grain boundary mobility and the Herring relation. <i>Acta Materialia</i> , 2004 , 52, 285-292	8.4	32
272	Level set simulations of dislocation-particle bypass mechanisms. <i>Acta Materialia</i> , 2004 , 52, 1745-1760	8.4	73
271	Computer simulation of the elastically driven migration of a flat grain boundary. <i>Acta Materialia</i> , 2004 , 52, 2569-2576	8.4	100
270	Faceted dislocation surface pits. <i>Acta Materialia</i> , 2004 , 52, 3365-3374	8.4	13
269	Stress distributions in growing polycrystalline oxide films. <i>Acta Materialia</i> , 2004 , 52, 3761-3780	8.4	26
268	Molecular dynamics simulation of single asperity contact. <i>Acta Materialia</i> , 2004 , 52, 3983-3996	8.4	57
267	Scaling laws for opening partially adhered contacts in MEMS. <i>Journal of Microelectromechanical Systems</i> , 2004 , 13, 377-385	2.5	18
266	A General Solution for Two-Dimensional Stress Distributions in Thin Films. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2004 , 71, 691-696	2.7	4
265	Crystal-melt interfacial free energies in metals: fcc versus bcc. <i>Physical Review B</i> , 2004 , 69,	3.3	83
264	Strongly non-Arrhenius self-interstitial diffusion in vanadium. <i>Physical Review B</i> , 2004 , 70,	3.3	21
263	Thermal conductivity of crystalline quartz from classical simulations. <i>Physical Review B</i> , 2004 , 70,	3.3	57
262	Molecular Dynamics Simulation of Single Asperity Contact 2004 , 29		
261	Finite element-based model for crack propagation in polycrystalline materials. <i>Computational and Applied Mathematics</i> , 2004 , 23,	2.4	3
260	Morphological Stability during Electrodeposition. <i>Journal of the Electrochemical Society</i> , 2003 , 150, C6993-9	3.9	14
259	Development of new interatomic potentials appropriate for crystalline and liquid iron. <i>Philosophical Magazine</i> , 2003 , 83, 3977-3994	1.6	941
258	Brittle fracture in polycrystalline microstructures with the extended finite element method. <i>International Journal for Numerical Methods in Engineering</i> , 2003 , 56, 2015-2037	2.4	111
257	Discrete dislocation simulations of the development of a continuum plastic zone ahead of a stationary Mode III crack. <i>Journal of the Mechanics and Physics of Solids</i> , 2003 , 51, 695-713	5	2
256	Solute effects on dislocation glide in metals. <i>Acta Materialia</i> , 2003 , 51, 1199-1210	8.4	19

255	Stress distributions in growing oxide films. <i>Acta Materialia</i> , 2003 , 51, 2171-2190	8.4	50
254	A level set method for dislocation dynamics. <i>Acta Materialia</i> , 2003 , 51, 5499-5518	8.4	82
253	Interatomic potential for vanadium suitable for radiation damage simulations. <i>Journal of Applied Physics</i> , 2003 , 93, 3328-3335	2.5	61
252	Morphological Stability during Electrodeposition. <i>Journal of the Electrochemical Society</i> , 2003 , 150, C7083-9	3.9	13
251	Mechanism map for a misfitting film on a viscous substrate. <i>Applied Physics Letters</i> , 2003 , 82, 2233-2235	3.4	1
250	Molecular dynamics study of the threshold displacement energy in vanadium. <i>Physical Review B</i> , 2003 , 67,	3.3	24
249	Origins of growth stresses in amorphous semiconductor thin films. <i>Physical Review Letters</i> , 2003 , 91, 096101	7.4	46
248	Molecular dynamics simulation of triple junction migration. <i>Acta Materialia</i> , 2002 , 50, 1405-1420	8.4	89
247	Microstructure and mechanical properties of a [NbTi] based alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2002 , 328, 122-132	5.3	10
246	Buckling and post-buckling kinetics of compressed thin films on viscous substrates. <i>Acta Materialia</i> , 2002 , 50, 2547-2557	8.4	36
245	Determination of alloy interatomic potentials from liquid-state diffraction data. <i>Physical Review B</i> , 2002 , 66,	3.3	31
244	Physical Origins of Intrinsic Stresses in Volmer-Weber Thin Films. <i>MRS Bulletin</i> , 2002 , 27, 19-25	3.2	249
243	Domain Wall Migration in 3-d in the Presence of Diffusing Impurities. <i>Journal of Materials Science</i> , 2002 , 10, 91-98		4
242	Boundary Mobility and Energy Anisotropy Effects on Microstructural Evolution During Grain Growth. <i>Journal of Materials Science</i> , 2002 , 10, 201-216		110
241	Co-Segregation Effects on Boundary Migration. <i>Journal of Materials Science</i> , 2002 , 10, 191-199		7
240	Domain Wall Migration in 3-d in the Presence of Diffusing Impurities. <i>Journal of Materials Science</i> , 2002 , 10, 243-250		
239	Equilibrium structure of multilayer van der Waals films and nanotubes. <i>Physical Review B</i> , 2002 , 65,	3.3	9
238	Effects of ion beams on the early stages of MgO growth. <i>Journal of Applied Physics</i> , 2002 , 91, 10169	2.5	19

237	Impurity effects on grain boundary migration. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2002 , 10, R79-R109	2	63
236	Interface Mobility Under Different Driving Forces. <i>Journal of Materials Research</i> , 2002 , 17, 234-245	2.5	12
235	First passage time Markov chain analysis of rare events for kinetic Monte Carlo: double kink nucleation during dislocation glide. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2002 , 10, 581-596	2	22
234	Shadowing effects on the microstructure of obliquely deposited films. <i>Journal of Applied Physics</i> , 2002 , 91, 1963-1972	2.5	63
233	Morphological instability and additive-induced stabilization in electrodeposition. <i>Physical Review Letters</i> , 2002 , 89, 215509	7.4	12
232	Self-interstitials in V and Mo. <i>Physical Review B</i> , 2002 , 66,	3.3	94
231	Kinetic Monte Carlo Simulation of Chemical Vapor Deposition. <i>Annual Review of Materials Research</i> , 2002 , 32, 297-319	12.8	96
230	A regular solution model for impurity drag on a migrating grain boundary. <i>Acta Materialia</i> , 2001 , 49, 5895-5917	8.7	42
229	Do stresses modify wetting angles?. <i>Acta Materialia</i> , 2001 , 49, 1005-1007	8.4	22
228	Kink model for extended defect migration in the presence of diffusing impurities: theory and simulation. <i>Acta Materialia</i> , 2001 , 49, 2843-2852	8.4	13
227	Combined out-of-plane and in-plane texture control in thin films using ion beam assisted deposition. <i>Journal of Materials Research</i> , 2001 , 16, 210-216	2.5	25
226	Grain Boundary Wetting: Diffusion or Non-Diffusion Mechanism. <i>Defect and Diffusion Forum</i> , 2001 , 194-199, 1273-1296	0.7	5
225	Grain-boundary migration in the presence of diffusing impurities: Simulations and analytical models. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 2001 , 81, 2243-2269		24
224	Modifying the microstructure and morphology of film surface layers by manipulating chemical vapor deposition reactor conditions. <i>Journal of Applied Physics</i> , 2001 , 89, 4857-4865	2.5	5
223	Atomic-scale three-dimensional kinetic Monte Carlo simulation of organometallic vapor-phase epitaxy of ordered films. <i>Physical Review B</i> , 2001 , 63,	3.3	10
222	Kinetics of buckling of a compressed film on a viscous substrate. <i>Applied Physics Letters</i> , 2001 , 78, 2482-2484	3.4	92
221	Scaling of dislocation cell structures: diffusion in orientation space. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2001 , 457, 1807-1819	2.4	15
220	Grain boundary migration: misorientation dependence. <i>Current Opinion in Solid State and Materials Science</i> , 2001 , 5, 9-14	12	61

219	Sputtering and in-plane texture control during the deposition of MgO. <i>Journal of Applied Physics</i> , 2001 , 89, 4105-4112	2.5	35
218	Dislocation motion in the presence of diffusing solutes: a computer simulation study. <i>Acta Materialia</i> , 2000 , 48, 2163-2175	8.4	58
217	Kink model for extended defect migration: theory and simulations. <i>Acta Materialia</i> , 2000 , 48, 3711-3717	8.4	11
216	Morphology evolution during the growth of strained-layer superlattices. <i>Physical Review B</i> , 2000 , 62, 8397-8409	3.3	39
215	Diamond CVD Growth Mechanisms and Reaction Rates From First-Principles. <i>Materials Research Society Symposia Proceedings</i> , 2000 , 616, 123		1
214	Dynamically stable growth of strained-layer superlattices. <i>Applied Physics Letters</i> , 2000 , 77, 304-306	3.4	26
213	Surface stress model for intrinsic stresses in thin films. <i>Journal of Materials Research</i> , 2000 , 15, 2468-2474	4.5	187
212	Point defect incorporation during diamond chemical vapor deposition. <i>Journal of Materials Research</i> , 1999 , 14, 3439-3446	2.5	10
211	Mechanism of texture development in ion-beam-assisted deposition. <i>Applied Physics Letters</i> , 1999 , 75, 584-586	3.4	53
210	Etching effects during the chemical vapor deposition of (100) diamond. <i>Journal of Chemical Physics</i> , 1999 , 111, 4291-4299	3.9	64
209	Defect model of twinning in ferroelectrics. <i>Acta Materialia</i> , 1999 , 47, 1325-1336	8.4	3
208	Simulation of faceted film growth in two-dimensions: microstructure, morphology and texture. <i>Acta Materialia</i> , 1999 , 47, 2269-2281	8.4	89
207	Impurity effects on adhesion at an interface between NiAl and Mo. <i>Acta Materialia</i> , 1999 , 47, 3281-3289	8.4	26
206	Misorientation dependence of intrinsic grain boundary mobility: simulation and experiment. <i>Acta Materialia</i> , 1999 , 47, 3901-3914	8.4	120
205	Triple Junction Mobility: A Molecular Dynamics Study. <i>Journal of Materials Science</i> , 1999 , 7, 307-319		30
204	Molecular dynamics study of isobaric and isochoric glass transitions in a model amorphous polymer. <i>Journal of Chemical Physics</i> , 1999 , 110, 7058-7069	3.9	33
203	Atomic-scale simulations of chemical vapor deposition on flat and vicinal diamond substrates. <i>Journal of Crystal Growth</i> , 1998 , 194, 353-368	1.6	42
202	Atomistic Simulation of Curvature Driven Grain Boundary Migration. <i>Journal of Materials Science</i> , 1998 , 6, 41-58		80

201	Vacancy Generation During Grain Boundary Migration. <i>Journal of Materials Science</i> , 1998 , 6, 289-300		20
200	Nonuniform and directional grain growth caused by grain boundary mobility variations. <i>Acta Materialia</i> , 1998 , 46, 953-964	8.4	34
199	Shape of hollow dislocation cores: anisotropic surface energy and elastic effects. <i>Scripta Materialia</i> , 1998 , 39, 379-387	5.6	13
198	Elastic analysis of finite stiffness bimaterial interfaces: application to dislocation-interface interactions. <i>Acta Materialia</i> , 1998 , 46, 3063-3075	8.4	29
197	Stress relaxation and misfit dislocation nucleation in the growth of misfitting films: A molecular dynamics simulation study. <i>Journal of Applied Physics</i> , 1998 , 83, 217-227	2.5	105
196	Misfit effects in adhesion calculations. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1998 , 6, 153-164	2	40
195	Texture development mechanisms in ion beam assisted deposition. <i>Journal of Applied Physics</i> , 1998 , 84, 5261-5269	2.5	90
194	Surface Chemistry of CVD Diamond: Linking the Nanoscale and Mesoscale Modelling Hierarchies. <i>Materials Research Society Symposia Proceedings</i> , 1998 , 538, 275		
193	Multilayer film stability. <i>Journal of Applied Physics</i> , 1997 , 82, 4852-4859	2.5	30
192	Adatom-step interactions: Atomistic simulations and elastic models. <i>Physical Review B</i> , 1997 , 55, 4737-4744	3.5	12
191	A kinetic Monte Carlo method for the atomic-scale simulation of chemical vapor deposition: Application to diamond. <i>Journal of Applied Physics</i> , 1997 , 82, 6293-6300	2.5	117
190	Morphologies of diamond films from atomic-scale simulations of chemical vapor deposition. <i>Diamond and Related Materials</i> , 1997 , 6, 1198-1206	3.5	39
189	Extended ensemble molecular dynamics method for constant strain rate uniaxial deformation of polymer systems. <i>Journal of Chemical Physics</i> , 1997 , 107, 4396-4407	3.9	48
188	Anisotropic elastic analysis and atomistic simulation of adatom-adatom interactions on solid surfaces. <i>Journal of the Mechanics and Physics of Solids</i> , 1997 , 45, 1861-1873	5	12
187	The integrated multiscale modeling of diamond chemical vapor deposition. <i>Jom</i> , 1997 , 49, 42-47	2.1	17
186	Molecular view of diamond CVD growth. <i>Journal of Electronic Materials</i> , 1997 , 26, 960-965	1.9	4
185	Finite size effects on the thermodynamics of Cu ₂ Ni alloys: {100} and {110} thin films. <i>Acta Materialia</i> , 1997 , 45, 1715-1724	8.4	6
184	MICROSTRUCTURAL STABILITY OF STRESSED LAMELLAR AND FIBER COMPOSITES. <i>Acta Materialia</i> , 1997 , 45, 2715-2733	8.4	41

183	Dynamic simulation of dislocation microstructures in Mode III cracking. <i>Acta Materialia</i> , 1997 , 45, 3745-3863	3.3	25
182	Void formation during film growth: A molecular dynamics simulation study. <i>Journal of Applied Physics</i> , 1996 , 79, 1448-1457	2.5	127
181	A two-dimensional molecular dynamics simulation of thin film growth by oblique deposition. <i>Journal of Applied Physics</i> , 1996 , 80, 5682-5690	2.5	98
180	Elastic field of a surface step: Atomistic simulations and anisotropic elastic theory. <i>Physical Review B</i> , 1996 , 53, 11120-11127	3.3	49
179	Microstructure Control for Thin Film Metallization. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 441, 311		3
178	3-D Atomistic Kinetic Monte Carlo Simulations of Point Defect Incorporation During CVD Diamond Film Growth. <i>Materials Research Society Symposia Proceedings</i> , 1996 , 441, 509		2
177	Effect of reinforcement morphology on matrix microcracking. <i>Acta Materialia</i> , 1996 , 44, 915-925	8.4	5
176	Surface segregation in thin films. <i>Acta Materialia</i> , 1996 , 44, 2067-2072	8.4	24
175	Determination of vacancy and atomic diffusivities in solid solution alloys. <i>Acta Materialia</i> , 1996 , 44, 2737-2749	8.4	15
174	Twinning in thin films II Elastic analysis. <i>Acta Materialia</i> , 1996 , 44, 4085-4096	8.4	44
173	Twinning in thin films II. Equilibrium microstructures. <i>Acta Materialia</i> , 1996 , 44, 4097-4113	8.4	35
172	An atomistic view of adhesion. <i>Journal of Computer-Aided Materials Design</i> , 1996 , 3, 169-172		2
171	First-principles study of the α -Al ₂ O ₃ (0001)/Cu(111) interface. <i>Journal of Materials Science</i> , 1996 , 3, 289		39
170	Interface Diffusion under an Electric Field. Interface Evolution. <i>Materials Science Forum</i> , 1996 , 207-209, 109-112	0.4	5
169	Adhesion in NiAl-Cr from first principles. <i>Physical Review B</i> , 1996 , 53, 13883-13890	3.3	56
168	Morphological stability of a heterophase interface under electromigration conditions. <i>Journal of Applied Physics</i> , 1996 , 79, 6834-6839	2.5	16
167	The mechanism of texture formation during film growth: The roles of preferential sputtering and shadowing. <i>Applied Physics Letters</i> , 1996 , 69, 3007-3009	3.4	50
166	Mesoscopic Simulations of Recrystallization 1996 , 373-389		1

165	Simulation of Segregation to Free Surfaces in Cubic Oxides. <i>Journal of the American Ceramic Society</i> , 1995 , 78, 3195-3200	3.8	11
164	Design of multiscalar metallic multilayer composites for high strength, high toughness, and low CTE mismatch. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 1995 , 26, 1805-1813	2.3	23
163	High-Rate, Gas-Phase Growth of MoS ₂ Nested Inorganic Fullerenes and Nanotubes. <i>Science</i> , 1995 , 267, 222-5	33.3	1045
162	The Thermodynamics and Kinetics of film agglomeration. <i>Jom</i> , 1995 , 47, 31-36	2.1	136
161	Smith, Hong, and Srolovitz reply. <i>Physical Review Letters</i> , 1995 , 74, 3084	7.4	1
160	Atomistic Monte Carlo Simulations of Surface Segregation in (FexMni-x)O and (NixCoi-x)O. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 408, 401		
159	Interatomic potentials for elastically isotropic crystals. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1995 , 3, 643-653	2	
158	Simulation of dynamic fracture of an impact-loaded brittle solid: microcracked and polycrystalline solids. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1995 , 3, 665-688	2	5
157	Thermoelastic analysis of matrix crack growth in particulate composites. <i>Acta Metallurgica Et Materialia</i> , 1995 , 43, 1669-1681		4
156	Theory of metal/ceramic adhesion. <i>Acta Metallurgica Et Materialia</i> , 1995 , 43, 2721-2730		115
155	Segregation to an edge dislocation in Cu _{0.1} Ni _{0.9} . <i>Acta Metallurgica Et Materialia</i> , 1995 , 43, 3621-3632		12
154	Computer simulation of grain growth with mobile particles. <i>Scripta Metallurgica Et Materialia</i> , 1995 , 32, 1541-1547		18
153	Evaluation of the accuracy of the free-energy-minimization method. <i>Physical Review B</i> , 1995 , 52, 9229-9241	3.5	33
152	Morphology of nested fullerenes. <i>Physical Review Letters</i> , 1995 , 74, 1779-1782	7.4	109
151	Microstructural Stability of Stressed Lamellar Eutectics. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 398, 445		
150	Atomistic Simulation and Elastic Theory of Surface Steps. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 399, 505		
149	Thermodynamics of Hole and Hillock Growth in Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 403, 3		2
148	Growth and Texture of Polycrystalline Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 403, 39		3

147	Dynamic Simulation of Crack Propagation with Dislocation Emission and Migration. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 408, 199		
146	Dynamic Simulation of Crack Propagation with Dislocation Emission and Migration. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 409, 115		
145	Adhesion in NiAl-Cr from First Principles. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 409, 177		
144	Void and Dislocation Microstructure Development in Heteroepitaxial Film Growth. <i>Materials Research Society Symposia Proceedings</i> , 1995 , 399, 371		
143	Simulation of dynamic fracture of an impact-loaded brittle solid. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1994 , 2, 1153-1170	2	2
142	Metal / ceramic adhesion: a first principles study of MgO/Al and MgO/Ag. <i>Journal of Adhesion Science and Technology</i> , 1994 , 8, 837-851	2	45
141	Metal-ceramic adhesion and the Harris functional. <i>Physical Review Letters</i> , 1994 , 72, 4021-4024	7.4	135
140	Adhesion at a heterophase interface: First-principles study of Mo(001)/MoSi ₂ (001). <i>Journal of Materials Science</i> , 1994 , 1, 223		1
139	The effect of surface relaxation and atomic vibration on the equilibrium shape of gold and copper crystallites. <i>Journal of Computer-Aided Materials Design</i> , 1994 , 1, 187-197		2
138	Surface morphology evolution in stressed solids: Surface diffusion controlled crack initiation. <i>Journal of the Mechanics and Physics of Solids</i> , 1994 , 42, 1551-1574	5	69
137	Simulation of Grain Growth During Directional Annealing. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 362, 271		4
136	Microstructural Mechanics Model of Anisotropic-Thermal-Expansion-Induced Microcracking. <i>Journal of the American Ceramic Society</i> , 1994 , 77, 1123-1138	3.8	38
135	Statistical mechanical-atomistic determination of vacancy formation free energies in Cu-Ni alloys. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1994 , 70, 519-529		7
134	Elastic step interactions on vicinal surfaces of fcc metals. <i>Surface Science</i> , 1994 , 317, 221-234	1.8	47
133	Elastic equilibrium of curved thin films. <i>Physical Review E</i> , 1994 , 49, 5260-5270	2.4	23
132	Polycrystalline surface properties from spherical crystallites: Ag, Au, Cu and Pt. <i>Surface Science</i> , 1994 , 306, 367-380	1.8	21
131	Thermal Misfit and Thermal Fatigue Induced Damage in Brittle Composites. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 350, 267		
130	Simulation of Segregation to Interfaces in Metal-Oxides. <i>Materials Research Society Symposia Proceedings</i> , 1994 , 357, 435		1

- 129 Shape of hollow dislocation cores. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1994**, 69, 341-347 4
- 128 Effects of Impurities on Bonding: Application to the Mo/MoSi₂ Interface **1994**, 281-290
- 127 Defect interactions on solid surfaces. *Surface Science*, **1993**, 284, 211-221 1.8 75
- 126 Order-disorder transitions at and segregation to (001) Ni-Pt surfaces. *Surface Science*, **1993**, 286, 104-115.8 21
- 125 A modified-local-harmonic model for solids. *Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties*, **1993**, 67, 1081-1094 17
- 124 Microstructural evolution in two-dimensional two-phase polycrystals. *Acta Metallurgica Et Materialia*, **1993**, 41, 1119-1136 65
- 123 Segregation to and structure of [001] twist grain boundaries in Cu-Ni alloys. *Acta Metallurgica Et Materialia*, **1993**, 41, 2533-2546 19
- 122 Efficient determination of thermodynamic properties from a single simulation. *Journal of Chemical Physics*, **1993**, 99, 7993-7997 3.9 5
- 121 Thermodynamic properties of metastable Ag-Cu alloys. *Journal of Applied Physics*, **1993**, 74, 3144-3149 2.5 99
- 120 Impurity effects on adhesion: Nb, C, O, B, and S at a Mo/MoSi₂ interface. *Physical Review B*, **1993**, 47, 13615-13625 3.3 42
- 119 Impurity effects on adhesion. *Physical Review Letters*, **1993**, 70, 615-618 7.4 27
- 118 Monte Carlo simulation of phase separation during thin-film codeposition. *Journal of Applied Physics*, **1993**, 74, 1707-1715 2.5 47
- 117 Finite temperature vacancy formation thermodynamics: local harmonic and quasiharmonic studies. *Modelling and Simulation in Materials Science and Engineering*, **1993**, 1, 539-551 2 35
- 116 First principles study of interfacial adhesion: The Mo/MoSi₂ Interface With and Without Impurities. *Materials Research Society Symposia Proceedings*, **1993**, 314, 3
- 115 Interfacial segregation in Ag-Au, Au-Pd, and Cu-Ni alloys: I. (100) surfaces. *Journal of Materials Science*, **1993**, 1, 7 4
- 114 Interfacial segregation in Ag-Au, Au-Pd, and Cu-Ni alloys: II. [001] Σ twist grain boundaries. *Journal of Materials Science*, **1993**, 1, 31 4
- 113 Cracklike surface instabilities in stressed solids. *Physical Review Letters*, **1993**, 71, 1593-1596 7.4 225
- 112 Finite-temperature properties of perfect crystals and defects from zero-temperature energy minimization. *Journal of Physics Condensed Matter*, **1992**, 4, 4923-4934 1.8 10

111	Phase separation during co-deposition of Al on thin films. <i>Journal of Materials Research</i> , 1992 , 7, 653-666	2.5	40
110	(100) surface segregation in Cu-Ni alloys. <i>Physical Review B</i> , 1992 , 45, 12028-12042	3.3	31
109	Determining ab initio interfacial energetics. <i>Physical Review B</i> , 1992 , 45, 8775-8778	3.3	30
108	Developing potentials for atomistic simulations. <i>Modelling and Simulation in Materials Science and Engineering</i> , 1992 , 1, 101-109	2	13
107	Segregation to Σ [001] twist grain boundaries in ni-cu alloys. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1992 , 65, 625-655		20
106	Finite-Temperature Properties From a Single Zero-Temperature Energy Minimization. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 278, 369		
105	Segregation to and Phase Transition at Σ (310)/[001] Tilt Grain Boundaries in Ni ₃ Al _{1+x} Alloys. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 288, 189		
104	Methods for Determining Vacancy Formation Thermodynamic. <i>Materials Research Society Symposia Proceedings</i> , 1992 , 291, 455		
103	Microstructural simulation of dynamic recrystallization. <i>Acta Metallurgica Et Materialia</i> , 1992 , 40, 43-55		110
102	Phase separation during film growth. <i>Journal of Applied Physics</i> , 1992 , 72, 442-446	2.5	58
101	Computer simulation of recrystallization. Influence of a dispersion of fine particles. <i>Acta Metallurgica Et Materialia</i> , 1992 , 40, 3475-3495		68
100	Mechanical behavior and interface design of MoSi ₂ -based alloys and composites. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1992 , 155, 147-158	5.3	86
99	Segregation effects on intergranular fracture. <i>Metallurgical and Materials Transactions A - Physical Metallurgy and Materials Science</i> , 1992 , 23, 3105-3113		9
98	Modeling of transformation toughening in brittle materials. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 1992 , 155, 267-274	5.3	4
97	Coarsening in Two-Dimensional Soap Froths and the Large-Q Potts Model. <i>Materials Research Society Symposia Proceedings</i> , 1991 , 237, 101		1
96	Transition from lateral to transverse phase separation during film co-deposition. <i>Applied Physics Letters</i> , 1991 , 59, 2535-2537	3.4	14
95	The role of surface tension in the growth of strained quantum wire arrays. <i>Journal of Applied Physics</i> , 1991 , 69, 717-721	2.5	1
94	Thermodynamic and structural properties of [001] twist boundaries in gold. <i>Journal of Materials Research</i> , 1991 , 6, 999-1011	2.5	35

93	A new method for the simulation of alloys: Application to interfacial segregation. <i>Acta Metallurgica Et Materialia</i> , 1991 , 39, 3071-3082		50
92	Elastic analysis of the energy and relaxation of stepped surfaces. <i>Surface Science</i> , 1991 , 255, 111-119	1.8	37
91	The effects of segregation on grain boundary cohesive energies in Ni ₃ Al _{1+x} . <i>Scripta Metallurgica Et Materialia</i> , 1991 , 25, 2497-2502		12
90	Thermodynamics of solid and liquid embedded-atom-method metals: A variational study. <i>Journal of Chemical Physics</i> , 1991 , 94, 5090-5097	3.9	41
89	Effects of lattice anisotropy and temperature on domain growth in the two-dimensional Potts model. <i>Physical Review A</i> , 1991 , 43, 2662-2668	2.6	158
88	Al-Ge Phase Separation During Vapor Deposition. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 187, 33		
87	Phase Separation During Film Deposition. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 202, 143		
86	The Free Energy Simulation Approach to Grain Boundary Segregation In Cu-Ni. <i>Materials Research Society Symposia Proceedings</i> , 1990 , 209, 219		
85	Computer Simulation of Final-Stage Sintering: I, Model Kinetics, and Microstructure. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 2857-2864	3.8	102
84	Computer Simulation of Final-Stage Sintering: II, Influence of Initial Pore Size. <i>Journal of the American Ceramic Society</i> , 1990 , 73, 2865-2872	3.8	54
83	Crosshatched surface morphology in strained III-V semiconductor films. <i>Journal of Applied Physics</i> , 1990 , 67, 4093-4098	2.5	109
82	Finite temperature structure and thermodynamics of the Au Σ (001) twist boundary. <i>Journal of Materials Research</i> , 1990 , 5, 2663-2676	2.5	35
81	Abnormal grain growth in three dimensions. <i>Scripta Metallurgica Et Materialia</i> , 1990 , 24, 661-665		59
80	Effects of particle size on inhibited grain growth. <i>Scripta Metallurgica Et Materialia</i> , 1990 , 24, 101-106		77
79	A simulation of void linking during ductile microvoid fracture. <i>Acta Metallurgica Et Materialia</i> , 1990 , 38, 1013-1022		33
78	Influence of anisotropic vibrational motion on diffraction from grain boundaries. <i>Scripta Metallurgica Et Materialia</i> , 1990 , 24, 251-256		4
77	Brittle fracture in materials with random defects. <i>Physical Review B</i> , 1989 , 39, 9273-9281	3.3	77
76	The dynamics of free, straight dislocation pairs. I. Screw dislocations. <i>Journal of Applied Physics</i> , 1989 , 65, 4198-4203	2.5	4

75	The dynamics of free, straight dislocation pairs. II. Edge dislocations. <i>Journal of Applied Physics</i> , 1989 , 65, 4204-4211	2.5	5
74	Oscillatory relaxations in (111) planar defects in Ni ₃ Al. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1989 , 60, 433-446		12
73	On the stability of surfaces of stressed solids. <i>Acta Metallurgica</i> , 1989 , 37, 621-625		888
72	A Monte Carlo-finite element model for strain energy controlled microstructural evolution: Grain growth in superalloys. <i>Acta Metallurgica</i> , 1989 , 37, 641-650		67
71	A kinetic criterion for quasi-brittle fracture. <i>Acta Metallurgica</i> , 1989 , 37, 1957-1970		18
70	Simulation and theory of abnormal grain growth in anisotropic grain boundary energies and mobilities. <i>Acta Metallurgica</i> , 1989 , 37, 1227-1240		296
69	Computer simulation of recrystallization in non-uniformly deformed metals. <i>Acta Metallurgica</i> , 1989 , 37, 627-639		145
68	Dislocation distributions in two dimensions. <i>Scripta Metallurgica</i> , 1989 , 23, 1347-1352		133
67	Inhibition of grain growth by second phase particles: Three dimensional Monte Carlo computer simulations. <i>Scripta Metallurgica</i> , 1989 , 23, 753-758		121
66	Computer simulation of normal grain growth in three dimensions. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 1989 , 59, 293-329		333
65	Finite-temperature defect properties from free-energy minimization. <i>Physical Review Letters</i> , 1989 , 63, 624-627	7.4	227
64	Computer simulation on surfaces and [001] symmetric tilt grain boundaries in Ni, Al, and Ni ₃ Al. <i>Journal of Materials Research</i> , 1989 , 4, 62-77	2.5	155
63	The effect of vapor incidence angle upon thin-film columnar growth. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1989 , 7, 1386-1391	2.9	19
62	Surface Cross-Hatched Morphology on Strained III-V Semiconductor Heterostructures. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 160, 129		2
61	Computer simulation of recrystallization II. Heterogeneous nucleation and growth. <i>Acta Metallurgica</i> , 1988 , 36, 2115-2128		144
60	Computer Simulation of Failure in an Elastic Model with Randomly Distributed Defects. <i>Journal of the American Ceramic Society</i> , 1988 , 71, 362-369	3.8	29
59	Columnar growth in thin films. <i>Physical Review Letters</i> , 1988 , 60, 424-427	7.4	137
58	Ordering in the quenched two-dimensional axial next-nearest-neighbor Ising model. <i>Physical Review B</i> , 1988 , 37, 3467-3479	3.3	6

57	Analytical and numerical modeling of columnar evolution in thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1988 , 6, 2371-2380	2.9	99
56	Elastic fracture in random materials. <i>Physical Review B</i> , 1988 , 37, 5500-5507	3.3	151
55	Summary Abstract: Theory and simulations of zone II microstructures in thin films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1988 , 6, 1640-1641	2.9	1
54	Domain-growth kinetics for the Q-state Potts model in two and three dimensions. <i>Physical Review B</i> , 1988 , 38, 4752-4760	3.3	153
53	Effects of Impurities on Domain Growth. <i>Springer Proceedings in Physics</i> , 1988 , 254-262	0.2	1
52	Monte Carlo Simulation of Modulated Phases 1988 , 111-120		
51	Moving discommensurations interacting with diffusing impurities. <i>Physical Review B</i> , 1987 , 35, 6107-6121	3.3	28
50	Effects of diffusing impurities on domain growth in the Ising model. <i>Physical Review B</i> , 1987 , 35, 6902-6910	3.3	45
49	On the volume fraction dependence of particle limited grain growth. <i>Scripta Metallurgica</i> , 1987 , 21, 675-679		92
48	Comparison of Domain Growth Kinetics in Two and Three Dimensions 1987 , 365-382		2
47	Atomistic Simulations of [001] Symmetric Tilt Boundaries in Ni ₃ Al. <i>Materials Research Society Symposia Proceedings</i> , 1986 , 81, 45		11
46	Atomistic Simulations of Surface Relaxations in Ni, Al, and Their Ordered Alloys. <i>Materials Research Society Symposia Proceedings</i> , 1986 , 82, 515		7
45	Beading instabilities in thin film lines with bamboo microstructures. <i>Thin Solid Films</i> , 1986 , 139, 133-141	2.2	15
44	Dislocation dynamics in the 2-D Frenkel-Kontorova model. <i>Physica D: Nonlinear Phenomena</i> , 1986 , 23, 402-412	3.3	24
43	Computer simulation of recrystallization I Homogeneous nucleation and growth. <i>Acta Metallurgica</i> , 1986 , 34, 1833-1845		215
42	Kinetics of Instabilities in Solid Films. <i>Europhysics Letters</i> , 1986 , 2, 61-66	1.6	3
41	Grain growth phenomena in films: A Monte Carlo approach. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1986 , 4, 2925-2931	2.9	96
40	Surface segregation during deposition. <i>Journal of Applied Physics</i> , 1986 , 60, 1793-1796	2.5	5

39	Computer simulation of grain boundaries in Ni ₃ Al: The effect of grain boundary composition. <i>Scripta Metallurgica</i> , 1986 , 20, 1389-1394		99
38	A model for the fracture behavior of polycrystalline Ni ₃ Al. <i>Scripta Metallurgica</i> , 1986 , 20, 1699-1704		23
37	Oscillatory surface relaxations in Ni, Al, and their ordered alloys. <i>Physical Review Letters</i> , 1986 , 57, 1308-1311	1311	151
36	Dislocation generation in the two-dimensional Frenkel-Kontorova model at high stresses. <i>Physical Review Letters</i> , 1986 , 57, 2702-2705	7.4	41
35	Clock-model description of incommensurate ferroelectric films and of nematic-liquid-crystal films. <i>Physical Review B</i> , 1986 , 34, 1815-1819	3.3	49
34	Capillary instabilities in thin films. I. Energetics. <i>Journal of Applied Physics</i> , 1986 , 60, 247-254	2.5	272
33	Capillary instabilities in thin films. II. Kinetics. <i>Journal of Applied Physics</i> , 1986 , 60, 255-260	2.5	201
32	Microstructural Dynamic Study of Grain Growth. <i>Materials Research Society Symposia Proceedings</i> , 1985 , 63, 225		
31	Capillary equilibria of surfaces intersected by dislocations. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1985 , 52, 793-800		9
30	Computer simulation of grain growthIV. Anisotropic grain boundary energies. <i>Acta Metallurgica</i> , 1985 , 33, 509-520		216
29	Computer simulation of grain growthV. Abnormal grain growth. <i>Acta Metallurgica</i> , 1985 , 33, 2233-2247		261
28	Impurity effects on domain-growth kinetics. II. Potts model. <i>Physical Review B</i> , 1985 , 32, 3021-3025	3.3	40
27	Impurity effects on domain-growth kinetics. I. Ising model. <i>Physical Review B</i> , 1985 , 32, 3014-3020	3.3	97
26	Carburization Mechanisms of High Chromium Alloys. <i>Journal of the Electrochemical Society</i> , 1985 , 132, 2268-2274	3.9	13
25	Grain growth in three dimensions: A lattice model. <i>Scripta Metallurgica</i> , 1985 , 19, 225-230		73
24	Vortex effects on domain growth: The clock model. <i>Physical Review B</i> , 1984 , 30, 6535-6539	3.3	22
23	Structure and evolution of quenched Ising clusters. <i>Physical Review B</i> , 1984 , 30, 5150-5155	3.3	66
22	Kinetics of Domain Growth: Universality of Kinetic Exponents. <i>Physical Review Letters</i> , 1984 , 52, 1321-1324	1324	56

21	Diffusionally modified dislocation-particle elastic interactions. <i>Acta Metallurgica</i> , 1984 , 32, 1079-1088		151
20	A criterion for compressive failure of a continuous, protective surface film. <i>Acta Metallurgica</i> , 1984 , 32, 1089-1092		7
19	Computer simulation of grain growth-III. Influence of a particle dispersion. <i>Acta Metallurgica</i> , 1984 , 32, 1429-1438		255
18	Computer simulation of grain growth□ Kinetics. <i>Acta Metallurgica</i> , 1984 , 32, 783-791		876
17	Computer simulation of grain growth□. Grain size distribution, topology, and local dynamics. <i>Acta Metallurgica</i> , 1984 , 32, 793-802		415
16	Thermochemical diagrams for metal-oxygen-sulfur systems: An aid in corrosion research. <i>Oxidation of Metals</i> , 1984 , 22, 247-275	1.6	2
15	An elastic analysis of growth stresses during oxidation. <i>Oxidation of Metals</i> , 1984 , 22, 133-146	1.6	23
14	Straight dislocation-sphericle inclusion interactions: High and low temperature solutions. <i>Scripta Metallurgica</i> , 1984 , 18, 1063-1068		16
13	An atomistic study of deformation of amorphous metals. <i>Acta Metallurgica</i> , 1983 , 31, 335-352		214
12	Grain growth in two dimensions. <i>Scripta Metallurgica</i> , 1983 , 17, 241-246		94
11	Diffusional relaxation of the dislocation-inclusion repulsion. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1983 , 48, 795-809		73
10	Kinetics of ordering in two dimensions. II. Quenched systems. <i>Physical Review B</i> , 1983 , 28, 2705-2716	3.3	231
9	Kinetics of the Q-State Potts Model in Two Dimensions. <i>Physical Review Letters</i> , 1983 , 50, 263-266	7.4	129
8	Edge dislocation-circular inclusion interactions at elevated temperatures. <i>Acta Metallurgica</i> , 1983 , 31, 2151-2159		49
7	Computer Simulation of Grain Growth in Polycrystalline Aggregates. <i>Materials Research Society Symposia Proceedings</i> , 1982 , 21, 467		
6	Local structural fluctuations in amorphous and liquid metals: a simple theory of the glass transition. <i>Journal of Physics F: Metal Physics</i> , 1982 , 12, 2141-2163		184
5	On dislocation-incoherent particle interactions at high temperatures. <i>Scripta Metallurgica</i> , 1982 , 16, 1401-1406		34
4	Structural defects in amorphous solids Statistical analysis of a computer model. <i>Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties</i> , 1981 , 44, 847-866		256

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|---|--|-----|-----|
| 3 | Radial distribution function and structural relaxation in amorphous solids. <i>Physical Review B</i> , 1981 , 24, 6936-6944 | 3.3 | 183 |
| 2 | Local structure and topology of a model amorphous metal. <i>Journal of Physics F: Metal Physics</i> , 1981 , 11, 2209-2219 | | 62 |
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