Normand Mousseau

List of Publications by Year in Descending Order

189 papers	6,109 citations	44 h-index	72 g-index
209 ext. papers	6,591 ext. citations	4.3 avg, IF	5.92 L-index

#	Paper	IF	Citations
189	Activation-Relaxation Technique: An efficient way to find minima and saddle points of potential energy surfaces. *Computational Materials Science*, **2022**, 209, 111363	3.2	0
188	Polyphenol-Peptide Interactions in Mitigation of Alzheimer's Disease: Role of Biosurface-Induced Aggregation. *Journal of Alzheimer's Disease*, **2021**, 81, 33-55	4.3	0
187	Corilagin and 1,3,6-Tri--galloy-D-glucose: potential inhibitors of SARS-CoV-2 variants. *Physical Chemistry Chemical Physics*, **2021**, 23, 14873-14888	3.6	3
186	The energy landscape governs ductility in disordered materials. *Materials Horizons*, **2021**, 8, 1242-1252	14.4	7
185	Capturing the Iron Carburization Mechanisms from the Surface to Bulk. *Journal of Physical Chemistry C*, **2020**, 124, 28569-28579	3.8	6
184	Identifying flow defects in amorphous alloys using machine learning outlier detection methods. *Scripta Materialia*, **2020**, 186, 185-189	5.6	17
183	Order and disorder at the C-face of SiC: A hybrid surface reconstruction. *Applied Physics Letters*, **2020**, 116, 141605	3.4	1
182	Simulation of Single Particle Displacement Damage in Si-xGex Alloys-Interaction of Primary Particles With the Material and Generation of the Damage Structure. *IEEE Transactions on Nuclear Science*, **2020**, 67, 1273-1283	1.7	3
181	Off-Lattice Kinetic Monte Carlo Methods **2020**, 715-743		2
180	Atomistic Kinetic Monte Carlo and Solute Effects **2020**, 2437-2456		
179	Kinetic Monte Carlo Simulations of Irradiation Effects **2020**, 754-778		4
178	Finding Reaction Pathways and Transition States: r-ARTn and d-ARTn as an Efficient and Versatile Alternative to String Approaches. *Journal of Chemical Theory and Computation*, **2020**, 16, 6726-6734	6.4	9
177	Enthalpy-entropy compensation of atomic diffusion originates from softening of low frequency phonons. *Nature Communications*, **2020**, 11, 3977	17.4	7
176	Elucidating the role of extended surface defects at Fe surfaces on CO adsorption and dissociation. *Applied Surface Science*, **2019**, 491, 792-798	6.7	7
175	Is Hydrogen Diffusion along Grain Boundaries Fast or Slow? Atomistic Origin and Mechanistic Modeling. *Physical Review Letters*, **2019**, 122, 215501	7.4	16
174	Off-Lattice Kinetic Monte Carlo Methods **2019**, 1-29		2
173	ART_data_analyzer: Automating parallelized computations to study the evolution of materials. *SoftwareX*, **2019**, 9, 238-243	2.7	5

172	Mitigating Alzheimer's Disease with Natural Polyphenols: A Review. *Current Alzheimer Research*, **2019**, 16, 529-543	3	27
171	. *IEEE Transactions on Nuclear Science*, **2018**, 65, 724-731	1.7	8
170	Carbon diffusion paths and segregation at high-angle tilt grain boundaries in Fe studied by using a kinetic activation-relation technique. *Physical Review B*, **2018**, 97,	3.3	11
169	Interaction between interstitial carbon atoms and a <1 1 1> self-interstitial atoms loop in an iron matrix: a combined DFT, off lattice KMC and MD study. *Journal of Physics Condensed Matter*, **2018**, 30, 335901	1.8	1
168	Study of point defects diffusion in nickel using kinetic activation-relaxation technique. *Acta Materialia*, **2018**, 144, 679-690	8.4	16
167	Atomistic Kinetic Monte Carlo and Solute Effects **2018**, 1-20		1
166	Long-time point defect diffusion in ordered nickel-based binary alloys: How small kinetic differences can lead to completely long-time structural evolution. *Materialia*, **2018**, 4, 575-584	3.2	6
165	Off-Lattice Kinetic Monte Carlo Methods **2018**, 1-29		
164	Benchmarking the performance of plane-wave vs. localized orbital basis set methods in DFT modeling of metal surface: a case study for Fe-(110). *Journal of Computational Science*, **2018**, 29, 163-167	2.4	4
163	Carbon adsorption on and diffusion through the Fe(110) surface and in bulk: Developing a new strategy for the use of empirical potentials in complex material set-ups. *Physica Status Solidi (B): Basic Research*, **2017**, 254, 1600408	1.3	13
162	Algorithmic developments of the kinetic activation-relaxation technique: Accessing long-time kinetics of larger and more complex systems. *Journal of Chemical Physics*, **2017**, 147, 152712	3.9	10
161	Strain-driven diffusion process during silicon oxidation investigated by coupling density functional theory and activation relaxation technique. *Journal of Chemical Physics*, **2017**, 147, 054701	3.9	3
160	Structural and thermodynamical properties of early human amylin oligomers using replica exchange molecular dynamics: mutation effect of three key residues F15, H18 and F23. *Physical Chemistry Chemical Physics*, **2017**, 19, 31290-31299	3.6	8
159	Energy landscape and diffusion kinetics of lithiated silicon: A kinetic activation-relaxation technique study. *Physical Review B*, **2017**, 96,	3.3	9
158	The role of emerging grain boundary at iron surface, temperature and hydrogen on metal dusting initiation. *Acta Materialia*, **2017**, 135, 340-347	8.4	8
157	Diffusion mechanisms of C in 100, 110 and 111 Fe surfaces studied using kinetic activation-relaxation technique. *Acta Materialia*, **2017**, 136, 303-314	8.4	11
156	Simulation of Single Particle Displacement Damage in Silicon Part II: Generation and Long-Time Relaxation of Damage Structure. *IEEE Transactions on Nuclear Science*, **2017**, 64, 141-148	1.7	39
155	Stimulating a Canadian narrative for climate. *Facets*, **2017**, 2, 131-149	2.3	3

154	Na 3 Fe 2 (SO 4) 2 (SO 3 N) as a potential high capacity cathode material. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **2016**, 211, 185-190	3.1	1
153	Free-Energy Landscape of the Amino-Terminal Fragment of Huntingtin in Aqueous Solution. *Biophysical Journal*, **2016**, 110, 1075-88	2.9	11
152	Diffusion properties of Fe□ systems studied by using kinetic activation□elaxation technique. *Computational Materials Science*, **2016**, 112, 96-106	3.2	17
151	Insights on finite size effects in ab initio study of CO adsorption and dissociation on Fe 110 surface. *Journal of Applied Physics*, **2016**, 120, 055301	2.5	14
150	Influence of surface vacancy defects on the carburisation of Fe 110 surface by carbon monoxide. *Journal of Chemical Physics*, **2016**, 145, 044710	3.9	10
149	Diffusion of point defects in crystalline silicon using the kinetic activation-relaxation technique method. *Physical Review B*, **2015**, 91,	3.3	25
148	Following atomistic kinetics on experimental timescales with the kinetic Activation□elaxation Technique. *Computational Materials Science*, **2015**, 100, 111-123	3.2	21
147	Strong Long-Range Relaxations of Structural Defects in Graphene Simulated Using a New Semiempirical Potential. *Journal of Physical Chemistry C*, **2015**, 119, 9646-9655	3.8	18
146	Probing the Huntingtin 1-17 membrane anchor on a phospholipid bilayer by using all-atom simulations. *Biophysical Journal*, **2015**, 108, 1187-98	2.9	16
145	Probing Potential Energy Surface Exploration Strategies for Complex Systems. *Journal of Chemical Theory and Computation*, **2015**, 11, 1970-7	6.4	1
144	Amyloid □Protein and Alzheimer's Disease: When Computer Simulations Complement Experimental Studies. *Chemical Reviews*, **2015**, 115, 3518-63	68.1	426
143	Aggregation process of A□1-40with non-A□myloid component of□ynuclein. *Journal of Physics: Conference Series*, **2015**, 640, 012008	0.3	
142	A novel intercalation cathode material for sodium-based batteries. *Electrochemistry Communications*, **2015**, 52, 9-12	5.1	1
141	Distinct helix propensities and membrane interactions of human and rat IAPP(1-19) monomers in anionic lipid bilayers. *Journal of Physical Chemistry B*, **2015**, 119, 3366-76	3.4	25
140	The OPEP protein model: from single molecules, amyloid formation, crowding and hydrodynamics to DNA/RNA systems. *Chemical Society Reviews*, **2014**, 43, 4871-93	58.5	118
139	Atomistic mechanisms of huntingtin N-terminal fragment insertion on a phospholipid bilayer revealed by molecular dynamics simulations. *Proteins: Structure, Function and Bioinformatics*, **2014**, 82, 1409-27	4.2	10
138	Strain effects and intermixing at the Si surface: Importance of long-range elastic corrections in first-principles calculations. *Physical Review B*, **2014**, 90,	3.3	8
137	Understanding long-time vacancy aggregation in iron: A kinetic activation-relaxation technique study. *Physical Review B*, **2014**, 90,	3.3	33

136	Early oligomerization stages for the non-amyloid component of □synuclein amyloid. *Journal of Chemical Physics*, **2014**, 141, 135103	3.9	11
135	Oligomerization of Huntingtin N-Terminal Fragment on a Phospholipid Bilayer Revealed by Molecular Dynamics Simulations. *Biophysical Journal*, **2014**, 106, 99a-100a	2.9	1
134	Kinetics of Amyloid Growth. *Modecular Medicine and Medicinal*, **2013**, 209-237		1
133	Contribution of vacancies to relaxation in amorphous materials: A kinetic activation-relaxation technique study. *Physical Review B*, **2013**, 87,	3.3	30
132	Replenish and relax: explaining logarithmic annealing in ion-implanted c-Si. *Physical Review Letters*, **2013**, 111, 105502	7.4	29
131	Long-time relaxation of ion-bombarded silicon studied with the kinetic activation-relaxation technique: Microscopic description of slow aging in a disordered system. *Physical Review B*, **2013**, 88,	3.3	24
130	Tunable magnetic states in hexagonal boron nitride sheets. *Applied Physics Letters*, **2012**, 101, 132405	3.4	25
129	Molecular dynamics simulations of the bacterial ABC transporter SAV1866 in the closed form. *Journal of Physical Chemistry B*, **2012**, 116, 2934-42	3.4	34
128	Structures of A□17-42 trimers in isolation and with five small-molecule drugs using a hierarchical computational procedure. *Journal of Physical Chemistry B*, **2012**, 116, 8412-22	3.4	92
127	All-atom stability and oligomerization simulations of polyglutamine nanotubes with and without the 17-amino-acid N-terminal fragment of the Huntingtin protein. *Journal of Physical Chemistry B*, **2012**, 116, 12168-79	3.4	11
126	Large loop conformation sampling using the activation relaxation technique, ART-nouveau method. *Proteins: Structure, Function and Bioinformatics*, **2012**, 80, 1883-94	4.2	4
125	Distinct dimerization for various alloforms of the amyloid-beta protein: A□(1-40), A□(1-42), and A□(1-40)(D23N). *Journal of Physical Chemistry B*, **2012**, 116, 4043-55	3.4	90
124	Kinetics of amyloid aggregation: a study of the GNNQQNY prion sequence. *PLoS Computational Biology*, **2012**, 8, e1002782	5	35
123	Comment on "Mechanism of void nucleation and growth in bcc Fe: atomistic simulations at experimental time scales". *Physical Review Letters*, **2012**, 108, 219601; author reply 219602	7.4	17
122	Understanding the EF-hand closing pathway using non-biased interatomic potentials. *Journal of Chemical Physics*, **2012**, 136, 035101	3.9	14
121	First stages of silicon oxidation with the activation relaxation technique. *Physical Review B*, **2012**, 86,	3.3	6
120	Optimization of the Kinetic Activation-Relaxation Technique, an off-lattice and self-learning kinetic Monte-Carlo method. *Journal of Physics: Conference Series*, **2012**, 341, 012007	0.3	14
119	The Activation-Relaxation Technique: ART Nouveau and Kinetic ART. *Journal of Atomic, Molecular, and Optical Physics*, **2012**, 2012, 1-14		41

118	Holographic multiscale method used with non-biased atomistic forcefields for simulation of large transformations in protein. *Journal of Physics: Conference Series*, **2012**, 341, 012015	0.3	1
117	Energy landscape of small clusters of self-interstitial dumbbells in iron. *Physical Review B*, **2011**, 83,	3.3	69
116	Kinetic activation-relaxation technique. *Physical Review E*, **2011**, 84, 046704	2.4	108
115	Use of Umbrella Sampling to Calculate the Entrance/Exit Pathway for Z-Pro-Prolinal Inhibitor in Prolyl Oligopeptidase. *Journal of Chemical Theory and Computation*, **2011**, 7, 1583-94	6.4	27
114	Distinct Morphologies for Amyloid Beta Protein Monomer: Aβ1-40, Aβ1-42, and Aβ1-40(D23N). *Journal of Chemical Theory and Computation*, **2011**, 7, 2584-92	6.4	71
113	Structure and thermodynamics of amylin dimer studied by Hamiltonian-temperature replica exchange molecular dynamics simulations. *Journal of Physical Chemistry B*, **2011**, 115, 3146-54	3.4	61
112	Amorphous silicon under mechanical shear deformations: Shear velocity and temperature effects. *Physical Review B*, **2011**, 83,	3.3	7
111	Crystallization of amorphous silicon induced by mechanical shear deformations. *Physical Review B*, **2011**, 84,	3.3	15
110	A multiscale approach to characterize the early aggregation steps of the amyloid-forming peptide GNNQQNY from the yeast prion sup-35. *PLoS Computational Biology*, **2011**, 7, e1002051	5	68
109	Optimized energy landscape exploration using the ab initio based activation-relaxation technique. *Journal of Chemical Physics*, **2011**, 135, 034102	3.9	72
108	Spontaneous formation of polyglutamine nanotubes with molecular dynamics simulations. *Journal of Chemical Physics*, **2010**, 132, 165102	3.9	22
107	Evolution of the potential-energy surface of amorphous silicon. *Physical Review Letters*, **2010**, 105, 045503	7.4	46
106	Effect of the disulfide bond on the monomeric structure of human amylin studied by combined Hamiltonian and temperature replica exchange molecular dynamics simulations. *Journal of Physical Chemistry B*, **2010**, 114, 7071-7	3.4	60
105	Thermodynamics and dynamics of amyloid peptide oligomerization are sequence dependent. *Proteins: Structure, Function and Bioinformatics*, **2009**, 75, 954-63	4.2	102
104	Structures and thermodynamics of Alzheimer's amyloid-beta Abeta(16-35) monomer and dimer by replica exchange molecular dynamics simulations: implication for full-length Abeta fibrillation. *Journal of Physical Chemistry B*, **2009**, 113, 7668-75	3.4	92
103	Replica exchange molecular dynamics simulations of coarse-grained proteins in implicit solvent. *Journal of Physical Chemistry B*, **2009**, 113, 267-74	3.4	67
102	The beta-strand-loop-beta-strand conformation is marginally populated in beta2-microglobulin (20-41) peptide in solution as revealed by replica exchange molecular dynamics simulations. *Biophysical Journal*, **2008**, 95, 510-7	2.9	11
101	Self-assembly of the beta2-microglobulin NHVTLSQ peptide using a coarse-grained protein model reveals a beta-barrel species. *Journal of Physical Chemistry B*, **2008**, 112, 4410-8	3.4	71

100	The complex folding pathways of protein A suggest a multiple-funnelled energy landscape. *Journal of Chemical Physics*, **2008**, 128, 045101	3.9	16
99	Energy landscapes of the monomer and dimer of the Alzheimer's peptide Abeta(1-28). *Journal of Chemical Physics*, **2008**, 128, 125108	3.9	24
98	Role of the region 23-28 in Abeta fibril formation: insights from simulations of the monomers and dimers of Alzheimer's peptides Abeta40 and Abeta42. *Current Alzheimer Research*, **2008**, 5, 244-50	3	91
97	Numerical characterization of the Ga interstitial self-diffusion mechanisms in GaAs. *Journal of Applied Physics*, **2008**, 103, 113502	2.5	9
96	Kinetic activation-relaxation technique: An off-lattice self-learning kinetic Monte Carlo algorithm. *Physical Review B*, **2008**, 78,	3.3	114
95	Self-assembly of amyloid-forming peptides by molecular dynamics simulations. *Frontiers in Bioscience - Landmark*, **2008**, 13, 5681-92	2.8	37
94	Exploring energy landscapes of protein folding and aggregation. *Frontiers in Bioscience - Landmark*, **2008**, 13, 4495-516	2.8	12
93	Ab initio study of the diffusion mechanisms of gallium in a silicon matrix. *European Physical Journal B*, **2008**, 64, 165-172	1.2	11
92	Ab-initio simulations of self-diffusion mechanisms in semiconductors. *Physica B: Condensed Matter*, **2007**, 401-402, 658-661	2.8	4
91	Ab initio characterization of arsenic vacancy diffusion pathways in GaAs with SIEST-A-RT. *Applied Physics A: Materials Science and Processing*, **2007**, 86, 309-312	2.6	7
90	Probing amyloid fibril formation of the NFGAIL peptide by computer simulations. *Journal of Chemical Physics*, **2007**, 126, 065101	3.9	29
89	Sampling small-scale and large-scale conformational changes in proteins and molecular complexes. *Journal of Chemical Physics*, **2007**, 126, 105101	3.9	7
88	Gallium self-interstitial relaxation in GaAs: An ab initio characterization. *Physical Review B*, **2007**, 76,	3.3	19
87	Self-organized criticality in the intermediate phase of rigidity percolation. *Physical Review E*, **2007**, 75, 056108	2.4	26
86	Computational simulations of the early steps of protein aggregation. *Prion*, **2007**, 1, 3-8	2.3	59
85	Coarse-grained protein molecular dynamics simulations. *Journal of Chemical Physics*, **2007**, 126, 025101	3.9	84
84	The conformations of the amyloid-beta (21-30) fragment can be described by three families in solution. *Journal of Chemical Physics*, **2006**, 125, 084911	3.9	60
83	Self-organization with equilibration: a model for the intermediate phase in rigidity percolation. *Physical Review E*, **2006**, 74, 016116	2.4	54

82	Thermally activated charge reversibility of gallium vacancies in GaAs. *Journal of Applied Physics*, **2006**, 100, 083521	2.5	11
81	Charge-dependent migration pathways for the Ga vacancy in GaAs. *Physical Review B*, **2006**, 74,	3.3	8
80	Exploiting memory in event-based simulations. *Journal of Non-Crystalline Solids*, **2006**, 352, 4424-4429	3.9	3
79	ARTIST: an activated method in internal coordinate space for sampling protein energy landscapes. *Proteins: Structure, Function and Bioinformatics*, **2006**, 63, 967-75	4.2	13
78	Structures of soluble amyloid oligomers from computer simulations. *Proteins: Structure, Function and Bioinformatics*, **2006**, 65, 180-91	4.2	52
77	Aggregating the amyloid Abeta(11-25) peptide into a four-stranded beta-sheet structure. *Proteins: Structure, Function and Bioinformatics*, **2006**, 65, 877-88	4.2	21
76	Following the aggregation of amyloid-forming peptides by computer simulations. *Journal of Chemical Physics*, **2005**, 122, 174904	3.9	57
75	Exploring the early steps of amyloid peptide aggregation by computers. *Accounts of Chemical Research*, **2005**, 38, 885-91	24.3	81
74	Self-vacancies in gallium arsenide: An ab initio calculation. *Physical Review B*, **2005**, 71,	3.3	51
73	Liquid–liquid phase transition in Stillinger–Weber silicon. *Journal of Physics Condensed Matter*, **2005**, 17, 2269-2279	1.8	35
72	Activated sampling in complex materials at finite temperature: the properly obeying probability activation-relaxation technique. *Journal of Chemical Physics*, **2005**, 123, 244707	3.9	4
71	Nucleation and crystallization process of silicon using the Stillinger-Weber potential. *Physical Review B*, **2005**, 71,	3.3	34
70	Navigation and analysis of the energy landscape of small proteins using the activation-relaxation technique. *Physical Biology*, **2005**, 2, S101-7	3	6
69	Exploring the early steps of aggregation of amyloid-forming peptide KFFE. *Journal of Physics Condensed Matter*, **2004**, 16, S5047-S5054	1.8	10
68	Binary continuous random networks. *Journal of Physics Condensed Matter*, **2004**, 16, S5183-S5190	1.8	8
67	Pathway complexity of Alzheimer's beta-amyloid Abeta16-22 peptide assembly. *Structure*, **2004**, 12, 1245-55	5.5	121
66	Complex folding pathways in a simple beta-hairpin. *Proteins: Structure, Function and Bioinformatics*, **2004**, 56, 464-74	4.2	76
65	In silico assembly of Alzheimer's Abeta16-22 peptide into beta-sheets. *Journal of the American Chemical Society*, **2004**, 126, 11509-16	16.4	125

64	Sampling the self-assembly pathways of KFFE hexamers. *Biophysical Journal*, **2004**, 87, 3648-56	2.9	69
63	Sampling the diffusion paths of a neutral vacancy in silicon with quantum mechanical calculations. *Physical Review B*, **2004**, 70,	3.3	70
62	Exploring the Folding and Aggregation Mechanisms of Amyloid-Forming Peptides by Computer Simulations **2004**, 379-381		
61	Numerical Studies Of The Dynamics Of Silicon: Relaxation, Nucleation And Energy Landscape. *Materials Research Society Symposia Proceedings*, **2003**, 762, 1111		
60	Relationship between dynamical heterogeneities and stretched exponential relaxation. *Physical Review E*, **2003**, 68, 041110	2.4	14
59	Sampling the complex energy landscape of a simple hairpin. *Journal of Chemical Physics*, **2003**, 119, 6403-6406	3.9	54
58	Energy landscape of relaxed amorphous silicon. *Physical Review B*, **2003**, 68,	3.3	35
57	Characterization of the stretched-exponential trap-time distributions in one-dimensional coupled map lattices. *Physical Review E*, **2002**, 66, 066205	2.4	8
56	Exploring the energy landscape of proteins: A characterization of the activation-relaxation technique. *Journal of Chemical Physics*, **2002**, 117, 11379-11387	3.9	46
55	Comment on **B**oson peak in amorphous silicon: A numerical study *Physical Review B*, **2002**, 66,	3.3	5
54	Stretched-exponential dynamics in a chain of coupled chaotic oscillators. *Europhysics Letters*, **2002**, 60, 827-833	1.6	8
53	Recent developments in the study of continuous random networks. *The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties*, **2002**, 82, 171-183		7
52	Crystallization study of model tetrahedral semiconductors. *Journal of Physics Condensed Matter*, **2002**, 14, 6627-6638	1.8	15
51	Sampling activated mechanisms in proteins with the activation-relaxation technique. *Journal of Molecular Graphics and Modelling*, **2001**, 19, 78-86	2.8	25
50	MODELS OF PARACRYSTALLINE SILICON WITH A DEFECT-FREE BANDGAP. *International Journal of Modern Physics B*, **2001**, 15, 3253-3257	1.1	7
49	Diffusion in Lennard-Jones Glasses: Simulation Studies of the Activation Parameters for Collective Mechanisms. *Defect and Diffusion Forum*, **2001**, 194-199, 855-860	0.7	1
48	Simulating Diffusion at Low Temperatures in Binary Lennard-Jones Glasses: The Activation-Relaxation Technique. *Defect and Diffusion Forum*, **2001**, 194-199, 775-788	0.7	1
47	Efficient tight-binding Monte Carlo structural sampling of complex materials. *Europhysics Letters*, **2001**, 56, 427-433	1.6	6

46	Realistic models of paracrystalline silicon. *Physical Review B*, **2001**, 63,	3.3	48
45	Fast bond-transposition algorithms for generating covalent amorphous structures. *Current Opinion in Solid State and Materials Science*, **2001**, 5, 497-502	12	9
44	The activation–relaxation technique: an efficient algorithm for sampling energy landscapes. *Computational Materials Science*, **2001**, 20, 285-292	3.2	33
43	Fitting the Stillinger–Weber potential to amorphous silicon. *Journal of Non-Crystalline Solids*, **2001**, 282, 248-255	3.9	136
42	Basic mechanisms of structural relaxation and diffusion in amorphous silicon. *Materials Research Society Symposia Proceedings*, **2001**, 664, 2811		1
41	Characterization of the Activation-Relaxation Technique: Recent Results on Models of Amorphous Silicon. *Materials Research Society Symposia Proceedings*, **2001**, 677, 841		1
40	Numerical studies of the vibrational isocoordinate rule in chalcogenide glasses. *European Physical Journal B*, **2000**, 17, 667-671	1.2	5
39	High-quality continuous random networks. *Physical Review B*, **2000**, 62, 4985-4990	3.3	206
38	Approximate ab initio calculations of electronic structure of amorphous silicon. *Physical Review B*, **2000**, 62, 15307-15310	3.3	26
37	Elementary mechanisms governing the dynamics of silica. *Journal of Chemical Physics*, **2000**, 112, 960-964	3.9	24
36	Optimal activation and diffusion paths of perfect events in amorphous silicon. *Physical Review B*, **2000**, 62, 15680-15685	3.3	16
35	Activated mechanisms in amorphous silicon: An activation-relaxation-technique study. *Physical Review B*, **2000**, 61, 1898-1906	3.3	68
34	Dynamics of lennard-jones clusters: A characterization of the activation-relaxation technique. *Physical Review E*, **2000**, 62, 7723-8	2.4	199
33	Dependence of the vibrational spectra of amorphous silicon on the defect concentration and ring distribution. *Journal of Physics Condensed Matter*, **1999**, 11, 9647-9658	1.8	30
32	Exploring structural mechanisms in disordered materials using the activation-relaxation technique. *Computer Physics Communications*, **1999**, 121-122, 206-209	4.2	4
31	Exploring high-dimensional energy landscapes. *Computing in Science and Engineering*, **1999**, 1, 74-80, 82	1.5	14
30	Tight-binding molecular-dynamics studies of defects and disorder in covalently bonded materials. *Computational Materials Science*, **1998**, 12, 210-241	3.2	23
29	Surface diffusion coefficients by thermodynamic integration: Cu on Cu(100). *Physical Review B*, **1998**, 58, 12667-12670	3.3	40

28	Traveling through potential energy landscapes of disordered materials: The activation-relaxation technique. *Physical Review E*, **1998**, 57, 2419-2424	2.4	182
27	Identification of Relaxation and Diffusion Mechanisms in Amorphous Silicon. *Physical Review Letters*, **1998**, 81, 1865-1868	7.4	55
26	Comment on Role of Lattice Vibrations in Adatom Diffusion *Physical Review Letters*, **1998**, 80, 203-203	7.4	14
25	Multiple phase changes induced by frustration in randomly connected cellular automata. *Journal of Physics A*, **1997**, 30, 2995-3002		
24	Comment on Systematic approach to generate near-perfect periodic continuous random network models: Application to amorphous Si3N4 *Physical Review B*, **1997**, 56, 14190-14191	3.3	1
23	Structural, electronic, and dynamical properties of amorphous gallium arsenide: A comparison between two topological models. *Physical Review B*, **1997**, 56, 9461-9468	3.3	22
22	sAvalanche distribution in the Feder and Feder model: Effects of quenched disorder. *Physical Review E*, **1997**, 55, 3682-3685	2.4	
21	Topology of Amorphous Tetrahedral Semiconductors on Intermediate Length Scales. *Physical Review Letters*, **1997**, 78, 1484-1487	7.4	57
20	Strain broadening of the magnetization steps in diluted magnetic semiconductors. *Physical Review B*, **1997**, 56, 13094-13102	3.3	6
19	Structural and Electronic Properties of a-GaAs: A Tight-Binding-Molecular-Dynamics-Art Simulation. *Materials Research Society Symposia Proceedings*, **1997**, 491, 463		
18	Computer Modelling of Glasses and Glassy Alloys **1997**, 133-150		
17	Randomly connected cellular automata: a search for critical connectivities. *Europhysics Letters*, **1996**, 33, 509-514	1.6	7
16	On the phase diagram of frustrated (quasi-)periodic cellular automata. *Journal of Physics A*, **1996**, 29, 3021-3036		3
15	Event-Based Relaxation of Continuous Disordered Systems. *Physical Review Letters*, **1996**, 77, 4358-4361	7.4	354
14	Synchronization by Disorder in Coupled Systems. *Physical Review Letters*, **1996**, 77, 968-971	7.4	49
13	Size-mismatch disorder at the surface of semiconductors. *Physical Review B*, **1995**, 52, 2660-2667	3.3	6
12	Length mismatch in random semiconductor alloys. IV. General multinary compounds. *Physical Review B*, **1995**, 52, 17191-17198	3.3	3
11	Role of detailed balance on the phase diagram of frustrated systems; the modified ANNNI model. *Journal of Physics A*, **1995**, 28, 6557-6566		1

10	Frustration-Induced Phase Transition in High-Dimensional Deterministic Cellular Automata. *Europhysics Letters*, **1994**, 28, 551-556	1.6	5
9	Onset of avalanches in granular media. *Physical Review E*, **1994**, 49, 4712-4715	2.4	11
8	Structural model for crystalline and amorphous Si-Ge alloys. *Physical Review B*, **1993**, 48, 5172-5178	3.3	37
7	Length distributions in metallic alloys. *Physical Review B*, **1992**, 45, 2015-2022	3.3	41
6	Length mismatch in random semiconductor alloys. III. Crystalline and amorphous SiGe. *Physical Review B*, **1992**, 46, 15887-15893	3.3	61
5	Dynamical models of hydrogenated amorphous silicon. *Physical Review B*, **1991**, 43, 9810-9817	3.3	36
4	Computer models for amorphous silicon hydrides. *Physical Review B*, **1990**, 41, 3702-3707	3.3	21
3	Photometric and polarimetric variability and mass-loss rate of the massive binary Wolf-Rayet star HDE 311884 (WN6 + 05: V). *Astrophysical Journal*, **1990**, 350, 767	4.7	20
2	Computer-simulated model structures for hydrogenated amorphous semiconductors. *Journal of Non-Crystalline Solids*, **1989**, 114, 202-204	3.9	1
1	Recent developments in the study of continuous random networks		7