Walter Kob

List of Publications by Year
in descending order

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211 papers	15,558 citations	22153 59 h-index	18647 119 g-index
218 all docs	218 docs citations	218 times ranked	5866 citing authors

#	Article	IF	Citations
1	Testing mode-coupling theory for a supercooled binary Lennard-Jones mixture I: The van Hove correlation function. Physical Review E, 1995, 51, 4626-4641.	2.1	1,123
2	Dynamical Heterogeneities in a Supercooled Lennard-Jones Liquid. Physical Review Letters, 1997, 79, 2827-2830.	7.8	861
3	Stringlike Cooperative Motion in a Supercooled Liquid. Physical Review Letters, 1998, 80, 2338-2341.	7.8	846
4	Scaling Behavior in theÎ²-Relaxation Regime of a Supercooled Lennard-Jones Mixture. Physical Review Letters, 1994, 73, 1376-1379.	7.8	623
5	Cooling-rate effects in amorphous silica: A computer-simulation study. Physical Review B, 1996, 54, 15808-15827.	3.2	612
6	Testing mode-coupling theory for a supercooled binary Lennard-Jones mixture. II. Intermediate scattering function and dynamic susceptibility. Physical Review E, 1995, 52, 4134-4153.	2.1	534
7	Spatial correlations of mobility and immobility in a glass-forming Lennard-Jones liquid. Physical Review E, 1999, 60, 3107-3119.	2.1	455
8	Inherent Structure Entropy of Supercooled Liquids. Physical Review Letters, 1999, 83, 3214-3217.	7.8	408
9	Static and dynamic properties of a viscous silica melt. Physical Review B, 1999, 60, 3169-3181.	3.2	367
10	Universal Nature of Particle Displacements close to Glass and Jamming Transitions. Physical Review Letters, 2007, 99, 060604.	7.8	352
11	Kinetic lattice-gas model of cage effects in high-density liquids and a test of mode-coupling theory of the ideal-glass transition. Physical Review E, 1993, 48, 4364-4377.	2.1	250
12	Cooperative motion and growing length scales in supercooled confined liquids. Europhysics Letters, 2002, 59, 701-707.	2.0	235
13	Aging Effects in a Lennard-Jones Glass. Physical Review Letters, 1997, 78, 4581-4584.	7.8	231
14	Spontaneous and induced dynamic fluctuations in glass formers. I. General results and dependence on ensemble and dynamics. Journal of Chemical Physics, 2007, 126, 184503.	3.0	229
15	Computer simulations of supercooled liquids and glasses. Journal of Physics Condensed Matter, 1999, 11, R85-R115.	1.8	216
16	The Relaxation Dynamics of a Supercooled Liquid Confined by Rough Walls. Journal of Physical Chemistry B, 2004, 108, 6673-6686.	2.6	203
17	How Does the Relaxation of a Supercooled Liquid Depend on Its Microscopic Dynamics?. Physical Review Letters, 1998, 81, 4404-4407.	7.8	195
18	Structure and dynamics of amorphous silica surfaces. Journal of Chemical Physics, 2001, 114, 7602-7614.	3.0	189

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19	Non-monotonic temperature evolution of dynamic correlations in glass-forming liquids. Nature Physics, 2012, 8, 164-167.	16.7	189
20	Spontaneous and induced dynamic correlations in glass formers. II. Model calculations and comparison to numerical simulations. Journal of Chemical Physics, 2007, 126, 184504.	3.0	162
21	Static point-to-set correlations in glass-forming liquids. Physical Review E, 2012, 85, 011102.	2.1	155
22	Democratic Particle Motion for Metabasin Transitions in Simple Glass Formers. Physical Review Letters, 2006, 96, 057801.	7.8	149
23	Finite size effects in simulations of glass dynamics. Physical Review E, 1996, 54, R5897-R5900.	2.1	146
24	How do the properties of a glass depend on the cooling rate? A computer simulation study of a Lennardâ€Jones system. Journal of Chemical Physics, 1996, 105, 4714-4728.	3.0	141
25	Quantitative test of the mode-coupling theory of the ideal glass transition for a binary Lennard-Jones system. Physical Review E, 1997, 55, 657-667.	2.1	141
26	Dynamics of the rotational degrees of freedom in a supercooled liquid of diatomic molecules. Physical Review E, 1997, 56, 5450-5461.	2.1	139
27	Channel diffusion of sodium in a silicate glass. Physical Review B, 2001, 64, .	3.2	138
28	Channel Formation and Intermediate Range Order in Sodium Silicate Melts and Glasses. Physical Review Letters, 2004, 93, 027801.	7.8	131
29	Aging as dynamics in configuration space. Europhysics Letters, 2000, 49, 590-596.	2.0	128
30	The relaxation dynamics of a simple glass former confined in a pore. Europhysics Letters, 2000, 52, 277-283.	2.0	125
31	Molecular dynamics simulations. Journal of Physics Condensed Matter, 2004, 16, S429-S453.	1.8	124
32	Dynamics of Sodium in Sodium Disilicate: Channel Relaxation and Sodium Diffusion. Physical Review Letters, 2002, 88, 125502.	7.8	120
33	Structural and dynamical properties of sodium silicate melts: an investigation by molecular dynamics computer simulation. Chemical Geology, 2001, 174, 87-101.	3.3	118
34	Debye-Waller Factor of Liquid Silica: Theory and Simulation. Physical Review Letters, 2001, 86, 648-651.	7.8	112
35	High frequency sound and the boson peak in amorphous silica. European Physical Journal B, 2001, 19, 531-543.	1.5	112
36	The Monte Carlo dynamics of a binary Lennard-Jones glass-forming mixture. Journal of Physics Condensed Matter, 2007, 19, 205130.	1.8	112

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37	Structure and diffusion in amorphous aluminum silicate: A molecular dynamics computer simulation. Journal of Chemical Physics, 2004, 120, 384-393.	3.0	111
38	Granular materials flow like complex fluids. Nature, 2017, 551, 360-363.	27.8	111
39	Probing a Liquid to Glass Transition in Equilibrium. Physical Review Letters, 2013, 110, 245702.	7.8	108
40	Fluctuation-dissipation ratio in an aging Lennard-Jones glass. Europhysics Letters, 1999, 46, 637-642.	2.0	104
41	Dynamical heterogeneities below the glass transition. Journal of Chemical Physics, 2002, 116, 5158.	3.0	102
42	New fitting scheme to obtain effective potential from Car-Parrinello molecular-dynamics simulations: Application to silica. Europhysics Letters, 2008, 82, 17001.	2.0	102
43	Structural properties of a calcium aluminosilicate glass from molecular-dynamics simulations: A finite size effects study. Journal of Chemical Physics, 2004, 120, 10172-10181.	3.0	101
44	Relaxation dynamics of a viscous silica melt: The intermediate scattering functions. Physical Review E, 2001, 64, 041503.	2.1	97
45	Specific Heat of Amorphous Silica within the Harmonic Approximation. Journal of Physical Chemistry B, 1999, 103, 4104-4108.	2.6	85
46	Fluctuations, response and aging dynamics in a simple glass-forming liquid out of equilibrium. European Physical Journal B, 2000, 13, 319-333.	1.5	84
47	Amorphous silica modeled with truncated and screened Coulomb interactions: A molecular dynamics simulation study. Journal of Chemical Physics, 2007, 127, 114512.	3.0	83
48	Coupling and Decoupling between Translational and Rotational Dynamics in a Supercooled Molecular Liquid. Physical Review Letters, 2009, 102, 025702.	7.8	82
49	Heterogeneous Diffusion in a Reversible Gel. Physical Review Letters, 2007, 98, 135503.	7.8	80
50	Equilibrium phase diagram of a randomly pinned glass-former. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6914-6919.	7.1	79
51	Replica-exchange molecular dynamics simulation for supercooled liquids. Physical Review E, 2000, 61, 5473-5476.	2.1	77
52	Influence of the Glass Transition on the Liquid-Gas Spinodal Decomposition. Physical Review Letters, 2011, 106, 125702.	7.8	73
53	Finite-size effects in the dynamics of glass-forming liquids. Physical Review E, 2012, 86, 031502.	2.1	73
54	Glass transitions in one-, two-, three-, and four-dimensional binary Lennard-Jones systems. Journal of Physics Condensed Matter, 2009, 21, 035117.	1.8	70

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55	Thermodynamics of supercooled liquids in the inherent-structure formalism: a case study. Journal of Physics Condensed Matter, 2000, 12, 6525-6534.	1.8	67
56	Length-Scale-Dependent Relaxation in Colloidal Gels. Physical Review Letters, 2007, 98, 028303.	7.8	65
57	The relaxation dynamics of a confined glassy simple liquid. European Physical Journal E, 2003, 12, 5-9.	1.6	64
58	Intermittent dynamics and logarithmic domain growth during the spinodal decomposition of a glass-forming liquid. Journal of Chemical Physics, 2014, 140, 164502.	3.0	61
59	Stretched and compressed exponentials in the relaxation dynamics of a metallic glass-forming melt. Nature Communications, 2018, 9, 5334.	12.8	60
60	New optimization scheme to obtain interaction potentials for oxide glasses. Journal of Chemical Physics, 2018, 148, 194504.	3.0	60
61	Frequency-dependent specific heat of viscous silica. Physical Review B, 2001, 63, .	3.2	57
62	Evidence for the Weak Steric Hindrance Scenario in the Supercooled-State Reorientational Dynamics. Physical Review Letters, 2005, 94, 215701.	7.8	54
63	Test of mode coupling theory for a supercooled liquid of diatomic molecules. I. Translational degrees of freedom. Physical Review E, 1998, 58, 2131-2140.	2.1	53
64	Structure and relaxation dynamics of a colloidal gel. Europhysics Letters, 2005, 72, 1032-1038.	2.0	53
65	Structure and Dynamics of a Polymerâ€“Nanoparticle Composite: Effect of Nanoparticle Size and Volume Fraction. Macromolecules, 2018, 51, 5375-5391.	4.8	53
66	Test of mode coupling theory for a supercooled liquid of diatomic molecules. II.q-dependent orientational correlators. Physical Review E, 1998, 58, 2141-2150.	2.1	50
67	Classical and ab-initio molecular dynamic simulation of an amorphous silica surface. Computer Physics Communications, 2002, 147, 222-225.	7.5	45
68	Quantitative tests of mode-coupling theory for fragile and strong glass formers. Journal of Non-Crystalline Solids, 2002, 307-310, 181-187.	3.1	44
69	Water adsorption on amorphous silica surfaces: a Carâ€“Parrinello simulation study. Journal of Physics Condensed Matter, 2005, 17, 4005-4013.	1.8	44
70	The vibrational dynamics of vitreous silica: Classical force fields vs. first principles. Europhysics Letters, 2002, 60, 269-275.	2.0	43
71	Crossovers in the dynamics of supercooled liquids probed by an amorphous wall. Physical Review E, 2014, 89, 052311.	2.1	42
72	Structural and topological nature of plasticity in sheared granular materials. Nature Communications, 2018, 9, 2911.	12.8	41

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73	New interaction potentials for alkali and alkaline-earth aluminosilicate glasses. Journal of Chemical Physics, 2019, 150, 154505.	3.0	41
74	The -relaxation dynamics of a simple liquid. European Physical Journal B, 2000, 13, 83-86.	1.5	40
75	A microscopic model for colloidal gels with directional effective interactions: network induced glassy dynamics. Soft Matter, 2010, 6, 1547.	2.7	40
76	Water solubility in calcium aluminosilicate glasses investigated by first principles techniques. Journal of Solid State Chemistry, 2010, 183, 2786-2796.	2.9	38
77	A random walk description of the heterogeneous glassy dynamics of attracting colloids. Journal of Physics Condensed Matter, 2008, 20, 244126.	1.8	37
78	Hard X-rays as pump and probe of atomic motion in oxide glasses. Scientific Reports, 2017, 7, 3962.	3.3	37
79	The dynamics of supercooled silica: acoustic modes and boson peak. Journal of Non-Crystalline Solids, 1998, 235-237, 320-324.	3.1	36
80	Structure and dynamics of sodium disilicate. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1999, 79, 1981-1986.	0.6	36
81	First-principles molecular-dynamics simulations of a hydrous silica melt:â€‚Structural properties and hydrogen diffusion mechanism. Physical Review B, 2004, 70, .	3.2	35
82	Structural Relaxation of a Gel Modeled by Three Body Interactions. Physical Review Letters, 2009, 103, 248305.	7.8	35
83	Molecular dynamics simulation of the dynamics of supercooled silica. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1998, 77, 297-303.	0.6	34
84	Dynamic arrest in a liquid of symmetric dumbbells: Reorientational hopping for small molecular elongations. Journal of Chemical Physics, 2005, 123, 204505.	3.0	34
85	Structural and vibrational properties of a calcium aluminosilicate glass: classical force-fields vs. first-principles. Molecular Simulation, 2007, 33, 1093-1103.	2.0	33
86	Virtual experiments: Combining realistic neutron scattering instrument and sample simulations. Journal of Computational Physics, 2009, 228, 5251-5261.	3.8	33
87	First-principles study of a sodium borosilicate glass-former. II. The glass state. Physical Review B, 2015, 91, .	3.2	33
88	Growing length scales in a supercooled liquid close to an interface. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 283-290.	0.6	32
89	ÂAnatomy of cage formation in a two-dimensional glass-forming liquid. Nature, 2020, 587, 225-229.	27.8	32
90	Revealing the three-dimensional structure of liquids using four-point correlation functions. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 14032-14037.	7.1	30

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91	Dynamics of Nanoparticles in Polydisperse Polymer Networks: from Free Diffusion to Hopping. Macromolecules, 2021, 54, 8575-8589.	4.8	30
92	Nonlinear dynamic response of glass-forming liquids to random pinning. Physical Review E, 2014, 90, 052305.	2.1	29
93	When gel and glass meet: A mechanism for multistep relaxation. Physical Review E, 2010, 81, 040502.	2.1	28
94	New interaction potentials for borate glasses with mixed network formers. Journal of Chemical Physics, 2020, 152, 104501.	3.0	28
95	Aging in a simple glass former. Journal of Physics Condensed Matter, 2000, 12, 6385-6394.	1.8	27
96	A genetic algorithm for the atomistic design and global optimisation of substitutionally disordered materials. Computational Materials Science, 2009, 45, 111-117.	3.0	27
97	Gelling by Heating. Scientific Reports, 2013, 3, 2451.	3.3	27
98	First-principles study of a sodium borosilicate glass-former. I. The liquid state. Physical Review B, 2015, 91, .	3.2	27
99	Locally favoured structures and dynamic length scales in a simple glass-former. Journal of Statistical Mechanics: Theory and Experiment, 2017, 2017, 024001.	2.3	27
100	Numerical study of the electronic structure of amorphous silica. Physical Review B, 1997, 56, 9469-9476.	3.2	26
101	Statics and dynamics of the ten-state mean-field Potts glass model: a Monte Carlo study. Journal of Physics A, 2002, 35, 191-216.	1.6	26
102	Vibrational properties of a sodium tetrasilicate glass: Ab initio versus classical force fields. Journal of Non-Crystalline Solids, 2005, 351, 1144-1150.	3.1	26
103	Ideal Glass States Are Not Purely Vibrational: Insight from Randomly Pinned Glasses. Physical Review Letters, 2018, 121, 205501.	7.8	26
104	Effect of Chain Polydispersity on the Elasticity of Disordered Polymer Networks. Macromolecules, 2021, 54, 3769-3779.	4.8	26
105	Dynamics of a one-dimensional â€˜â€˜glassâ€™â€™ model: Ergodicity and nonexponential relaxation. Physical Review A, 1990, 42, 2191-2203.	2.5	25
106	Finite-size scaling at the dynamical transition of the mean-field 10-state Potts glass. Europhysics Letters, 2001, 53, 756-761.	2.0	25
107	Computer simulation study of the phase behavior and structural relaxation in a gel-former modeled by three-body interactions. Journal of Chemical Physics, 2011, 134, 164506.	3.0	24
108	Cooling Rate Dependence of the Internal Structure of a Lennard-Jones Glass. Europhysics Letters, 1995, 32, 715-719.	2.0	23

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109	The structural relaxation of molten sodium disilicate. Journal of Physics Condensed Matter, 2002, 14, 9237-9253.	1.8	23
110	Developing empirical potentials from ab initio simulations: The case of amorphous silica. Computational Materials Science, 2016, 124, 323-334.	3.0	23
111	Dynamic and thermodynamic crossover scenarios in the Kob-Andersen mixture: Insights from multi-CPU and multi-GPU simulations. European Physical Journal E, 2018, 41, 62.	1.6	23
112	Tracking Heterogeneous Dynamics During theÎ±Relaxation of a Simple Glass Former. Physical Review Letters, 2008, 101, 190601.	7.8	22
113	Static and dynamical properties of a supercooled liquid confined in a pore. European Physical Journal Special Topics, 2000, 10, Pr7-33-Pr7-36.	0.2	22
114	Aging in a Lennard-Jones glass. Physica A: Statistical Mechanics and Its Applications, 1999, 263, 234-241.	2.6	21
115	Structure and dynamics oflâ˜'Ge: Neutron scattering experiments andab initiomolecular dynamics simulations. Physical Review B, 2007, 75, .	3.2	21
116	The critical role of the interaction potential and simulation protocol for the structural and mechanical properties of sodosilicate glasses. Journal of Non-Crystalline Solids, 2020, 532, 119895.	3.1	21
117	Testing mode-coupling theory for a supercooled binary Lennard-Jones mixture. Transport Theory and Statistical Physics, 1995, 24, 1179-1198.	0.4	20
118	Statics and dynamics of the ten-state nearest-neighbour Potts glass on the simple-cubic lattice. Journal of Physics A, 2003, 36, 10847-10866.	1.6	20
119	Relaxation dynamics in a transient network fluid with competing gel and glass phases. Journal of Chemical Physics, 2015, 142, 174503.	3.0	20
120	The Mode-Coupling Theory of the Glass Transition. ACS Symposium Series, 1997, , 28-44.	0.5	19
121	Translational and Rotational Dynamical Heterogeneities in Granular Systems. Physical Review Letters, 2018, 121, 018002.	7.8	19
122	Growing length scales in a supercooled liquid close to an interface. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 283-290.	0.6	19
123	Relaxation dynamics in a lattice gas: A test of the mode-coupling theory of the ideal glass transition. Physical Review E, 1993, 47, 3281-3302.	2.1	18
124	Small-Angle Excess Scattering: Glassy Freezing or Local Orientational Ordering?. Physical Review Letters, 1997, 78, 2136-2139.	7.8	18
125	Phase diagram of a reentrant gel of patchy particles. Journal of Chemical Physics, 2013, 139, 244910.	3.0	18
126	Determining the Mesh Size of Polymer Solutions via the Pore Size Distribution. Macromolecules, 2020, 53, 2568-2581.	4.8	18

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127	Network formation and relaxation dynamics in a new model for colloidal gelation. Journal of Non-Newtonian Fluid Mechanics, 2008, 149, 28-33.	2.4	17
128	Surface of a calcium aluminosilicate glass by classical and ab initio molecular dynamics simulations. Surface Science, 2008, 602, 114-125.	1.9	17
129	Friction-Controlled Entropy-Stability Competition in Granular Systems. Physical Review Letters, 2020, 125, 268005.	7.8	17
130	Dynamics of a rigid rod in a glassy medium. Europhysics Letters, 2004, 67, 820-826.	2.0	16
131	Ergodicity of a system with second-order phase transition: applicability of mode coupling theory. Journal of Physics Condensed Matter, 1991, 3, 9195-9214.	1.8	14
132	Investigating the cooling rate dependence of amorphous silica: A computer simulation study. Zeitschrift Fur Elektrotechnik Und Elektrochemie, 1996, 100, 1399-1401.	0.9	14
133	Evidence against a glass transition in the 10-state short-range Potts glass. Europhysics Letters, 2002, 59, 546-551.	2.0	14
134	Out-of-equilibrium dynamics of a fractal model gel. Journal of Chemical Physics, 2009, 130, 194904.	3.0	14
135	Predicting the Structure of Alloys Using Genetic Algorithms. Materials and Manufacturing Processes, 2011, 26, 348-353.	4.7	14
136	Reply to "Characterizing dynamic length scales in glass-forming liquids". Nature Physics, 2012, 8, 697-697.	16.7	14
137	Realistic tunnelling states for the magnetic effects in non-metallic real glasses. Philosophical Magazine, 2016, 96, 648-703.	1.6	14
138	Methods to locate saddle points in complex landscapes. Journal of Chemical Physics, 2017, 147, 204104.	3.0	14
139	Experimental Test of the Edwards Volume Ensemble for Tapped Granular Packings. Physical Review Letters, 2021, 127, 018002.	7.8	14
140	Cooling processes for a 1D structural 'glass' model. Journal of Physics A, 1990, 23, 4673-4689.	1.6	13
141	Molecular dynamics study of the diffusion of sodium in amorphous silica. Journal of Non-Crystalline Solids, 2002, 307-310, 939-945.	3.1	13
142	Relaxation dynamics of a linear molecule in a random static medium: A scaling analysis. Journal of Chemical Physics, 2004, 121, 380.	3.0	13
143	Modeling glass materials. Ceramics International, 2005, 31, 713-717.	4.8	13
144	Origin of Noncubic Scaling Law in Disordered Granular Packing. Physical Review Letters, 2017, 118, 238002.	7.8	13

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145	Glass physics: still not transparent. Physics World, 1999, 12, 54-54.	0.0	12
146	COOLING RATE DEPENDENCE AND DYNAMIC HETEROGENEITY BELOW THE GLASS TRANSITION IN A LENNARDâ€“JONES GLASS. International Journal of Modern Physics C, 1999, 10, 1443-1451.	1.7	11
147	Aging and the fluctuation dissipation ratio in a Lennard-Jones fluid. Journal of Physics Condensed Matter, 1999, 11, A247-A252.	1.8	11
148	The vibrational density of states of a disordered gel model. Journal of Chemical Physics, 2011, 135, 104502.	3.0	11
149	Spatial Correlations in Glass-Forming Liquids Across The Mode-Coupling Crossover. Physics Procedia, 2012, 34, 70-79.	1.2	11
150	Basis glass states: New insights from the potential energy landscape. Journal of Non-Crystalline Solids: X, 2019, 3, 100031.	1.2	11
151	The dynamics of melts containing mobile ions: computer simulations of sodium silicates. Journal of Physics Condensed Matter, 2003, 15, S903-S908.	1.8	10
152	On the nature of native defects in high OH-content silica glasses: A first-principles study. Europhysics Letters, 2008, 82, 57004.	2.0	10
153	Structure and vibrational properties of sodium silicate glass surfaces. Journal of Chemical Physics, 2020, 153, 124503.	3.0	10
154	Origin of the non-linear elastic behavior of silicate glasses. Acta Materialia, 2022, 231, 117855.	7.9	10
155	Roughness and Scaling Properties of Oxide Glass Surfaces at the Nanoscale. Physical Review Letters, 2021, 126, 066101.	7.8	9
156	Cooling-rate dependence of the residual energy of a one-dimensional configurational glass model. European Physical Journal B, 1987, 68, 245-249.	1.5	8
157	Virtual neutron scattering experiments. Physica B: Condensed Matter, 2004, 350, 151-154.	2.7	8
158	Chain conformation in thin polymer layers as revealed by simulations of ideal random walks. European Physical Journal E, 2003, 12, 143-146.	1.6	7
159	Dynamics of a Supercooled Lennard-Jones System: Qualitative and Quantitative Tests of Mode-Coupling Theory. Progress of Theoretical Physics Supplement, 1997, 126, 35-42.	0.1	7
160	Kob and Barrat Reply:. Physical Review Letters, 1998, 81, 931-931.	7.8	6
161	Thermodynamics and aging in supercooled liquids: the energy landscape approach. Physica A: Statistical Mechanics and Its Applications, 2002, 306, 343-350.	2.6	6
162	Static and dynamic properties of a reversible gel. , 2009, , .		6

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163	Connecting real glasses to mean-field models. Journal of Chemical Physics, 2021, 154, 094506.	3.0	6
164	First-principles study of the surface of silica and sodium silicate glasses. Physical Review B, 2021, 103, .	3.2	6
165	Transport properties of sodium in a silicate glass: A numerical study. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 597-606.	0.6	5
166	Simulation of Models for the Glass Transition: Is There Progress?. Lecture Notes in Physics, 2002, , 199-228.	0.7	5
167	Viscosity of silica and doped silica melts: evidence for a crossover temperature. Journal of the American Ceramic Society, 0, , .	3.8	4
168	The high-temperature dynamics of a mean-field Potts glass. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 663-668.	0.6	4
169	Ergodicity, non-exponential relaxation and cooling processes for a simple 1-D â€˜glassâ€™ model. Journal of Non-Crystalline Solids, 1991, 131-133, 248-251.	3.1	3
170	Scaling behavior in the dynamics of a supercooled Lennard-Jones mixture. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1994, 16, 1291-1295.	0.4	3
171	Ergodicity breaking in a mean field Potts glass: A Monte Carlo investigation. Computer Physics Communications, 2002, 147, 154-157.	7.5	3
172	The interplay between structure and ionic motions in glasses. Computing in Science and Engineering, 2003, 5, 60-66.	1.2	3
173	Dynamics of a rod in a random static environment: non-Gaussian behaviour on large length scales. Philosophical Magazine, 2004, 84, 1383-1388.	1.6	3
174	Predicting complex mineral structures using genetic algorithms. Journal of Physics Condensed Matter, 2015, 27, 425201.	1.8	3
175	Reply to Chakrabarty et al.: Particles move even in ideal glasses. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E4821-2.	7.1	3
176	Dynamics of the Glass Structure. Schott Series on Glass and Glass Ceramics, 1999, , 313-398.	0.7	3
177	Connecting Packing Efficiency of Binary Hard Sphere Systems to Their Intermediate Range Structure. Physical Review Letters, 2021, 127, 278001.	7.8	3
178	Relaxation dynamics of metastable antiferromagnetic states. Journal of Applied Physics, 1990, 67, 5430-5432.	2.5	2
179	Molecular Dynamics Simulation of Confined Glass Forming Liquids. Materials Research Society Symposia Proceedings, 2000, 651, 1.	0.1	2
180	Computer Simulation of the Glass Transition in Thin Films. AIP Conference Proceedings, 2004, , .	0.4	2

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181	Dynamics of a rod in a homogeneous/inhomogeneous frozen disordered medium: Correlation functions and non-Gaussian effects. AIP Conference Proceedings, 2004, , .	0.4	2
182	Comment on â€œResidual entropy and structural disorder in glass: A two level model and a review of spatial and ensemble vs. temporal samplingâ€•by A. Takada, R. Conradt, and P. Richet [J. Non-Cryst. Solids, 360, 13 (2013)]. Journal of Non-Crystalline Solids, 2014, 387, 28-29.	3.1	2
183	Structuring polymer gels via catalytic reactions. Soft Matter, 2017, 13, 8706-8716.	2.7	2
184	Computer Simulations of Supercooled Liquids. , 2006, , 1-30.		2
185	Transport properties of sodium in a silicate glass: a numerical study. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 597-606.	0.6	2
186	Equilibrating Glassy Systems with Parallel Tempering. Springer Proceedings in Physics, 2001, , 153-166.	0.2	2
187	Are strongly confined colloids good models for two dimensional liquids?. Journal of Chemical Physics, 2022, 156, 164903.	3.0	2
188	KAM tori, chaotic motion and exactly integrable islands for a non-differentiable Hamiltonian system. Journal of Physics A, 1989, 22, L633-L639.	1.6	1
189	Computer simulations of supercooled liquids and glasses what is feasible?. Computational Materials Science, 1995, 4, 345-348.	3.0	1
190	The high-temperature dynamics of a mean-field Potts glass. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2002, 82, 663-668.	0.6	1
191	Static and dynamic glass transitions in the 10-state Potts glass: What can Monte Carlo simulations contribute?. Computer Physics Communications, 2002, 146, 9-15.	7.5	1
192	Computer Simulation of Molten and Glassy Silica and its Mixtures with Sodium Oxide and Aluminium Oxide. , 2005, , 35-53.		1
193	Network Induced Relaxation Dynamics in Colloidal Gels. AIP Conference Proceedings, 2008, , .	0.4	1
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