Li-Min Wang

List of Publications by Year
in descending order

94 papers	3,382 citations	136950 32 h-index	149698 56 g-index
96 all docs	96 docs citations	96 times ranked	2532 citing authors

#	Article	IF	Citations
1	Direct determination of kinetic fragility indices of glassforming liquids by differential scanning calorimetry: Kinetic versus thermodynamic fragilities. Journal of Chemical Physics, 2002, 117, 10184-10192.	3.0	300
2	Fragility and thermodynamics in nonpolymeric glass-forming liquids. Journal of Chemical Physics, 2006, 125, 074505.	3.0	262
3	Ionic Liquids of Chelated Orthoborates as Model Ionic Glassformers. Journal of Physical Chemistry B, 2003, 107, 11749-11756.	2.6	217
4	Many-Body Nature of Relaxation Processes in Glass-Forming Systems. Journal of Physical Chemistry Letters, 2012, 3, 735-743.	4.6	171
5	Dynamics of glass-forming liquids. IX. Structural versus dielectric relaxation in monohydroxy alcohols. Journal of Chemical Physics, 2004, 121, 11170.	3.0	119
6	Comparing calorimetric and dielectric polarization modes in viscous 2-ethyl-1-hexanol. Journal of Chemical Physics, 2007, 126, 104503.	3.0	112
7	Superior Blends Solid Polymer Electrolyte with Integrated Hierarchical Architectures for All-Solid-State Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 36886-36896.	8.0	106
8	Measuring the Configurational Heat Capacity of Liquids. Physical Review Letters, 2007, 99, 185701.	7.8	100
9	Exponential probe rotation in glass-forming liquids. Journal of Chemical Physics, 2004, 120, 11082-11089.	3.0	80
10	Calorimetric versus kinetic glass transitions in viscous monohydroxy alcohols. Journal of Chemical Physics, 2008, 128, 084503.	3.0	80
11	Debye Type Dielectric Relaxation and the Glass Transition of Alcohols. Journal of Physical Chemistry B, 2005, 109, 11091-11094.	2.6	69
12	Interfaceâ€Engineered Li₇La₃Zr₂O₁₂â€Based Garnet Solid Electrolytes with Suppressed Liâ€Dendrite Formation and Enhanced Electrochemical Performance. ChemSusChem, 2018, 11, 3774-3782.	6.8	64
13	Relaxation time dispersions in glass forming metallic liquids and glasses. Journal of Chemical Physics, 2008, 128, 164503.	3.0	63
14	Primary and secondary relaxation time dispersions in fragile supercooled liquids. Physical Review B, 2007, 76, .	3.2	62
15	Identification of dielectric and structural relaxations in glass-forming secondary amides. Journal of Chemical Physics, 2005, 123, 054516.	3.0	56
16	Intramicellar Glass Transition and Liquid Dynamics in Soft Confinement. Physical Review Letters, 2004, 92, 095701.	7.8	52
17	Response to â€œComment on â€˜Direct determination of the fragility indices of glassforming liquids by differential scanning calorimetry: Kinetic versus thermodynamic fragilitiesâ€™â€Sâ€•[J. Chem. Phys. 118, 10351 (2003)]. Journal of Chemical Physics, 2003, 118, 10353-10355.	3.0	49
18	Nature of the Sub-Rouse Modes in the Glassâ^'Rubber Transition Zone of Amorphous Polymers. Macromolecules, 2011, 44, 3605-3610.	4.8	49

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19	Diluent Effects on the Debye-Type Dielectric Relaxation in Viscous Monohydroxy Alcohols. Journal of Physical Chemistry B, 2005, 109, 23255-23262.	2.6	47
20	Glass Transition Dynamics and Boiling Temperatures of Molecular Liquids and Their Isomers. Journal of Physical Chemistry B, 2007, 111, 3201-3207.	2.6	47
21	Great thermoelectric power factor enhancement of CoSb3 through the lightest metal element filling. Applied Physics Letters, 2011, 98, .	3.3	47
22	Diffusion-controlled crystal growth in deeply undercooled melt on approaching the glass transition. Physical Review B, 2011, 83, .	3.2	47
23	Enthalpy Relaxation upon Glass Transition and Kinetic Fragility of Molecular Liquids. Journal of Physical Chemistry B, 2009, 113, 5168-5171.	2.6	46
24	Bulk Re₂C: Crystal Structure, Hardness, and Ultra-incompressibility. Crystal Growth and Design, 2010, 10, 5024-5026.	3.0	46
25	Peculiar structure and tensile strength of WB4: nonstoichiometric origin. AIP Advances, 2012, 2, .	1.3	46
26	Coupling of Caged Molecule Dynamics to JG Î²-Relaxation II: Polymers. Journal of Physical Chemistry B, 2015, 119, 12502-12518.	2.6	46
27	Structural Relaxation Dynamics in Binary Glass-Forming Molecular Liquids with Ideal and Complex Mixing Behavior. Journal of Physical Chemistry B, 2010, 114, 3618-3622.	2.6	45
28	A â€œuniversalâ€•criterion for metallic glass formation. Applied Physics Letters, 2012, 100, 261913.	3.3	43
29	Coupling of Caged Molecule Dynamics to JG Î²-Relaxation III:van der Waals Glasses. Journal of Physical Chemistry B, 2015, 119, 12519-12525.	2.6	42
30	Ideal Mixing Behavior of the Debye Process in Supercooled Monohydroxy Alcohols. Journal of Physical Chemistry B, 2005, 109, 8767-8773.	2.6	38
31	Dynamics of glass-forming liquids. VIII. Dielectric signature of probe rotation and bulk dynamics in branched alkanes. Journal of Chemical Physics, 2004, 121, 8960-8967.	3.0	36
32	Glass Transition in Binary Eutectic Systems: Best Glass-Forming Composition. Journal of Physical Chemistry B, 2010, 114, 12080-12084.	2.6	33
33	Microscopic dynamics perspective on the relationship between Poisson's ratio and ductility of metallic glasses. Journal of Chemical Physics, 2014, 140, 044511.	3.0	33
34	Glass formability in medium-sized molecular systems/pharmaceuticals. I. Thermodynamics vs. kinetics. Journal of Chemical Physics, 2016, 144, 174502.	3.0	32
35	Enthalpy and dielectric relaxations in supercooled methyl m-toluate. Journal of Chemical Physics, 2009, 130, 204515.	3.0	31
36	An upper limit to kinetic fragility in glass-forming liquids. Journal of Chemical Physics, 2011, 134, 044522.	3.0	28

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37	Dielectric relaxation of long-chain glass-forming monohydroxy alcohols. Journal of Chemical Physics, 2013, 139, 164504.	3.0	26
38	Direct Evidence of Relaxation Anisotropy Resolved by High Pressure in a Rigid and Planar Glass Former. Journal of Physical Chemistry Letters, 2017, 8, 4341-4346.	4.6	25
39	Activation Entropy as a Key Factor Controlling the Memory Effect in Glasses. Physical Review Letters, 2020, 125, 135501.	7.8	25
40	Relating Ultrastable Glass Formation to Enhanced Surface Diffusion via the Johariâ€“Goldstein Î²-Relaxation in Molecular Glasses. Journal of Physical Chemistry Letters, 2017, 8, 2739-2744.	4.6	23
41	Segmental Î±-Relaxation for the First Step and Sub-Rouse Modes for the Second Step in Enthalpy Recovery in the Glassy State of Polystyrene. Macromolecules, 2019, 52, 1440-1446.	4.8	23
42	The JG Î²-relaxation in water and impact on the dynamics of aqueous mixtures and hydrated biomolecules. Journal of Chemical Physics, 2019, 151, 034504.	3.0	22
43	Prediction of a superconductive superhard material: Diamond-like BC7. Journal of Applied Physics, 2011, 110, 013501.	2.5	21
44	Dependence of calorimetric glass transition profiles on relaxation dynamics in non-polymeric glass formers. Journal of Non-Crystalline Solids, 2016, 433, 20-27.	3.1	18
45	Presence of global and local Î±-relaxations in an alkyl phosphate glass former. Journal of Chemical Physics, 2017, 147, 134501.	3.0	18
46	Comparative study of dynamics in glass forming mixtures of Debye-type N-ethylacetamide with water, alcohol, and amine. Journal of Chemical Physics, 2014, 141, 104506.	3.0	17
47	Interplay of intermolecular interactions and flexibility to mediate glass forming ability and fragility: A study of chemical analogs. Journal of Chemical Physics, 2018, 148, 124504.	3.0	17
48	Variation in entropies of fusion driven by mixing in binary glass forming eutectics. Journal of Alloys and Compounds, 2018, 736, 12-16.	5.5	17
49	Clarifying the nature of the Johari-Goldstein Î²-relaxation and emphasising its fundamental importance. Philosophical Magazine, 2020, 100, 2596-2613.	1.6	17
50	Kinetic fragility of binary and ternary glass forming liquid mixtures. European Physical Journal E, 2011, 34, 86.	1.6	16
51	Glass transition and mixing thermodynamics of a binary eutectic system. Physical Chemistry Chemical Physics, 2014, 16, 3586.	2.8	16
52	Highly transparent electrorheological fluids of silica nanoparticles: the effect of urea modification. Journal of Materials Chemistry C, 2016, 4, 7875-7882.	5.5	16
53	Component Dynamics in Miscible Mixtures of Water and Methanol. Journal of Physical Chemistry B, 2011, 115, 8242-8248.	2.6	15
54	Anomalous Component Dynamics of a Binary Mixture of Associating Glass-Forming Liquids. Journal of Physical Chemistry B, 2011, 115, 719-724.	2.6	15

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55	Polymorphism in glassy silicon: Inherited from liquid-liquid phase transition in supercooled liquid. Scientific Reports, 2015, 5, 8590.	3.3	15
56	Unveiling the Dependence of Glass Transitions on Mixing Thermodynamics in Miscible Systems. Scientific Reports, 2015, 5, 8500.	3.3	14
57	Relaxation dynamics in the strong chalcogenide glass-former of Ge22Se78. Scientific Reports, 2017, 7, 40547.	3.3	14
58	Relations between the Structural Î±-Relaxation and the Johariâ€“Goldstein Î²-Relaxation in Two Monohydroxyl Alcohols: 1-Propanol and 5-Methyl-2-hexanol. Journal of Physical Chemistry B, 2019, 123, 714-719.	2.6	14
59	â€‡Dielectric relaxation dynamics in glass-forming mixtures of propanediol isomers. Physical Review E, 2010, 82, 062502.	2.1	12
60	Debye-type dielectric relaxation in glass-forming 3-methylthio-1-hexanol. Journal of Chemical Physics, 2013, 139, 024503.	3.0	11
61	Anomaly in dielectric relaxation dispersion of glass-forming alkoxy alcohols. Journal of Chemical Physics, 2015, 142, 214505.	3.0	11
62	Secondary relaxation dynamics in rigid glass-forming molecular liquids with related structures. Journal of Chemical Physics, 2015, 143, 104505.	3.0	11
63	Structural disorder in metallic glass-forming liquids. Scientific Reports, 2016, 6, 27708.	3.3	11
64	Pressure Effect on Orderâ€“Disorder Ferroelectric Transition in a Hydrogen-Bonded Metalâ€“Organic Framework. Journal of Physical Chemistry Letters, 2020, 11, 9566-9571.	4.6	11
65	Entropic Nature of the Debye Relaxation in Glass-Forming Monoalcohols. Journal of Physical Chemistry Letters, 2020, 11, 5792-5797.	4.6	11
66	Preparation of Cellulose/Laponite Composite Particles and Their Enhanced Electrorheological Responses. Molecules, 2021, 26, 1482.	3.8	11
67	Ionic-liquid-modified TiO2 spheres and their enhanced electrorheological responses. Journal of Molecular Liquids, 2021, 338, 116696.	4.9	11
68	A new secondary relaxation in the rigid and planar 1-methylindole: Evidence from binary mixture studies. Journal of Chemical Physics, 2016, 145, 214501.	3.0	10
69	Communication: Enthalpy relaxation in a metal-organic zeolite imidazole framework (ZIF-4) glass-former. Journal of Chemical Physics, 2017, 146, 121101.	3.0	10
70	Deviations of dynamic parameters characterizing enthalpic and dielectric relaxations in glass forming alkyl phosphates. Journal of Chemical Physics, 2018, 149, 204505.	3.0	9
71	Prediction of a conducting hard ductile cubic IrC. Physica Status Solidi - Rapid Research Letters, 2010, 4, 230-232.	2.4	8
72	Revisiting the glass transition and dynamics of supercooled benzene by calorimetric studies. Journal of Chemical Physics, 2015, 143, 164501.	3.0	8

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73	Non-isothermal crystallization kinetics of Gaâ€“Snâ€“Te chalcogenide glasses by differential scanning calorimetry. Journal of Materials Science, 2017, 52, 2924-2933.	3.7	8
74	Melting entropy and its connection to kinetic fragility in glass forming materials. Journal of Alloys and Compounds, 2017, 696, 754-759.	5.5	8
75	Effects of minor addition on glass forming ability: Thermal versus elastic criteria. Journal of Applied Physics, 2010, 107, 053515.	2.5	7
76	Isochronal Superposition of the Structural Î±-Relaxation and Invariance of Its Relation to the Î²-Relaxation to Changes of Thermodynamic Conditions in Methyl m-Toluate. Journal of Physical Chemistry B, 2020, 124, 6690-6697.	2.6	7
77	Glass Transitions in Viscous Monohydroxy Alcohols: Calorimetry Versus Dielectric Relaxation. International Journal of Thermophysics, 2008, 29, 2055-2061.	2.1	6
78	Relaxation dynamics in glass forming liquids with related molecular structures. Chemical Physics Letters, 2012, 551, 81-85.	2.6	6
79	Enhanced Electrorheological Response of Cellulose: A Double Effect of Modification by Urea-Terminated Silane. Polymers, 2018, 10, 867.	4.5	6
80	Experimental evidence of co-existence of equilibrium and nonequilibrium in two-glass-transition miscible mixtures. Physical Chemistry Chemical Physics, 2020, 22, 25631-25637.	2.8	6
81	Identifying the structural relaxation dynamics in a strongly asymmetric binary glass former. Journal of Chemical Physics, 2021, 154, 144504.	3.0	5
82	Titanium Dioxide Nanoparticles Modified with Disulfonic Acid Functionalized Imidazolium Ionic Liquids for Use as Electrorheological Materials. ACS Applied Nano Materials, 2021, 4, 12382-12392.	5.0	5
83	On glass formation thermodynamics: Enthalpy vs. Entropy. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 196401.	0.5	4
84	Molecular Dynamics Simulation of Structural Signals of Shear-Band Formation in Zr46Cu46Al8 Metallic Glasses. Materials, 2018, 11, 2564.	2.9	3
85	The glass formation of sodium metaphosphate: Perspective from the correlation of thermodynamic and kinetic parameters. Journal of Non-Crystalline Solids, 2021, 570, 121011.	3.1	3
86	Understanding of glass-forming ability of Zrâ€“Cu alloys from the perspective of vibrational entropy of crystalline phases. Journal of Applied Physics, 2022, 131, .	2.5	3
87	Direct evidence of entropy driven fluid-like â€“ glass-like transition in microgel suspensions. Applied Physics Letters, 2017, 110, 071902.	3.3	2
88	Change in molecular dynamics with structures of the trialkyl phosphates and in mixtures with ortho-terphenyl. Journal of Non-Crystalline Solids, 2020, 530, 119804.	3.1	2
89	Unveiling the strong dependence of the Î±-relaxation dispersion on mixing thermodynamics in binary glass-forming liquids. Physical Chemistry Chemical Physics, 2021, 23, 5644-5651.	2.8	2
90	Relaxation dynamics in multicomponent glass formers with adjustable concentration fluctuations. Journal of Non-Crystalline Solids: X, 2021, 11-12, 100072.	1.2	2

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91	Electrorheological Responses of Acid-Hydrolyzed Cellulose Suspensions. Current Smart Materials, 2018, 3, 58-67.	0.5	1
92	Slow Dynamics and the Glass Transition in Confining Systems. Materials Research Society Symposia Proceedings, 2003, 790, 1.	0.1	0
93	Unusual Debye relaxation in 4-methyl-2-pentanol evidenced by high-pressure dielectric studies. Journal of Physics Condensed Matter, 2021, 33, 025401.	1.8	0
94	Quantifying Concentration Fluctuations in Binary Glass-Forming Systems by Small- and Wide-Angle X-ray Scattering. Journal of Physical Chemistry Letters, 2022, 13, 2205-2210.	4.6	0