Junko Habasaki

List of Publications by Year
in descending order

92	1,773	257357 24	289141 40
papers	citations	h-index	g-index

101	101	101	880
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Heterogeneous dynamics of ionic liquids from molecular dynamics simulations. Journal of Chemical Physics, 2008, 129, 194501.	1.2	133
2	MD study of the mixed alkali effect in a lithium&.zsbnd;potassium metasilicate glass. Journal of Non-Crystalline Solids, 1995, 183, 12-21.	1.5	93
3	Thermodynamic scaling of Î±-relaxation time and viscosity stems from the Johari-Goldstein Î²-relaxation or the primitive relaxation of the coupling model. Journal of Chemical Physics, 2012, 137, 034511.	1.2	82
4	Molecular Dynamics Simulation of Alkali Silicates Based on the Quantum Mechanical Potential Surfaces. Molecular Simulation, 1992, 9, 319-326.	0.9	81
5	MD study of the mixed alkali effect in terms of the potential surface in the lithium-potassium metasilicate glass. Journal of Non-Crystalline Solids, 1996, 208, 181-190.	1.5	73
6	Molecular dynamics study of the mechanism of ion transport in lithium silicate glasses: Characteristics of the potential energy surface and structures. Physical Review B, 2004, 69, .	1.1	65
7	Fracton excitation and LÃ©vy flight dynamics in alkali silicate glasses. Physical Review B, 1997, 55, 6309-6315.	1.1	61
8	Origins of the two-step relaxation and the boson peak in an alkali silicate glass studied by molecular-dynamics simulation. Physical Review E, 1995, 52, 2681-2687.	0.8	56
9	Molecular dynamics simulation of ion dynamics in glassy ionic conductors: Evidence of the primitive ion hopping process. Journal of Non-Crystalline Solids, 2006, 352, 5170-5177.	1.5	56
10	Comparison of Dynamics of Ions in Ionically Conducting Materials and Dynamics of Glass-Forming Substances: Remarkable Similarities. Zeitschrift Fur Physikalische Chemie, 2005, 219, 47-70.	1.4	54
11	Molecular dynamics study of cage decay, near constant loss, and crossover to cooperative ion hopping in lithium metasilicate. Physical Review E, 2002, 66, 021205.	0.8	52
12	A combined molecular dynamics simulation, experimental and coupling model study of the ion dynamics in glassy ionic conductors. Journal of Physics Condensed Matter, 2003, 15, S1607-S1632.	0.7	52
13	The mixed alkali effect in ionically conducting glasses revisited: A study by molecular dynamics simulation. Physical Chemistry Chemical Physics, 2007, 9, 4673.	1.3	50
14	Characteristics of slow and fast ion dynamics in a lithium metasilicate glass. Physical Review E, 1999, 59, 6962-6966.	0.8	44
15	Comparison of ion sites and diffusion paths in glasses obtained by molecular dynamics simulations and bond valence analysis. Physical Review B, 2007, 75, .	1.1	37
16	Dynamics of caged ions in glassy ionic conductors. Journal of Chemical Physics, 2004, 120, 8195-8200.	1.2	35
17	â€œCooperativity blockageâ€•in the mixed alkali effect as revealed by molecular-dynamics simulations of alkali metasilicate glass. Journal of Chemical Physics, 2004, 121, 925-934.	1.2	31
18	Molecular-dynamics study of glass formation in the Li2SiO3system. Molecular Physics, 1990, 70, 513-528.	0.8	28

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19	Breakdown of the Stokesâ€“Einstein relation in Lennard-Jones glassforming mixtures with different interaction potential. Journal of Chemical Physics, 2009, 131, 104510.	1.2	28
20	Dynamical fluctuations in ion conducting glasses: Slow and fast components in lithium metasilicate. Physical Review E, 2002, 65, 021604.	0.8	27
21	Molecular Dynamics Study of the Dynamics Near the Glass Transition in Ionic Liquids. Analytical Sciences, 2008, 24, 1321-1327.	0.8	27
22	Ion Dynamics in Pure and Mixed Alkali Glasses -Separation of the Spatial and Temporal Aspects-. Journal of the Physical Society of Japan, 1998, 67, 2012-2017.	0.7	25
23	Molecular Dynamics Study of Thermodynamic Scaling of the Glass-Transition Dynamics in Ionic Liquids over Wide Temperature and Pressure Ranges. Journal of Physical Chemistry B, 2010, 114, 3902-3911.	1.2	25
24	Molecular dynamics simulation of molten Li2CO3and Na2CO3. Molecular Physics, 1990, 69, 115-128.	0.8	23
25	Time series analysis of ion dynamics in glassy ionic conductors obtained by a molecular dynamics simulation. Journal of Chemical Physics, 2005, 122, 054507.	1.2	21
26	Mixing effects in glass-forming Lennard-Jones mixtures. Journal of Chemical Physics, 2009, 130, 154505.	1.2	21
27	Molecular Dynamics Study of Li₂SiO₃in the Liquid and Glassy States. Molecular Simulation, 1992, 8, 179-195.	0.9	20
28	Rigidity and soft percolation in the glass transition of an atomistic model of ionic liquid, 1-ethyl-3-methyl imidazolium nitrate, from molecular dynamics simulationsâ€”Existence of infinite overlapping networks in a fragile ionic liquid. Journal of Chemical Physics, 2015, 142, 164501.	1.2	19
29	Molecular dynamics study of single and mixed alkali metasilicates-spatial and temporal characterization of the dynamics in the supercooled liquid and glassy states. Journal of Non-Crystalline Solids, 2002, 307-310, 930-938.	1.5	17
30	Multifractal analysis of dynamic potential surface of ion-conducting materials. Journal of Chemical Physics, 2005, 122, 214725.	1.2	16
31	On the nature of the heterogeneous dynamics of ions in ionic conducting glasses. Journal of Non-Crystalline Solids, 2007, 353, 3956-3968.	1.5	16
32	Many-ion Dynamics: The Common View of CM and MC. Zeitschrift Fur Physikalische Chemie, 2009, 223, 1311-1325.	1.4	16
33	Fast and slow dynamics in single and mixed alkali silicate glasses. Journal of Non-Crystalline Solids, 2003, 320, 281-290.	1.5	15
34	Molecular dynamics study of network statistics in lithium disilicate: Qn distribution and the pressure-volume diagram. Journal of Chemical Physics, 2013, 139, 064503.	1.2	15
35	Relaxation Processes and the Mixed Alkali Effect in Alkali Metasilicate Glasses. Materials Research Society Symposia Proceedings, 1996, 455, 91.	0.1	14
36	Loosening of the structure in a mixed alkali glass. Physical Review E, 1998, 58, 5111-5114.	0.8	14

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37	Glass Transition Temperatures Studied by MD Simulation of Some Alkali Metasilicates. Molecular Simulation, 1993, 10, 19-26.	0.9	13
38	Refinements in the characterization of the heterogeneous dynamics of Li ions in lithium metasilicate. Journal of Chemical Physics, 2008, 129, 034503.	1.2	13
39	Several routes to the glassy states in the one component soft core system: Revisited by molecular dynamics. Journal of Chemical Physics, 2011, 134, 084505.	1.2	13
40	A Molecular Dynamics Study for Lithium Metasilicate: Liquid and Quenched Supercooled States. Molecular Simulation, 1992, 9, 49-63.	0.9	12
41	Monte Carlo simulation of the mixed alkali effect with cooperative jumps. Physical Review E, 2000, 62, 8790-8793.	0.8	12
42	Multifractal nature of heterogeneous dynamics and structures in glass forming ionic liquids. Journal of Non-Crystalline Solids, 2011, 357, 446-453.	1.5	11
43	Thermal Behavior of Caged Silsesquioxane (POSS) Studied by Molecular Dynamics Simulations. Journal of Inorganic and Organometallic Polymers and Materials, 2012, 22, 845-851.	1.9	11
44	Molecular dynamics study of coagulation in silica-nanocolloidâ€“waterâ€“NaCl systems based on the atomistic model. Physical Chemistry Chemical Physics, 2014, 16, 24000-24017.	1.3	11
45	A molecular dynamics study of the structures and dynamic properties of molten NaBeF3and Na2BeF4. Molecular Physics, 1986, 59, 1329-1344.	0.8	10
46	An alternative explanation of the change in T-dependence of the effective Debye-Waller factor at T c or T B. Journal of Chemical Physics, 2014, 141, 114502.	1.2	10
47	Molecular Dynamics Study of Microscopic Mechanism of Diffusion in Li₂SiO₃ System. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1991, 46, 616-620.	0.7	9
48	Molecular dynamics study of heterogeneous dynamics in lithium disilicate crystal. Journal of Electroceramics, 2015, 34, 43-56.	0.8	9
49	MD Simulation of Crystal Growth from Sodium Chloride Melt. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1995, 50, 307-315.	0.7	8
50	Molecular dynamics study of one component soft-core system - Analytical expression of non-equilibrium relaxation in constant pressure conditions. Journal of Non-Crystalline Solids, 2016, 447, 212-222.	1.5	8
51	Mixed Alkali Effect in Alkali Metasilicate Glasses. Progress of Theoretical Physics Supplement, 1997, 126, 399-402.	0.2	8
52	Internal Cation Mobilities in the Molten Binary System KNO₃ â€” Ca(NO₃)₂. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1987, 42, 695-699.	0.7	7
53	Molecular dynamics studies of ionically conducting glasses and ionic liquids: Wave number dependence of intermediate scattering function. Journal of Chemical Physics, 2010, 133, 124505.	1.2	7
54	Molecular dynamics study of one-component soft-core system: Thermodynamic properties in the supercooled liquid and glassy states. Journal of Chemical Physics, 2013, 138, 144503.	1.2	7

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55	Internal Cation Mobilities and Their Isotope Effects in the Molten System (Li, K)NO₃. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1987, 42, 683-689.	0.7	6
56	Molecular Dynamics Simulations. Topics in Applied Physics, 2017, , 355-414.	0.4	6
57	Internal Cation Mobilities in the Ternary Molten System (Li, Na, K) NO3 of the Eutectic Composition. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1985, 40, 906-908.	0.7	6
58	Dynamics in pure and mixed-alkali glasses - spatial and temporal aspects. Journal of Physics Condensed Matter, 2000, 12, 6405-6412.	0.7	5
59	Molecular dynamics simulations of the dynamics of ions in single and mixed alkali glasses. Journal of Non-Crystalline Solids, 2004, 349, 223-229.	1.5	5
60	Fast and Slow Dynamics in Metasilicate Glasses. Progress of Theoretical Physics Supplement, 2000, 138, 211-216.	0.2	4
61	Molecular Dynamics of Generalized Binary Lennard-Jones Systems: Effects of Anharmonicity and Breakdown of the Stokes-Einstein Relation. AIP Conference Proceedings, 2008, , .	0.3	4
62	Thermodynamic scaling in ionically conducting glasses and melts. , 2013, , .		4
63	Molecular dynamics study of nano-porous materialsâ€"Enhancement of mobility of Li ions in lithium disilicate. Journal of Chemical Physics, 2016, 145, 204503.	1.2	4
64	Nearly Constant Loss (NCL) in Lithium Metasilicate Glass at Low Temperaturesâ€"Anisotropic and Dynamical Caging from Molecular Dynamics Simulations. Journal of Physical Chemistry C, 2017, 121, 13729-13737.	1.5	4
65	Internal Cation Mobilities in the Molten Binary Systems KNO3-Sr(NO3)2 and KNO3-Ba(NO3)2. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1987, 42, 1021-1023.	0.7	3
66	Heterogeneousâ€"homogeneous transition and anomaly of density in SPC/E water examined by molecular dynamics simulations. Physica A: Statistical Mechanics and Its Applications, 2019, 527, 121391.	1.2	3
67	Molecular dynamics study of dynamical heterogeneity in ion conducting glasses. Magyar AprÃ³vad KÃ¶zlemÃ©nyek, 2002, 69, 1005-1013.	1.4	2
68	Dynamical significance in alkali metasilicate glasses. Journal of Molecular Liquids, 2005, 120, 135-138.	2.3	2
69	Comparison of Heterogeneous Dynamics in Ionic Liquids and Ionically Conducting Glasses from Molecular Dynamics Simulations. Journal of the Physical Society of Japan, 2010, 79, 145-149.	0.7	2
70	Molecular dynamics study of a one component soft-core system: thermodynamic properties in the crystalline state. Physical Chemistry Chemical Physics, 2012, 14, 7120.	1.3	2
71	Electrical Response of Ionic Conductors. Topics in Applied Physics, 2017, , 89-250.	0.4	2
72	Molecular Dynamics Simulation of Silicate Glasses. Topics in Applied Physics, 2017, , 415-458.	0.4	2

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73	Heterogeneous dynamics in nanoporous materials examined by molecular dynamics simulations -effects of modification of caged ion dynamics-. Journal of Non-Crystalline Solids, 2018, 498, 364-371.	1.5	2
74	Internal Mobilities in the Binary Molten System (Na, Tl)NO3. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1987, 42, 377-380.	0.7	1
75	Local Structure and Okada's Empirical Relation for the Internal Mobility of Cations in Molten Alkali Nitrates. Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 1989, 44, 595-596.	0.7	1
76	Glassy State and Glass Transition-Its Elucidation and New Applications. II. Structure and Dynamics of Alkali Silicate Glasses. Glass Transition, Relaxation, and the Mixed Alkali Effect.. Kobunshi Ronbunshu, 1996, 53, 774-787.	0.2	1
77	Heterogeneity, Multi-Fractality and Cooperativity in the Ionically Conducting Glasses. AIP Conference Proceedings, 2006, , .	0.3	1
78	The Mixed Alkali Effect Examined by Molecular Dynamics Simulations. Topics in Applied Physics, 2017, , 459-481.	0.4	1
79	Molecular Dynamics Simulations of Ionic Liquids. Topics in Applied Physics, 2017, , 483-532.	0.4	1
80	Theories and Models of Ion Diffusion. Topics in Applied Physics, 2017, , 9-60.	0.4	1
81	A molecular dynamics study of enhanced dynamics and selfâ€healing processes in nanoâ€porous lithium metasilicate systems. International Journal of Applied Glass Science, 2020, 11, 421-431.	1.0	1
82	Editorial: Are There Common Origins in Heterogeneous Dynamics and Structures in Ionic and Nonionic Systems?. Frontiers in Physics, 2021, 8, .	1.0	1
83	Slow and Fast Dynamics in Silicate Gasses.. Kobunshi Ronbunshu, 1999, 56, 269-281.	0.2	0
84	Nanoionics. Topics in Applied Physics, 2017, , 277-309.	0.4	0
85	Experimental Probes for Ion Dynamics. Topics in Applied Physics, 2017, , 61-88.	0.4	0
86	Practical Introduction to the MD Simulations of Ionic Systems. Topics in Applied Physics, 2017, , 533-550.	0.4	0
87	Some Applications and Further Problems. Topics in Applied Physics, 2017, , 551-562.	0.4	0
88	Ionic Liquids: Physics Bridging Two Fields. Topics in Applied Physics, 2017, , 311-354.	0.4	0
89	NMR Experiments in Ionic Conductors. Topics in Applied Physics, 2017, , 251-275.	0.4	0
90	Molecular Dynamics Simulations of Nanoporous Systems: Dynamic Heterogeneity, Self-Organization of Voids, and Self-Healing Processes. , 2020, , 203-240.		0

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91	Classification of Nanostructured Materials and Effects of Nano-Sizing. , 2020, , 11-48.		0
92	Atomistic molecular dynamics in polyethylene oxide and polymethyl methacrylate blends having significantly different glass transition temperatures. International Journal of Applied Glass Science, 2022, 13, 347-358.	1.0	0