Radha Dilip Banhatti

List of Publications by Year
in descending order

53	1,204	331670 21	377865 34
papers	citations	h-index	g-index

55	55	55	900
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Ionic motion in materials with disordered structures: conductivity spectra and the concept of mismatch and relaxation. Physical Chemistry Chemical Physics, 2002, 4, 3155-3167.	2.8	110
2	Ionic motion in materials with disordered structures. Solid State Ionics, 2006, 177, 1551-1557.	2.7	87
3	Anion reorientation in an ion conducting plastic crystal â€“ coherent quasielastic neutron scattering from sodium ortho-phosphate. Physica B: Condensed Matter, 1999, 266, 60-68.	2.7	68
4	Modelling frequency-dependent conductivities and permittivities in the framework of the MIGRATION concept. Solid State Ionics, 2004, 169, 1-8.	2.7	68
5	Characterization of the complex ion dynamics in lithium silicate glasses via computer simulations. Physical Chemistry Chemical Physics, 2002, 4, 3185-3192.	2.8	60
6	Correlated ionic hopping processes in crystalline and glassy electrolytes resulting in MIGRATION-type and nearly-constant-loss-type conductivities. Physical Chemistry Chemical Physics, 2005, 7, 157.	2.8	45
7	Frequency-dependent fluidity and conductivity of an ionic liquid. Physical Chemistry Chemical Physics, 2009, 11, 5930.	2.8	44
8	Anion Rotation and Cation Transport in the Rotor Phase Î± -Sodium Orthophosphate: Paddle-Wheel Mechanism Redefined in View of New Experimental Results. Zeitschrift Fur Physikalische Chemie, 2000, 214, .	2.8	40
9	Structure and dynamics of lithium silicate melts: molecular dynamics simulations. Physical Chemistry Chemical Physics, 2001, 3, 5104-5108.	2.8	40
10	Synthesis and Modeling of Polysiloxane-Based Salt-in-Polymer Electrolytes with Various Additives. Journal of Physical Chemistry B, 2009, 113, 15473-15484.	2.6	39
11	Low-Temperature Phases of Rubidium Silver Iodide:â€‰ Crystal Structures and Dynamics of the Mobile Silver Ions. Journal of Physical Chemistry A, 2006, 110, 3010-3016.	2.5	36
12	Conductivity spectra and ion dynamics of a salt-in-polymer electrolyte. Solid State Ionics, 2006, 177, 3135-3139.	2.7	36
13	First and Second Universalities: Expeditions Towards and Beyond. Zeitschrift Fur Physikalische Chemie, 2010, 224, 1891-1950.	2.8	35
14	Nearly constant loss effects in borate glasses. Physical Chemistry Chemical Physics, 2009, 11, 3158.	2.8	31
15	New nearly constant loss feature detected in glass at low temperatures. Physical Chemistry Chemical Physics, 2010, 12, 14102.	2.8	30
16	Conductivity dispersion in supercooled calcium potassium nitrate: caged ionic motion viewed as part of standard behaviour. Physical Chemistry Chemical Physics, 2007, 9, 5582.	2.8	26
17	Translational and localised ionic motion in materials with disordered structures. Solid State Sciences, 2008, 10, 790-803.	3.2	26
18	Nearly constant loss effect in sodium borate and silver meta-phosphate glasses: New insights. Solid State Ionics, 2011, 192, 70-75.	2.7	25

#	Article	IF	Citations
19	Conductivity spectroscopy covering 17 decades on the frequency scale. Solid State Ionics, 2005, 176, 1971-1978.	2.7	24
20	Insights from molecular dynamics simulations on structural organization and diffusive dynamics of an ionic liquid at solid and vacuum interfaces. Journal of Colloid and Interface Science, 2019, 553, 350-363.	9.4	23
21	Non-Arrhenius viscosity related to short-time ion dynamics in a fragile molten salt. Physical Chemistry Chemical Physics, 2005, 7, 1096.	2.8	21
22	Dielectric function and localized diffusion in ion conducting glasses. Solid State Ionics, 2004, 175, 661-663.	2.7	20
23	Coupling model and MIGRATION concept â€“ Equivalence and mutual mapping. Journal of Non-Crystalline Solids, 2007, 353, 3845-3852.	3.1	20
24	Low-temperature Î±-AgI confined in glass: Structure and dynamics. Solid State Ionics, 2015, 271, 2-9.	2.7	20
25	Polaronic transport in iron phosphate glasses containing HfO₂ and CeO₂. Physical Chemistry Chemical Physics, 2017, 19, 3999-4009.	2.8	20
26	Insights into Ion-Network Interactions and Ion Transport in Glass. Zeitschrift Fur Physikalische Chemie, 2009, 223, 1201-1215.	2.8	19
27	Insights from Local Network Structures and Localized Diffusion on the Ease of Lithium Ion Transport in Two Mixed Glass-Former Systems. Journal of Physical Chemistry C, 2017, 121, 17641-17657.	3.1	18
28	Scaling features of conductivity spectra reveal complexities in ionic, polaronic and mixed ionic-polaronic conduction in phosphate glasses. Acta Materialia, 2019, 175, 46-54.	7.9	18
29	Backward correlations and dynamic heterogeneities:â€ƒA computer study of ion dynamics. Physical Review B, 2002, 66, .	3.2	17
30	Dynamics of mobile ions in crystals, glasses and melts, described by the concept of mismatch and relaxation. Solid State Ionics, 2002, 154-155, 65-74.	2.7	16
31	From Ostwaldâ€²s Times to Solid State Ionics: Migration and Localised Hopping of Silver Ions in Crystalline Rubidium Silver Iodide. Zeitschrift Fur Physikalische Chemie, 2003, 217, 1245-1264.	2.8	15
32	Using pressure, temperature and frequency as variables to study the dynamics of mobile ions in materials with disordered structures. European Physical Journal: Special Topics, 2008, 161, 65-78.	2.6	13
33	Anion reorientation in Na3PO4. Physica B: Condensed Matter, 1997, 241-243, 338-340.	2.7	11
34	Toward understanding the second universalityâ€”A journey inspired by Arthur Stanley Nowick. Journal of Electroceramics, 2015, 34, 4-14.	2.0	10
35	Nearly constant loss behavior in ï¿½?-RbAg4I5: microwave conductivity plateau identified. Solid State Ionics, 2004, 175, 819-822.	2.7	9
36	A Mechanistic Approach to Conductivity Relaxation in Ionic Glasses. Zeitschrift Fur Physikalische Chemie, 2004, 218, 1401-1412.	2.8	9

#	Article	IF	Citations
37	Ionic transport and localized ionic motion in Na-Î²â€²â€²-alumina, Na1.70Li0.32Al10.66O17. Journal of Materials Science, 2007, 42, 1942-1947.	3.7	8
38	Computational Study of Glycerol Binding within the Active Site of Coenzyme B₁₂-Dependent Diol Dehydratase. Journal of Physical Chemistry B, 2019, 123, 6178-6187.	2.6	6
39	A theoretical calculation on Schottky defects in AgCl. Physica Status Solidi (B): Basic Research, 1991, 164, 357-367.	1.5	5
40	Role of induced quadrupoles in the simulation of intrinsic point defects in AgCl and NaCl. Physical Review B, 1993, 48, 6839-6853.	3.2	5
41	The cationic energy landscape in alkali silicate glasses: Properties and relevance. Journal of Chemical Physics, 2009, 131, 224708.	3.0	5
42	Broadband Conductivities and Fluidities of Fragile Ionic Liquids. Electrochemistry, 2009, 77, 573-581.	1.4	4
43	Exploring Reactive Conformations of Coenzyme A during Binding and Unbinding to Pyruvate Formateâ€“Lyase. Journal of Physical Chemistry A, 2019, 123, 9345-9356.	2.5	4
44	Ionic conductivity of a fragile glass-forming molten salt: Modelling its dependence on frequency, temperature, and pressure. International Journal of Materials Research, 2022, 95, 921-927.	0.3	4
45	Defect models in silver halides. Bulletin of Materials Science, 1997, 20, 435-440.	1.7	3
46	The Influence of Chemical Change on Protein Dynamics: A Case Study with Pyruvate Formateâ€Lyase. Chemistry - A European Journal, 2019, 25, 8741-8753.	3.3	3
47	Structural characterization of an ionic liquid in bulk and in nano-confined environment using data from MD simulations. Data in Brief, 2020, 28, 104794.	1.0	3
48	Point defect modelling and transport processes in AgBr. Radiation Effects and Defects in Solids, 1995, 134, 157-159.	1.2	2
49	An Extended Polarizable Point Ion Model for Schottky Defects. Physica Status Solidi (B): Basic Research, 1991, 166, 15-23.	1.5	1
50	Majority and minority intrinsic defects in lithium and sodium halides. Bulletin of Materials Science, 1997, 20, 451-454.	1.7	1
51	A Schematic Model for Multi-particle Dynamics in Ion Transport: From Mean Field to Non-mean Field Effects. Zeitschrift Fur Physikalische Chemie, 2009, 223, 1259-1272.	2.8	0
52	The Influence of Chemical Change on Protein Dynamics: A Case Study with Pyruvate Formateâ€Lyase. Chemistry - A European Journal, 2019, 25, 8653.	3.3	0
53	Ion Transport in Glass-Forming Calcium Potassium Nitrate: From Complex Behaviours to Unexpected Simplicities. , 2019, 22, 140-159.		0