Philip E Mason

List of Publications by Year
in descending order

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67 papers	3,780 citations	117571 34 h-index	128225 60 g-index
69 all docs	69 docs citations	69 times ranked	4578 citing authors

#	Article	IF	Citations
1	Computer simulation studies of microcrystalline cellulose Iî². Carbohydrate Research, 2006, 341, 138-152.	1.1	357
2	The Structure of Aqueous Guanidinium Chloride Solutions. Journal of the American Chemical Society, 2004, 126, 11462-11470.	6.6	245
3	Topological versus chemical ordering in network glasses at intermediate and extended length scales. Nature, 2005, 435, 75-78.	13.7	239
4	Arginine-rich cell-penetrating peptides induce membrane multilamellarity and subsequently enter via formation of a fusion pore. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 11923-11928.	3.3	168
5	The Molecular Origin of Like-Charge Argineneâ^'Arginine Pairing in Water. Journal of Physical Chemistry B, 2009, 113, 9041-9045.	1.2	142
6	Bis(m-phenylene)-32-crown-10-Based Cryptands, Powerful Hosts for Paraquat Derivatives. Journal of Organic Chemistry, 2005, 70, 3231-3241.	1.7	134
7	Arginine â€œMagicâ€• Guanidinium Like-Charge Ion Pairing from Aqueous Salts to Cell Penetrating Peptides. Accounts of Chemical Research, 2018, 51, 1455-1464.	7.6	128
8	Accurate Description of Calcium Solvation in Concentrated Aqueous Solutions. Journal of Physical Chemistry B, 2014, 118, 7902-7909.	1.2	125
9	Ion Pairing in Aqueous Lithium Salt Solutions with Monovalent and Divalent Counter-Anions. Journal of Physical Chemistry A, 2013, 117, 11766-11773.	1.1	112
10	A New Cryptand:Â Synthesis and Complexation with Paraquat. Organic Letters, 1999, 1, 1001-1004.	2.4	111
11	Arginine side chain interactions and the role of arginine as a gating charge carrier in voltage sensitive ion channels. Scientific Reports, 2016, 6, 21759.	1.6	110
12	Accounting for Electronic Polarization Effects in Aqueous Sodium Chloride via Molecular Dynamics Aided by Neutron Scattering. Journal of Physical Chemistry B, 2016, 120, 1454-1460.	1.2	102
13	Coulomb explosion during the early stages of the reaction of alkali metals with water. Nature Chemistry, 2015, 7, 250-254.	6.6	89
14	The Interaction of Guanidinium Ions with a Model Peptide. Biophysical Journal, 2007, 93, L04-L06.	0.2	86
15	Molecular Dynamics Simulation Studies of Caffeine Aggregation in Aqueous Solution. Journal of Physical Chemistry B, 2011, 115, 10957-10966.	1.2	79
16	Attractive Interactions between Side Chains of Histidine-Histidine and Histidine-Arginine-Based Cationic Dipeptides in Water. Journal of Physical Chemistry B, 2010, 114, 8744-8749.	1.2	75
17	Calcium ions in aqueous solutions: Accurate force field description aided by ab initio molecular dynamics and neutron scattering. Journal of Chemical Physics, 2018, 148, 222813.	1.2	75
18	Hydration and Ion Pairing in Aqueous Mg²⁺ and Zn²⁺ Solutions: Force-Field Description Aided by Neutron Scattering Experiments and Ab Initio Molecular Dynamics Simulations. Journal of Physical Chemistry B, 2018, 122, 3296-3306.	1.2	75

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19	Preferential Interactions of Guanidinum Ions with Aromatic Groups over Aliphatic Groups. Journal of the American Chemical Society, 2009, 131, 16689-16696.	6.6	70
20	Structure of Aqueous Glucose Solutions as Determined by Neutron Diffraction with Isotopic Substitution Experiments and Molecular Dynamics Calculations. Journal of Physical Chemistry B, 2005, 109, 13104-13111.	1.2	69
21	Specificity of Ionâ^'Protein Interactions: Complementary and Competitive Effects of Tetrapropylammonium, Guanidinium, Sulfate, and Chloride Ions. Journal of Physical Chemistry B, 2009, 113, 3227-3234.	1.2	66
22	The First Demonstration of Molecular Queuing in Pseudo[n]polyrotaxanes: A Novel Variant of Supramolecular Motion. Angewandte Chemie International Edition in English, 1996, 35, 2238-2241.	4.4	62
23	Structure of liquid and glassy<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>ZnCl</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math> Physical Review B, 2010, 82, .	3.7	62
24	Dissecting Contributions to the Denaturant Sensitivities of Proteins. Biochemistry, 2005, 44, 775-781.	1.2	58
25	Threading/Dethreading Exchange Rates as Structural Probes in Polypseudorotaxanes. Macromolecules, 1999, 32, 1559-1569.	2.2	57
26	Accurate Description of Aqueous Carbonate Ions: An Effective Polarization Model Verified by Neutron Scattering. Journal of Physical Chemistry B, 2012, 116, 8145-8153.	1.2	57
27	Exploring Ionâ€“Ion Interactions in Aqueous Solutions by a Combination of Molecular Dynamics and Neutron Scattering. Journal of Physical Chemistry Letters, 2015, 6, 1563-1567.	2.1	50
28	Hydration of the chloride ion in concentrated aqueous solutions using neutron scattering and molecular dynamics. Molecular Physics, 2014, 112, 1230-1240.	0.8	48
29	Photoelectron spectra of alkali metalâ€“ammonia microjets: From blue electrolyte to bronze metal. Science, 2020, 368, 1086-1091.	6.0	47
30	Orientational Dependence of the Affinity of Guanidinium Ions to the Water Surface. Journal of Physical Chemistry B, 2011, 115, 12521-12526.	1.2	44
31	Molecular dynamics studies of the conformation of sorbitol. Carbohydrate Research, 2009, 344, 2229-2235.	1.1	40
32	Complex Ion Effects on Polypeptide Conformational Stability: Chloride and Sulfate Salts of Guanidinium and Tetrapropylammonium. Journal of the American Chemical Society, 2011, 133, 7300-7303.	6.6	37
33	Molecular Dynamics and Neutron Scattering Study of Glucose Solutions Confined in MCM-41. Journal of Physical Chemistry B, 2011, 115, 910-918.	1.2	37
34	Neutron diffraction and simulation studies of the exocyclic hydroxymethyl conformation of glucose. Journal of Chemical Physics, 2006, 125, 224505.	1.2	34
35	The Reversal by Sulfate of the Denaturant Activity of Guanidinium. Journal of the American Chemical Society, 2007, 129, 15895-15902.	6.6	33
36	Water Confined in Cylindrical Pores: A Molecular Dynamics Study. Food Biophysics, 2011, 6, 233-240.	1.4	33

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37	Aqueous Guanidiniumâ€“Carbonate Interactions by Molecular Dynamics and Neutron Scattering: Relevance to Ionâ€“Protein Interactions. Journal of Physical Chemistry B, 2013, 117, 1844-1848.	1.2	33
38	Neutron Diffraction and Simulation Studies of CsNO3and Cs2CO3Solutions. Journal of the American Chemical Society, 2006, 128, 15136-15144.	6.6	30
39	Neutron diffraction studies on aqueous solutions of glucose. Journal of Chemical Physics, 2003, 119, 3347-3353.	1.2	29
40	Valence and Core-Level X-ray Photoelectron Spectroscopy of a Liquid Ammonia Microjet. Journal of the American Chemical Society, 2019, 141, 1838-1841.	6.6	28
41	Glucose interactions with a model peptide. Proteins: Structure, Function and Bioinformatics, 2011, 79, 2224-2232.	1.5	25
42	Sugar-binding sites on the surface of the carbohydrate-binding module of CBH I from Trichoderma reesei. Carbohydrate Research, 2011, 346, 839-846.	1.1	24
43	Observation of Pyridine Aggregation in Aqueous Solution Using Neutron Scattering Experiments and MD Simulations. Journal of Physical Chemistry B, 2010, 114, 5412-5419.	1.2	22
44	Specific Interactions of Ammonium Functionalities in Amino Acids with Aqueous Fluoride and Iodide. Journal of Physical Chemistry B, 2010, 114, 13853-13860.	1.2	19
45	Sweet taste of heavy water. Communications Biology, 2021, 4, 440.	2.0	19
46	Spectroscopic evidence for a gold-coloured metallic water solution. Nature, 2021, 595, 673-676.	13.7	16
47	Dynamic behaviour of a pseudo[n]polyrotaxane containing a bipyridyl-based cyclophane: spectroscopic observations. Polymer, 1998, 39, 3981-3991.	1.8	14
48	Neutron Diffraction and Computer Simulation Studies ofd-Xylose. Journal of the American Chemical Society, 2005, 127, 10991-10998.	6.6	14
49	Changes in the hydration structure of imidazole upon protonation: Neutron scattering and molecular simulations. Journal of Chemical Physics, 2017, 146, .	1.2	14
50	Quantifying the Strength of a Salt Bridge by Neutron Scattering and Molecular Dynamics. Journal of Physical Chemistry Letters, 2019, 10, 3254-3259.	2.1	14
51	Determination of a Hydroxyl Conformation in Aqueous Xylose Using Neutron Scattering and Molecular Dynamics. Journal of Physical Chemistry B, 2006, 110, 2981-2983.	1.2	13
52	Be²⁺ Hydration in Concentrated Aqueous Solutions of BeCl₂. Journal of Physical Chemistry B, 2008, 112, 1935-1939.	1.2	13
53	Hydration of Hydroxyl and Amino Groups Examined by Molecular Dynamics and Neutron Scattering. Journal of Physical Chemistry B, 2015, 119, 6357-6365.	1.2	13
54	Insight into Indole Interactions from Alkali Metal Chloride Effects on a Tryptophan Zipper Î²-Hairpin Peptide. Journal of the American Chemical Society, 2006, 128, 2762-2763.	6.6	12

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55	Resolving the Equal Number Density Puzzle: Molecular Picture from Simulations of LiCl(aq) and NaCl(aq). Journal of Physical Chemistry B, 2021, 125, 3153-3162.	1.2	12
56	Anomalous surface behavior of hydrated guanidinium ions due to ion pairing. Journal of Chemical Physics, 2018, 148, 144508.	1.2	10
57	Deeply cooled and temperature controlled microjets: Liquid ammonia solutions released into vacuum for analysis by photoelectron spectroscopy. Review of Scientific Instruments, 2020, 91, 043101.	0.6	9
58	Simulation and Neutron Diffraction Studies of Small Biomolecules in Water. Food Biophysics, 2011, 6, 210-216.	1.4	7
59	A Nonâ€Exploding Alkali Metal Drop on Water: From Blue Solvated Electrons to Bursting Molten Hydroxide. Angewandte Chemie - International Edition, 2016, 55, 13019-13022.	7.2	7
60	Molecular Dynamics and Neutron Scattering Studies of Potassium Chloride in Aqueous Solution. Journal of Physical Chemistry B, 2019, 123, 10807-10813.	1.2	7
61	Photoelectron Spectroscopy of Benzene in the Liquid Phase and Dissolved in Liquid Ammonia. Journal of Physical Chemistry B, 2022, 126, 229-238.	1.2	7
62	Molecular Dynamics and Neutron Scattering Studies of Mixed Solutions of Caffeine and Pyridine in Water. Journal of Physical Chemistry B, 2018, 122, 5308-5315.	1.2	5
63	The Conformation of a Ribose Derivative in Aqueous Solution: A Neutronâ€Scattering and Molecular Dynamics Study. Biopolymers, 2013, 99, 739-745.	1.2	4
64	A new structural technique for examining ion-neutral association in aqueous solution. Faraday Discussions, 2013, 160, 161.	1.6	2
65	The Determination of Specific Ion Structure by Neutron Scattering and Computer Simulation. , 2009, , 171-189.		1
66	Innentitelbild: A Nonâ€Exploding Alkali Metal Drop on Water: From Blue Solvated Electrons to Bursting Molten Hydroxide (Angew. Chem. 42/2016). Angewandte Chemie, 2016, 128, 13108-13108.	1.6	0
67	A Nonâ€Exploding Alkali Metal Drop on Water: From Blue Solvated Electrons to Bursting Molten Hydroxide. Angewandte Chemie, 2016, 128, 13213-13216.	1.6	0