Edward W Castner Jr

List of Publications by Year
in descending order

70	6,329	71102 41	95266 68
papers	citations	h-index	g-index

70	70	70	4487
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	ROAMing in mutable voids: Polymer free volumes from wobbling vibrational probes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 15385-15387.	7.1	3
2	Mixtures of octanol and an ionic liquid: Structure and transport. Journal of Chemical Physics, 2020, 153, 214501.	3.0	0
3	Structural analysis of ionic liquids with symmetric and asymmetric fluorinated anions. Journal of Chemical Physics, 2019, 151, 074504.	3.0	20
4	Microscopic Structural and Dynamic Features in Triphilic Room Temperature Ionic Liquids. Frontiers in Chemistry, 2019, 7, 285.	3.6	25
5	Structural analysis of zwitterionic liquids vs. homologous ionic liquids. Journal of Chemical Physics, 2018, 148, 193807.	3.0	24
6	Photoinduced Bimolecular Electron Transfer in Ionic Liquids: Cationic Electron Donors. Journal of Physical Chemistry B, 2018, 122, 2379-2388.	2.6	15
7	Structure and dynamics of propylammonium nitrate-acetonitrile mixtures: An intricate multi-scale system probed with experimental and theoretical techniques. Journal of Chemical Physics, 2018, 148, 134507.	3.0	18
8	Ionic liquid ultrathin films at the surface of Cu(100) and Au(111). Journal of Chemical Physics, 2017, 146, 054704.	3.0	35
9	Ionic Liquids with Symmetric Diether Tails: Bulk and Vacuum-Liquid Interfacial Structures. Journal of Physical Chemistry B, 2017, 121, 174-179.	2.6	15
10	Photoinduced Bimolecular Electron Transfer in Ionic Liquids. Journal of the American Chemical Society, 2017, 139, 14568-14585.	13.7	30
11	Intriguing transport dynamics of ethylammonium nitrateâ€“acetonitrile binary mixtures arising from nano-inhomogeneity. Physical Chemistry Chemical Physics, 2017, 19, 27212-27220.	2.8	24
12	Connecting Structural and Transport Properties of Ionic Liquids with Cationic Oligoether Chains. Journal of the Electrochemical Society, 2017, 164, H5247-H5262.	2.9	33
13	Structure and dynamics of ionic liquids: Trimethylsilylpropyl-substituted cations and bis(sulfonyl)amide anions. Journal of Chemical Physics, 2016, 145, 244506.	3.0	27
14	Structure of ionic liquids with cationic silicon-substitutions. Journal of Chemical Physics, 2016, 145, .	3.0	21
15	Structure of cyano-anion ionic liquids: X-ray scattering and simulations. Journal of Chemical Physics, 2016, 145, 024503.	3.0	54
16	Structures of Ionic Liquids Having Both Anionic and Cationic Octyl Tails: Lamellar Vacuum Interface vs Sponge-Like Bulk Order. Journal of Physical Chemistry Letters, 2016, 7, 3785-3790.	4.6	46
17	Liquid Structure of CO₂â€“Reactive Aprotic Heterocyclic Anion Ionic Liquids from X-ray Scattering and Molecular Dynamics. Journal of Physical Chemistry B, 2016, 120, 11951-11960.	2.6	12
18	Photoinduced Bimolecular Electron Transfer from Cyano Anions in Ionic Liquids. Journal of Physical Chemistry B, 2015, 119, 14790-14799.	2.6	21

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19	Electron-Transfer Dynamics for a Donorâ€“Bridgeâ€“Acceptor Complex in Ionic Liquids. Journal of Physical Chemistry B, 2015, 119, 11336-11345.	2.6	13
20	Communication: Unusual structure and transport in ionic liquid-hexane mixtures. Journal of Chemical Physics, 2015, 142, 121101.	3.0	29
21	Interactions between water and 1-butyl-1-methylpyrrolidinium ionic liquids. Journal of Chemical Physics, 2015, 143, 064503.	3.0	40
22	Ionic Liquidâ€“Solute Interactions Studied by 2D NOE NMR Spectroscopy. Journal of Physical Chemistry B, 2015, 119, 9225-9235.	2.6	29
23	Structure of 1-Alkyl-1-methylpyrrolidinium Bis(trifluoromethylsulfonyl)amide Ionic Liquids with Linear, Branched, and Cyclic Alkyl Groups. Journal of Physical Chemistry B, 2013, 117, 15328-15337.	2.6	121
24	Differences in Ion Interactions for Isoelectronic Ionic Liquid Homologs. Journal of Physical Chemistry Letters, 2013, 4, 1477-1483.	4.6	47
25	How Does the Ionic Liquid Organizational Landscape Change when Nonpolar Cationic Alkyl Groups Are Replaced by Polar Isoelectronic Diethers?. Journal of Physical Chemistry B, 2013, 117, 1130-1135.	2.6	134
26	Comparing intermediate range order for alkyl- vs. ether-substituted cations in ionic liquids. Chemical Communications, 2012, 48, 4959.	4.1	116
27	Temperature-dependent structure of ionic liquids: X-ray scattering and simulations. Faraday Discussions, 2012, 154, 133-143.	3.2	171
28	A Comparison of Electron-Transfer Dynamics in Ionic Liquids and Neutral Solvents. Journal of Physical Chemistry C, 2012, 116, 5197-5208.	3.1	31
29	Ionic Liquids: Structure and Photochemical Reactions. Annual Review of Physical Chemistry, 2011, 62, 85-105.	10.8	310
30	Communication: X-ray scattering from ionic liquids with pyrrolidinium cations. Journal of Chemical Physics, 2011, 134, 121101.	3.0	127
31	Temperature-dependent structure of methyltributylammonium bis(trifluoromethylsulfonyl)amide: X ray scattering and simulations. Journal of Chemical Physics, 2011, 134, 064501.	3.0	139
32	Ionic liquids and solids with paramagnetic anions. Physical Chemistry Chemical Physics, 2010, 12, 8919.	2.8	44
33	Spotlight on ionic liquids. Journal of Chemical Physics, 2010, 132, 120901.	3.0	366
34	Ultrafast Structural Rearrangements in the MLCT Excited State for Copper(I)bis-Phenanthrolines in Solution. Journal of the American Chemical Society, 2007, 129, 2147-2160.	13.7	193
35	The Physical Chemistry of Ionic Liquids. Journal of Physical Chemistry B, 2007, 111, 4639-4640.	2.6	155
36	Nuclear Magnetic Resonance Study of the Dynamics of Imidazolium Ionic Liquids with â^'CH2Si(CH3)3vs â^'CH2C(CH3)3Substituentsâ€. Journal of Physical Chemistry B, 2007, 111, 4885-4893.	2.6	101

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37	Intermolecular Interactions and Dynamics of Room Temperature Ionic Liquids That Have Silyl- and Siloxy-Substituted Imidazolium Cationsâ€. Journal of Physical Chemistry B, 2007, 111, 4819-4829.	2.6	109
38	Fluorescence Probing of Temperature-Dependent Dynamics and Friction in Ionic Liquid Local Environmentsâ€. Journal of Physical Chemistry B, 2007, 111, 4963-4977.	2.6	166
39	Local Polarity and Microviscosity in the Hydrophobic Cores of Amphiphilic Star-like and Scorpion-like Macromolecules. Macromolecules, 2007, 40, 3739-3748.	4.8	21
40	Intermolecular Dynamics, Interactions, and Solvation in Ionic Liquids. Accounts of Chemical Research, 2007, 40, 1217-1227.	15.6	237
41	Conformational Analysis of the Electron-Transfer Kinetics across Oligoproline Peptides UsingN,N-Dimethyl-1,4-benzenediamine Donors and Pyrene-1-sulfonyl Acceptorsâ€. Journal of Physical Chemistry B, 2007, 111, 6878-6886.	2.6	19
42	Spectroscopic Studies of Rilpivirine (TMC278/R278474) in Complex with HIVâ€1 Reverse Transcriptase. FASEB Journal, 2007, 21, A630.	0.5	0
43	Photoluminescence Decay Dynamics and Mechanism of Energy Transfer in Undoped and Mn²⁺ Doped ZnSe Nanoparticles. Journal of Nanoscience and Nanotechnology, 2005, 5, 1492-1497.	0.9	14
44	Ultrafast dynamics of pyrrolidinium cation ionic liquids. Journal of Chemical Physics, 2005, 122, 184512.	3.0	160
45	Why Are Viscosities Lower for Ionic Liquids with â^'CH2Si(CH3)3vs â^'CH2C(CH3)3Substitutions on the Imidazolium Cations?. Journal of Physical Chemistry B, 2005, 109, 21576-21585.	2.6	171
46	Physical Properties and Intermolecular Dynamics of an Ionic Liquid Compared with Its Isoelectronic Neutral Binary Solution. Journal of Physical Chemistry A, 2005, 109, 9388-9392.	2.5	136
47	Fluorescence Probing of Interior, Interfacial, and Exterior Regions in Solution Aggregates of Poly(ethylene oxide)â^' Poly(propylene oxide)â^'Poly(ethylene oxide) Triblock Copolymers. Langmuir, 2005, 21, 1745-1752.	3.5	121
48	Microviscosity in Multiple Regions of Complex Aqueous Solutions of Poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 Td (oxide) 22273-22284.	2.6	96
49	A Molecular Dynamics Study of Aggregation Phenomena in Aqueousn-Propanol. Journal of Physical Chemistry B, 2004, 108, 7389-7401.	2.6	81
50	A Theoretical Investigation of the Shape and Hydration Properties of Aqueous Urea:â€‰ Evidence for Nonplanar Urea Geometry. Journal of Physical Chemistry B, 2004, 108, 17583-17590.	2.6	46
51	Biophysical characterization of natural and mutant fluorescent proteins cloned from zooxanthellate corals. FEBS Letters, 2004, 570, 175-183.	2.8	15
52	Aqueous dimethyl sulfoxide solutions: Inter- and intra-molecular dynamics. Journal of Chemical Physics, 2002, 116, 4643-4654.	3.0	96
53	Dynamic Fluorescence Probing of the Local Environments within Amphiphilic Starlike Macromolecules. Journal of Physical Chemistry B, 2002, 106, 7463-7468.	2.6	85
54	Time-Dependent Density Functional Theory Investigation of the Ground and Excited States of Coumarins 102, 152, 153, and 343. Journal of Physical Chemistry A, 2002, 106, 12117-12123.	2.5	158

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55	Theoretical Investigation of the Ground and Excited States of Coumarin 151 and Coumarin 120. Journal of Physical Chemistry A, 2002, 106, 9294-9305.	2.5	156
56	Ultrafast Dynamics in Aqueous Polyacrylamide Solutions. Journal of the American Chemical Society, 2001, 123, 12877-12885.	13.7	78
57	Solvation in highly nonideal solutions: A study of aqueous 1-propanol using the coumarin 153 probe. Journal of Chemical Physics, 2000, 112, 2367-2376.	3.0	81
58	Solvent as Electron Donor:â€‰ Donor/Acceptor Electronic Coupling Is a Dynamical Variable. Journal of Physical Chemistry A, 2000, 104, 2869-2885.	2.5	173
59	Molecular Recognition and Electron Transfer Across a Hydrogen Bonding Interface. Journal of the American Chemical Society, 2000, 122, 1233-1234.	13.7	63
60	Interfacial Electron Transfer Dynamics of Photosensitized Zinc Oxide Nanoclusters. ACS Symposium Series, 1997, , 221-238.	0.5	20
61	Intermolecular Dynamics of Substituted Benzene and Cyclohexane Liquids, Studied by Femtosecond Nonlinear-Optical Polarization Spectroscopy. The Journal of Physical Chemistry, 1996, 100, 3330-3343.	2.9	126
62	Femtosecond to nanosecond solvation dynamics in pure water and inside the Î³-cyclodextrin cavity. Journal of the Chemical Society, Faraday Transactions, 1995, 91, 867-873.	1.7	261
63	Femtosecond dynamics of hydrogenâ€bonding solvents. Formamide andNâ€methylformamide in acetonitrile, DMF, and water. Journal of Chemical Physics, 1993, 99, 113-125.	3.0	194
64	Fast responses from â€˜â€˜slowly relaxingâ€™â€™ liquids: A comparative study of the femtosecond dynamics of triacetin, ethylene glycol, and water. Journal of Chemical Physics, 1993, 99, 7289-7299.	3.0	221
65	Reductive quenching of the emission of trans-dioxo(1,4,8,11-tetramethyl-1,4,8,11-tetraazacyclotetradecane)osmium(VI) in water. Inorganic Chemistry, 1993, 32, 4200-4208.	4.0	39
66	On the generalized continuum model of dipolar solvation dynamics. Journal of Molecular Structure, 1989, 194, 171-181.	3.6	20
67	Influence of non-Debye relaxation and of molecular shape on the time dependence of the stokes shift in polar media. Chemical Physics Letters, 1988, 143, 270-276.	2.6	64
68	The dynamics of polar solvation: Inhomogeneous dielectric continuum models. Journal of Chemical Physics, 1988, 89, 3519-3534.	3.0	115
69	Dipolar solvation dynamics. Faraday Discussions of the Chemical Society, 1988, 85, 199.	2.2	55
70	Subpicosecond resolution studies of solvation dynamics in polar aprotic and alcohol solvents. Journal of Chemical Physics, 1987, 86, 1090-1097.	3.0	343