

Ilya A Shkrob

List of Publications by Year in descending order

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140
papers

5,533
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81743

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all docs

141
docs citations

141
times ranked

6235
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiple charging and chemical stability of tripodal catholyte redoxmers. <i>Chemical Physics Letters</i> , 2022, 787, 139212.	1.2	0
2	Electrochemical Modeling and Experimental Verification of Lithiation Gradients in Oxide Cathodes of Lithium-Ion Cells. <i>Journal of the Electrochemical Society</i> , 2022, 169, 040503.	1.3	1
3	Fluorination Enables Simultaneous Improvements of a Dialkoxybenzene-Based Redoxmer for Nonaqueous Redox Flow Batteries. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 28834-28841.	4.0	2
4	Spatially-resolved lithiation dynamics from operando X-ray diffraction and electrochemical modeling of lithium-ion cells. <i>Journal of Power Sources</i> , 2021, 484, 229247.	4.0	11
5	Fast Charging of Li-Ion Cells: Part V. Design and Demonstration of Protocols to Avoid Li-Plating. <i>Journal of the Electrochemical Society</i> , 2021, 168, 010512.	1.3	17
6	How Fast Can a Li-Ion Battery Be Charged? Determination of Limiting Fast Charging Conditions. <i>ACS Applied Energy Materials</i> , 2021, 4, 1063-1068.	2.5	37
7	Self-Reporting Redoxmers: State of Health Metrics for Redox Flow Batteries. <i>ECS Meeting Abstracts</i> , 2021, MA2021-01, 33-33.	0.0	0
8	Crowded electrolytes containing redoxmers in different states of charge: Solution structure, properties, and fundamental limits on energy density. <i>Journal of Molecular Liquids</i> , 2021, 334, 116533.	2.3	18
9	TEMPO allegro: liquid catholyte redoxmers for nonaqueous redox flow batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 16769-16775.	5.2	15
10	Critical role of structural order in bipolar redox-active molecules for organic redox flow batteries. <i>Journal of Materials Chemistry A</i> , 2021, 9, 23563-23573.	5.2	8
11	Cross-Platform Classifier of Chemical Stability for Charged Redoxmers. , 2021, 3, 1605-1609.		2
12	Time-Resolved X-ray Operando Observations of Lithiation Gradients across the Cathode Matrix and Individual Oxide Particles during Fast Cycling of a Li-Ion Cell. <i>Journal of the Electrochemical Society</i> , 2021, 168, 110555.	1.3	9
13	Competitive Pi-Stacking and H-Bond Piling Increase Solubility of Heterocyclic Redoxmers. <i>Journal of Physical Chemistry B</i> , 2020, 124, 10409-10418.	1.2	10
14	Fluorescence-Enabled Self-Reporting for Redox Flow Batteries. <i>ACS Energy Letters</i> , 2020, 5, 3062-3068.	8.8	9
15	Self-Assembled Solute Networks in Crowded Electrolyte Solutions and Nanoconfinement of Charged Redoxmer Molecules. <i>Journal of Physical Chemistry B</i> , 2020, 124, 10226-10236.	1.2	18
16	<i>In situ</i> X-ray spatial profiling reveals uneven compression of electrode assemblies and steep lateral gradients in lithium-ion coin cells. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 21977-21987.	1.3	25
17	4-(Trimethylsilyl) Morpholine as a Multifunctional Electrolyte Additive in High Voltage Lithium Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2020, 167, 070533.	1.3	12
18	Realistic Ion Dynamics through Charge Renormalization in Nonaqueous Electrolytes. <i>Journal of Physical Chemistry B</i> , 2020, 124, 3214-3220.	1.2	15

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19	Unexpected electrochemical behavior of an anolyte redoxmer in flow battery electrolytes: solvating cations help to fight against the thermodynamic–kinetic dilemma. <i>Journal of Materials Chemistry A</i> , 2020, 8, 13470-13479.	5.2	17
20	Amphiphile Organization in Organic Solutions: An Alternative Explanation for Small-Angle X-ray Scattering Features in Malonamide/Alkane Mixtures. <i>Journal of Physical Chemistry B</i> , 2020, 124, 10822-10831.	1.2	13
21	Apparent Increasing Lithium Diffusion Coefficient with Applied Current in Graphite. <i>Journal of the Electrochemical Society</i> , 2020, 167, 120528.	1.3	34
22	Fast Charging of Li-Ion Cells: Part IV. Temperature Effects and “Safe Lines” to Avoid Lithium Plating. <i>Journal of the Electrochemical Society</i> , 2020, 167, 130508.	1.3	32
23	Poly(4-vinylbenzoic acid): A Re-Engineered Binder for Improved Performance from Water-Free Slurry Processing for Silicon Graphite Composite Electrodes. <i>ACS Applied Energy Materials</i> , 2019, 2, 6348-6354.	2.5	8
24	Dehydration Rather Than HF Capture Explains Performance Improvements of Li-Ion Cells by Ceramic Nanoparticles. <i>ACS Applied Energy Materials</i> , 2019, 2, 5380-5385.	2.5	19
25	An extremely durable redox shuttle additive for overcharge protection of lithium-ion batteries. <i>Materials Today Energy</i> , 2019, 13, 308-311.	2.5	13
26	Insights from incorporating reference electrodes in symmetric lithium-ion cells with layered oxide or graphite electrodes. <i>Journal of Power Sources</i> , 2019, 438, 227033.	4.0	4
27	Fast Charging of Li-Ion Cells: Part II. Nonlinear Contributions to Cell and Electrode Polarization. <i>Journal of the Electrochemical Society</i> , 2019, 166, A3305-A3313.	1.3	24
28	Redox-active polymers (redoxmers) for electrochemical energy storage. <i>MRS Communications</i> , 2019, 9, 1151-1167.	0.8	9
29	Structural underpinnings of cathode protection by in situ generated lithium oxyfluorophosphates. <i>Journal of Power Sources</i> , 2019, 438, 227039.	4.0	10
30	Quantifying lithium concentration gradients in the graphite electrode of Li-ion cells using <i>operando</i> energy dispersive X-ray diffraction. <i>Energy and Environmental Science</i> , 2019, 12, 656-665.	15.6	126
31	On Transferability of Performance Metrics for Redox-Active Molecules. <i>Journal of Physical Chemistry C</i> , 2019, 123, 16516-16524.	1.5	20
32	Observation of Microheterogeneity in Highly Concentrated Nonaqueous Electrolyte Solutions. <i>Journal of the American Chemical Society</i> , 2019, 141, 8041-8046.	6.6	10
33	Facile In Situ Syntheses of Cathode Protective Electrolyte Additives for High Energy Density Li-Ion Cells. <i>Chemistry of Materials</i> , 2019, 31, 2459-2468.	3.2	11
34	Fast Charging of Li-Ion Cells: Part I. Using Li/Cu Reference Electrodes to Probe Individual Electrode Potentials. <i>Journal of the Electrochemical Society</i> , 2019, 166, A996-A1003.	1.3	79
35	Understanding of pre-lithiation of poly(acrylic acid) binder: Striking the balances between the cycling performance and slurry stability for silicon-graphite composite electrodes in Li-ion batteries. <i>Journal of Power Sources</i> , 2019, 416, 125-131.	4.0	50
36	Fast Charging of Li-Ion Cells: Part III. Relaxation Dynamics and Trap-Controlled Lithium Ion Transport. <i>Journal of the Electrochemical Society</i> , 2019, 166, A4168-A4174.	1.3	12

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37	Solvent-dependent complex reaction pathways of bromoform revealed by time-resolved X-ray solution scattering and X-ray transient absorption spectroscopy. <i>Structural Dynamics</i> , 2019, 6, 064902.	0.9	8
38	Lithium Acetylide: A Spectroscopic Marker for Lithium Deposition During Fast Charging of Li-Ion Cells. <i>ACS Applied Energy Materials</i> , 2019, 2, 873-881.	2.5	32
39	Chemical "Pickling" of Phosphite Additives Mitigates Impedance Rise in Li Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 9811-9824.	1.5	18
40	Elucidating Factors Controlling Long-Term Stability of Radical Anions for Negative Charge Storage in Nonaqueous Redox Flow Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 8116-8127.	1.5	33
41	Solution Properties and Practical Limits of Concentrated Electrolytes for Nonaqueous Redox Flow Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 8159-8172.	1.5	59
42	The existence of optimal molecular weight for poly(acrylic acid) binders in silicon/graphite composite anode for lithium-ion batteries. <i>Journal of Power Sources</i> , 2018, 378, 671-676.	4.0	70
43	Substituted thiadiazoles as energy-rich anolytes for nonaqueous redox flow cells. <i>Journal of Materials Chemistry A</i> , 2018, 6, 6251-6254.	5.2	32
44	Spatially Constrained Organic Diquat Anolyte for Stable Aqueous Flow Batteries. <i>ACS Energy Letters</i> , 2018, 3, 2533-2538.	8.8	56
45	Calendar-life versus cycle-life aging of lithium-ion cells with silicon-graphite composite electrodes. <i>Electrochimica Acta</i> , 2018, 280, 221-228.	2.6	67
46	Comparing calendar and cycle life stability of redox active organic molecules for nonaqueous redox flow batteries. <i>Journal of Power Sources</i> , 2018, 397, 214-222.	4.0	26
47	Quantifying gas generation from slurries used in fabrication of Si-containing electrodes for lithium-ion cells. <i>Journal of Power Sources</i> , 2018, 395, 289-294.	4.0	16
48	Anode-Dependent Impedance Rise in Layered-Oxide Cathodes of Lithium-Ion Cells. <i>Journal of the Electrochemical Society</i> , 2018, 165, A1697-A1705.	1.3	40
49	Transition Metal Dissolution, Ion Migration, Electrocatalytic Reduction and Capacity Loss in Lithium-Ion Full Cells. <i>Journal of the Electrochemical Society</i> , 2017, 164, A389-A399.	1.3	356
50	"Wine-Dark Sea" in an Organic Flow Battery: Storing Negative Charge in 2,1,3-Benzothiadiazole Radicals Leads to Improved Cyclability. <i>ACS Energy Letters</i> , 2017, 2, 1156-1161.	8.8	160
51	Chemical Weathering of Layered Ni-Rich Oxide Electrode Materials: Evidence for Cation Exchange. <i>Journal of the Electrochemical Society</i> , 2017, 164, A1489-A1498.	1.3	133
52	Oxidatively stable fluorinated sulfone electrolytes for high voltage high energy lithium-ion batteries. <i>Energy and Environmental Science</i> , 2017, 10, 900-904.	15.6	119
53	Auger Electrons as Probes for Composite Micro- and Nanostructured Materials: Application to Solid Electrolyte Interphases in Graphite and Silicon-Graphite Electrodes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23333-23346.	1.5	20
54	Toward Improved Catholyte Materials for Redox Flow Batteries: What Controls Chemical Stability of Persistent Radical Cations?. <i>Journal of Physical Chemistry C</i> , 2017, 121, 23347-23358.	1.5	27

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55	Capacity Fade and Its Mitigation in Li-Ion Cells with Silicon-Graphite Electrodes. <i>Journal of Physical Chemistry C</i> , 2017, 121, 20640-20649.	1.5	59
56	Annulated Dialkoxybenzenes as Catholyte Materials for Non-aqueous Redox Flow Batteries: Achieving High Chemical Stability through Bicyclic Substitution. <i>Advanced Energy Materials</i> , 2017, 7, 1701272.	10.2	57
57	Improved performance through tight coupling of redox cycles of sulfur and 2,6-polyanthraquinone in lithium-sulfur batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 24103-24109.	5.2	6
58	Redox Flow Batteries: Annulated Dialkoxybenzenes as Catholyte Materials for Non-aqueous Redox Flow Batteries: Achieving High Chemical Stability through Bicyclic Substitution (<i>Adv. Energy Mater.</i>)	10.2	57
59	Electrocatalysis Paradigm for Protection of Cathode Materials in High-Voltage Lithium-Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2016, 120, 15119-15128.	1.5	24
60	Chemical Stability of Lithium 2-Trifluoromethyl-4,5-dicyanoimidazolide, an Electrolyte Salt for Li-Ion Cells. <i>Journal of Physical Chemistry C</i> , 2016, 120, 28463-28471.	1.5	15
61	Spontaneous aggregation of lithium ion coordination polymers in fluorinated electrolytes for high-voltage batteries. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 10846-10849.	1.3	17
62	Mechanistic Insight in the Function of Phosphite Additives for Protection of $\text{LiNi}_{0.5}\text{Co}_{0.2}\text{Mn}_{0.3}\text{O}_2$ Cathode in High Voltage Li-Ion Cells. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 11450-11458.	4.0	121
63	Allotropic Control: How Certain Fluorinated Carbonate Electrolytes Protect Aluminum Current Collectors by Promoting the Formation of Insoluble Coordination Polymers. <i>Journal of Physical Chemistry C</i> , 2016, 120, 18435-18444.	1.5	23
64	Redox Shuttles with Axisymmetric Scaffold for Overcharge Protection of Lithium-Ion Batteries. <i>Advanced Energy Materials</i> , 2016, 6, 1600795.	10.2	33
65	The lightest organic radical cation for charge storage in redox flow batteries. <i>Scientific Reports</i> , 2016, 6, 32102.	1.6	59
66	The AHA Moment: Assessment of the Redox Stability of Ionic Liquids Based on Aromatic Heterocyclic Anions (AHAs) for Nuclear Separations and Electric Energy Storage. <i>Journal of Physical Chemistry B</i> , 2015, 119, 14766-14779.	1.2	10
67	What Makes Fluoroethylene Carbonate Different?. <i>Journal of Physical Chemistry C</i> , 2015, 119, 14954-14964.	1.5	159
68	An organophosphine oxide redox shuttle additive that delivers long-term overcharge protection for 4 V lithium-ion batteries. <i>Journal of Materials Chemistry A</i> , 2015, 3, 10710-10714.	5.2	24
69	1,4-Bis(trimethylsilyl)-2,5-dimethoxybenzene: a novel redox shuttle additive for overcharge protection in lithium-ion batteries that doubles as a mechanistic chemical probe. <i>Journal of Materials Chemistry A</i> , 2015, 3, 7332-7337.	5.2	33
70	In the Bottlebrush Garden: The Structural Aspects of Coordination Polymer Phases formed in Lanthanide Extraction with Alkyl Phosphoric Acids. <i>Journal of Physical Chemistry B</i> , 2015, 119, 11910-11927.	1.2	24
71	Charge Trapping in Photovoltaically Active Perovskites and Related Halogenoplumbate Compounds. <i>Journal of Physical Chemistry Letters</i> , 2014, 5, 1066-1071.	2.1	106
72	Manganese in Graphite Anode and Capacity Fade in Li Ion Batteries. <i>Journal of Physical Chemistry C</i> , 2014, 118, 24335-24348.	1.5	115

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73	Radiation Stability of Cations in Ionic Liquids. 5. Task-Specific Ionic Liquids Consisting of Biocompatible Cations and the Puzzle of Radiation Hypersensitivity. <i>Journal of Physical Chemistry B</i> , 2014, 118, 10477-10492.	1.2	12
74	Why Bis(fluorosulfonyl)imide Is a "Magic Anion" for Electrochemistry. <i>Journal of Physical Chemistry C</i> , 2014, 118, 19661-19671.	1.5	229
75	Ionic Liquid Based Separations of Trivalent Lanthanide and Actinide Ions.. <i>Industrial & Engineering Chemistry Research</i> , 2014, 53, 3641-3653.	1.8	90
76	Radiation Induced Reactions and Fragmentation in Room Temperature Ionic Liquids. , 2014, , 453-485.		3
77	Reduction of Carbonate Electrolytes and the Formation of Solid-Electrolyte Interface (SEI) in Lithium-Ion Batteries. 1. Spectroscopic Observations of Radical Intermediates Generated in One-Electron Reduction of Carbonates. <i>Journal of Physical Chemistry C</i> , 2013, 117, 19255-19269.	1.5	161
78	Radiation Stability of Cations in Ionic Liquids. 1. Alkyl and Benzyl Derivatives of 5-Membered Ring Heterocycles. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14372-14384.	1.2	27
79	Radiation Stability of Cations in Ionic Liquids. 4. Task-Specific Antioxidant Cations for Nuclear Separations and Photolithography. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14797-14807.	1.2	9
80	Radiation Stability of Cations in Ionic Liquids. 3. Guanidinium Cations. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14400-14407.	1.2	15
81	Radiation Stability of Cations in Ionic Liquids. 2. Improved Radiation Resistance through Charge Delocalization in 1-Benzylpyridinium. <i>Journal of Physical Chemistry B</i> , 2013, 117, 14385-14399.	1.2	32
82	Mechanistic Insight into the Protective Action of Bis(oxalato)borate and Difluoro(oxalato)borate Anions in Li-Ion Batteries.. <i>Journal of Physical Chemistry C</i> , 2013, 117, 23750-23756.	1.5	79
83	Reduction of Carbonate Electrolytes and the Formation of Solid-Electrolyte Interface (SEI) in Lithium-Ion Batteries. 2. Radiolytically Induced Polymerization of Ethylene Carbonate. <i>Journal of Physical Chemistry C</i> , 2013, 117, 19270-19279.	1.5	79
84	Ionic Liquids Based on Polynitrile Anions: Hydrophobicity, Low Proton Affinity, and High Radiolytic Resistance Combined. <i>Journal of Physical Chemistry B</i> , 2013, 117, 7084-7094.	1.2	30
85	Photo- and Radiation-Chemistry of Halide Anions in Ionic Liquids. <i>Journal of Physical Chemistry A</i> , 2013, 117, 5742-5756.	1.1	21
86	Electron Localization and Radiation Chemistry of Amides. <i>Journal of Physical Chemistry A</i> , 2012, 116, 1746-1757.	1.1	15
87	Heteroatom-Transfer Coupled Photoreduction and Carbon Dioxide Fixation on Metal Oxides. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9461-9471.	1.5	45
88	Novel tandem column method for the rapid isolation of radiostromtium from human urine. <i>Analytica Chimica Acta</i> , 2012, 746, 114-122.	2.6	10
89	Radiation-Induced Fragmentation of Diamide Extraction Agents in Ionic Liquid Diluents. <i>Journal of Physical Chemistry B</i> , 2012, 116, 2234-2243.	1.2	32
90	Toward Radiation-Resistant Ionic Liquids. Radiation Stability of Sulfonyl Imide Anions. <i>Journal of Physical Chemistry B</i> , 2012, 116, 9043-9055.	1.2	37

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91	Dynamics of Interfacial Charge Transfer to Formic Acid, Formaldehyde, and Methanol on the Surface of TiO ₂ Nanoparticles and Its Role in Methane Production. <i>Journal of Physical Chemistry C</i> , 2012, 116, 878-885.	1.5	68
92	Radiation Induced Redox Reactions and Fragmentation of Constituent Ions in Ionic Liquids. 2. Imidazolium Cations. <i>Journal of Physical Chemistry B</i> , 2011, 115, 3889-3902.	1.2	76
93	Radiation Induced Redox Reactions and Fragmentation of Constituent Ions in Ionic Liquids. 1. Anions. <i>Journal of Physical Chemistry B</i> , 2011, 115, 3872-3888.	1.2	97
94	Hydrogen-Bonding Interactions and Protic Equilibria in Room-Temperature Ionic Liquids Containing Crown Ethers. <i>Journal of Physical Chemistry B</i> , 2011, 115, 3912-3918.	1.2	18
95	On the Radiation Stability of Crown Ethers in Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2011, 115, 3903-3911.	1.2	33
96	General Impossibility to Prescribe Diffusion for a Geminate Pair in a Central Force Field and Peculiarities of Geminate Dynamics in Ionic Liquids. <i>Journal of Physical Chemistry A</i> , 2011, 115, 4636-4639.	1.1	1
97	Photooxidation of Nucleic Acids on Metal Oxides: Physicochemical and Astrobiological Perspectives. <i>Journal of Physical Chemistry C</i> , 2011, 115, 3393-3403.	1.5	14
98	Surface Modified, Collapsible Controlled Pore Glass Materials for Sequestration and Immobilization of Trivalent Metal Ions. <i>Industrial & Engineering Chemistry Research</i> , 2011, 50, 4686-4696.	1.8	7
99	Mechanistic Aspects of Photooxidation of Polyhydroxylated Molecules on Metal Oxides. <i>Journal of Physical Chemistry C</i> , 2011, 115, 4642-4648.	1.5	25
100	Extraction and Reductive Stripping of Pertechnetate from Spent Nuclear Fuel Waste Streams. <i>Separation Science and Technology</i> , 2011, 46, 357-368.	1.3	18
101	Radiation and Radical Chemistry of NO ₃ ⁻ , HNO ₃ , and Dialkylphosphoric Acids in Room-Temperature Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2011, 115, 10927-10942.	1.2	39
102	The Structure and Dynamics of Solvated Electrons. , 2010, , 59-95.		8
103	The Radiation Chemistry of Ionic Liquids and its Implications for their Use in Nuclear Fuel Processing. <i>ACS Symposium Series</i> , 2010, , 119-134.	0.5	11
104	Deprotonation and Oligomerization in Photo-, Radiolytically, and Electrochemically Induced Redox Reactions in Hydrophobic Alkylalkylimidazolium Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2010, 114, 368-375.	1.2	31
105	Extraction of Tetra-Oxo Anions into a Hydrophobic, Ionic Liquid-Based Solvent without Concomitant Ion Exchange. <i>Industrial & Engineering Chemistry Research</i> , 2010, 49, 5863-5868.	1.8	38
106	Photocatalytic Decomposition of Carboxylated Molecules on Light-Exposed Martian Regolith and Its Relation to Methane Production on Mars. <i>Astrobiology</i> , 2010, 10, 425-436.	1.5	50
107	Magnetic Extraction, Detection, and Isotope Analysis of Metal Ions Using Surface Modified Microspheres for Lab-on-a-Chip Applications. <i>Separation Science and Technology</i> , 2010, 45, 186-197.	1.3	3
108	Sequestration, Fluorometric Detection, And Mass Spectroscopy Analysis of Lanthanide Ions Using Surface Modified Magnetic Microspheres for Microfluidic Manipulation. <i>Journal of the American Chemical Society</i> , 2009, 131, 15705-15710.	6.6	6

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109	Light Induced Fragmentation of Polyfunctional Carboxylated Compounds on Hydrated Metal Oxide Particles: From Simple Organic Acids to Peptides. <i>Journal of Physical Chemistry C</i> , 2009, 113, 17138-17150.	1.5	31
110	Charge Trapping in Imidazolium Ionic Liquids. <i>Journal of Physical Chemistry B</i> , 2009, 113, 5582-5592.	1.2	86
111	Electron solvation by clustered H-bond complexes of water with tri-n-butylphosphate. <i>Chemical Physics Letters</i> , 2008, 465, 234-237.	1.2	7
112	Pump-probe polarized transient hole burning (PTHB) dynamics of hydrated electron revisited. <i>Chemical Physics Letters</i> , 2008, 467, 84-87.	1.2	10
113	Transient x-ray absorption spectroscopy of hydrated halogen atom. <i>Journal of Chemical Physics</i> , 2008, 128, 061102.	1.2	35
114	Ultrafast pulse radiolysis using a terawatt laser wakefield accelerator. <i>Journal of Applied Physics</i> , 2007, 101, 053102.	1.1	29
115	The Structure of the Hydrated Electron. Part 1. Magnetic Resonance of Internally Trapping Water Anions: A Density Functional Theory Study. <i>Journal of Physical Chemistry A</i> , 2007, 111, 5223-5231.	1.1	56
116	The Structure of the Hydrated Electron. Part 2. A Mixed Quantum/Classical Molecular Dynamics Embedded Cluster Density Functional Theory: Single Excitation Configuration Interaction Study. <i>Journal of Physical Chemistry A</i> , 2007, 111, 5232-5243.	1.1	51
117	The Initial Stages of Radiation Damage in Ionic Liquids and Ionic Liquid-Based Extraction Systems. <i>Journal of Physical Chemistry B</i> , 2007, 111, 11786-11793.	1.2	124
118	On the nature of infrared absorbing trapped electron center in low-temperature ice-Ih. <i>Chemical Physics Letters</i> , 2007, 443, 289-292.	1.2	5
119	Ammoniated Electron as a Solvent Stabilized Multimer Radical Anion. <i>Journal of Physical Chemistry A</i> , 2006, 110, 3967-3976.	1.1	59
120	Toward Electron Encapsulation: Polynitrile Approach. <i>Journal of Physical Chemistry A</i> , 2006, 110, 8126-8136.	1.1	10
121	Can a single molecule trap the electron?. <i>Chemical Physics Letters</i> , 2006, 431, 364-369.	1.2	8
122	Photostimulated electron detrapping and the two-state model for electron transport in nonpolar liquids. <i>Journal of Chemical Physics</i> , 2005, 122, 134503.	1.2	18
123	Electron Trapping by Polar Molecules in Alkane Liquids: Cluster Chemistry in Dilute Solution. <i>Journal of Physical Chemistry A</i> , 2005, 109, 5754-5769.	1.1	11
124	Geminate recombination of hydroxyl radicals generated in 200 nm photodissociation of aqueous hydrogen peroxide. <i>Chemical Physics Letters</i> , 2004, 383, 481-485.	1.2	30
125	Recombination of geminate (OH, eaq ⁻) pairs in concentrated alkaline solutions: lack of evidence for hydroxyl radical deprotonation. <i>Chemical Physics Letters</i> , 2004, 389, 379-384.	1.2	10
126	Geminate recombination dynamics studied via electron reexcitation: kinetic analysis for anion CTTS photosystems. <i>Chemical Physics Letters</i> , 2004, 395, 264-268.	1.2	6

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127	Geminate recombination of electrons generated by above-the-gap (12.4 eV) photoionization of liquid water. <i>Chemical Physics Letters</i> , 2004, 398, 102-106.	1.2	26
128	Ultrafast dynamics for electron photodetachment from aqueous hydroxide. <i>Journal of Chemical Physics</i> , 2004, 120, 11712-11725.	1.2	59
129	Efficient, Rapid Photooxidation of Chemisorbed Polyhydroxyl Alcohols and Carbohydrates by TiO ₂ Nanoparticles in an Aqueous Solution. <i>Journal of Physical Chemistry B</i> , 2004, 108, 12512-12517.	1.2	93
130	Hole Scavenging and Photo-Stimulated Recombination of Electron-Hole Pairs in Aqueous TiO ₂ Nanoparticles. <i>Journal of Physical Chemistry B</i> , 2004, 108, 12497-12511.	1.2	128
131	Electron Photodetachment from Aqueous Anions. 1. Quantum Yields for Generation of Hydrated Electron by 193 and 248 nm Laser Photoexcitation of Miscellaneous Inorganic Anions. <i>Journal of Physical Chemistry A</i> , 2004, 108, 5490-5502.	1.1	111
132	Ionic and Neutral Species in Pulse Radiolysis of Supercritical CO ₂ . 1. Transient Absorption Spectroscopy, Electric Field Effect, and Charge Dynamics. <i>Journal of Physical Chemistry A</i> , 2002, 106, 11855-11870.	1.1	25
133	Spin-Polarized Nitroxide Radicals in Organic Glasses. <i>Journal of Physical Chemistry A</i> , 2002, 106, 4838-4845.	1.1	14
134	Ionic Species in Pulse Radiolysis of Supercritical Carbon Dioxide. 2. Ab Initio Studies on the Structure and Optical Properties of (CO ₂) ⁿ⁺ , (CO ₂) ²⁻ , and CO ₃ ⁻ Ions. <i>Journal of Physical Chemistry A</i> , 2002, 106, 11871-11881.	1.1	26
135	Electron Localization in Solid Acetonitrile. <i>Journal of Physical Chemistry A</i> , 2002, 106, 9132-9144.	1.1	28
136	Radiation chemistry of organic liquids: Saturated hydrocarbons. <i>Studies in Physical and Theoretical Chemistry</i> , 2001, 87, 175-221.	0.0	27
137	On the structure of trapped holes in borosilicates. <i>Journal of Chemical Physics</i> , 2000, 113, 10723-10732.	1.2	20
138	Electron trapping and hydrogen atoms in oxide glasses. <i>Journal of Chemical Physics</i> , 1999, 111, 5124-5140.	1.2	15
139	Reactions of Photoexcited Aromatic Radical Cations with Polar Solvents. <i>Journal of Physical Chemistry A</i> , 1998, 102, 4976-4989.	1.1	33
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