Ilya A Shkrob

List of Publications by Year
in descending order

140	5,533	81743	95083
papers	citations	39 h-index	68 g-index

141	141	141	6235
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Transition Metal Dissolution, Ion Migration, Electrocatalytic Reduction and Capacity Loss in Lithium-Ion Full Cells. Journal of the Electrochemical Society, 2017, 164, A389-A399.	1.3	356
2	Why Bis(fluorosulfonyl)imide Is a â€œMagic Anionâ€•for Electrochemistry. Journal of Physical Chemistry C, 2014, 118, 19661-19671.	1.5	229
3	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. Journal of Physical Chemistry C, 2013, 117, 19255-19269.	1.5	161
4	â€œWine-Dark Seaâ€•in an Organic Flow Battery: Storing Negative Charge in 2,1,3-Benzothiadiazole Radicals Leads to Improved Cyclability. ACS Energy Letters, 2017, 2, 1156-1161.	8.8	160
5	What Makes Fluoroethylene Carbonate Different?. Journal of Physical Chemistry C, 2015, 119, 14954-14964.	1.5	159
6	Chemical Weathering of Layered Ni-Rich Oxide Electrode Materials: Evidence for Cation Exchange. Journal of the Electrochemical Society, 2017, 164, A1489-A1498.	1.3	133
7	Hole Scavenging and Photo-Stimulated Recombination of Electronâ˜'Hole Pairs in Aqueous TiO2Nanoparticles. Journal of Physical Chemistry B, 2004, 108, 12497-12511.	1.2	128
8	Quantifying lithium concentration gradients in the graphite electrode of Li-ion cells using operando energy dispersive X-ray diffraction. Energy and Environmental Science, 2019, 12, 656-665.	15.6	126
9	The Initial Stages of Radiation Damage in Ionic Liquids and Ionic Liquid-Based Extraction Systems. Journal of Physical Chemistry B, 2007, 111, 11786-11793.	1.2	124
10	Mechanistic Insight in the Function of Phosphite Additives for Protection of LiNi_{0.5}Co_{0.2}Mn_{0.3}O₂ Cathode in High Voltage Li-Ion Cells. ACS Applied Materials & Interfaces, 2016, 8, 11450-11458.	4.0	121
11	Oxidatively stable fluorinated sulfone electrolytes for high voltage high energy lithium-ion batteries. Energy and Environmental Science, 2017, 10, 900-904.	15.6	119
12	Manganese in Graphite Anode and Capacity Fade in Li Ion Batteries. Journal of Physical Chemistry C, 2014, 118, 24335-24348.	1.5	115
13	Electron Photodetachment from Aqueous Anions. 1. Quantum Yields for Generation of Hydrated Electron by 193 and 248 nm Laser Photoexcitation of Miscellaneous Inorganic Anionsâ€. Journal of Physical Chemistry A, 2004, 108, 5490-5502.	1.1	111
14	Charge Trapping in Photovoltaically Active Perovskites and Related Halogenoplumbate Compounds. Journal of Physical Chemistry Letters, 2014, 5, 1066-1071.	2.1	106
15	Radiation Induced Redox Reactions and Fragmentation of Constituent Ions in Ionic Liquids. 1. Anions. Journal of Physical Chemistry B, 2011, 115, 3872-3888.	1.2	97
16	Efficient, Rapid Photooxidation of Chemisorbed Polyhydroxyl Alcohols and Carbohydrates by TiO2Nanoparticles in an Aqueous Solution. Journal of Physical Chemistry B, 2004, 108, 12512-12517.	1.2	93
17	Ionic Liquid Based Separations of Trivalent Lanthanide and Actinide Ions.. Industrial & Engineering Chemistry Research, 2014, 53, 3641-3653.	1.8	90
18	Charge Trapping in Imidazolium Ionic Liquids. Journal of Physical Chemistry B, 2009, 113, 5582-5592.	1.2	86

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19	Mechanistic Insight into the Protective Action of Bis(oxalato)borate and Difluoro(oxalate)borate Anions in Li-Ion Batteries.. Journal of Physical Chemistry C, 2013, 117, 23750-23756.	1.5	79
20	Reduction of Carbonate Electrolytes and the Formation of Solid-Electrolyte Interface (SEI) in Lithium-Ion Batteries. 2. Radiolytically Induced Polymerization of Ethylene Carbonate. Journal of Physical Chemistry C, 2013, 117, 19270-19279.	1.5	79
21	Fast Charging of Li-Ion Cells: Part I. Using Li/Cu Reference Electrodes to Probe Individual Electrode Potentials. Journal of the Electrochemical Society, 2019, 166, A996-A1003.	1.3	79
22	Radiation Induced Redox Reactions and Fragmentation of Constituent Ions in Ionic Liquids. 2. Imidazolium Cations. Journal of Physical Chemistry B, 2011, 115, 3889-3902.	1.2	76
23	The existence of optimal molecular weight for poly(acrylic acid) binders in silicon/graphite composite anode for lithium-ion batteries. Journal of Power Sources, 2018, 378, 671-676.	4.0	70
24	Dynamics of Interfacial Charge Transfer to Formic Acid, Formaldehyde, and Methanol on the Surface of TiO2Nanoparticles and Its Role in Methane Production. Journal of Physical Chemistry C, 2012, 116, 878-885.	1.5	68
25	Calendar-life versus cycle-life aging of lithium-ion cells with silicon-graphite composite electrodes. Electrochimica Acta, 2018, 280, 221-228.	2.6	67
26	Ultrafast dynamics for electron photodetachment from aqueous hydroxide. Journal of Chemical Physics, 2004, 120, 11712-11725.	1.2	59
27	Ammoniated Electron as a Solvent Stabilized Multimer Radical Anion. Journal of Physical Chemistry A, 2006, 110, 3967-3976.	1.1	59
28	The lightest organic radical cation for charge storage in redox flow batteries. Scientific Reports, 2016, 6, 32102.	1.6	59
29	Capacity Fade and Its Mitigation in Li-Ion Cells with Silicon-Graphite Electrodes. Journal of Physical Chemistry C, 2017, 121, 20640-20649.	1.5	59
30	Solution Properties and Practical Limits of Concentrated Electrolytes for Nonaqueous Redox Flow Batteries. Journal of Physical Chemistry C, 2018, 122, 8159-8172.	1.5	59
31	Annulated Dialkoxybenzenes as Catholyte Materials for Nonâ€aqueous Redox Flow Batteries: Achieving High Chemical Stability through Bicyclic Substitution. Advanced Energy Materials, 2017, 7, 1701272.	10.2	57
32	The Structure of the Hydrated Electron. Part 1. Magnetic Resonance of Internally Trapping Water Anions:â€‰ A Density Functional Theory Study. Journal of Physical Chemistry A, 2007, 111, 5223-5231.	1.1	56
33	Spatially Constrained Organic Diquat Anolyte for Stable Aqueous Flow Batteries. ACS Energy Letters, 2018, 3, 2533-2538.	8.8	56
34	The Structure of the Hydrated Electron. Part 2. A Mixed Quantum/Classical Molecular Dynamics Embedded Cluster Density Functional Theory:â€‰ Singleâˆ’Excitation Configuration Interaction Study. Journal of Physical Chemistry A, 2007, 111, 5232-5243.	1.1	51
35	Photocatalytic Decomposition of Carboxylated Molecules on Light-Exposed Martian Regolith and Its Relation to Methane Production on Mars. Astrobiology, 2010, 10, 425-436.	1.5	50
36	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. Journal of Power Sources, 2019, 416, 125-131.	4.0	50

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37	Heteroatom-Transfer Coupled Photoreduction and Carbon Dioxide Fixation on Metal Oxides. Journal of Physical Chemistry C, 2012, 116, 9461-9471.	1.5	45
38	Anode-Dependent Impedance Rise in Layered-Oxide Cathodes ofÂLithium-Ion Cells. Journal of the Electrochemical Society, 2018, 165, A1697-A1705.	1.3	40
39	Radiation and Radical Chemistry of NO₃^{â€“}, HNO₃, and Dialkylphosphoric Acids in Room-Temperature Ionic Liquids. Journal of Physical Chemistry B, 2011, 115, 10927-10942.	1.2	39
40	Extraction of Tetra-Oxo Anions into a Hydrophobic, Ionic Liquid-Based Solvent without Concomitant Ion Exchange. Industrial & Engineering Chemistry Research, 2010, 49, 5863-5868.	1.8	38
41	Toward Radiation-Resistant Ionic Liquids. Radiation Stability of Sulfonyl Imide Anions. Journal of Physical Chemistry B, 2012, 116, 9043-9055.	1.2	37
42	How Fast Can a Li-Ion Battery Be Charged? Determination of Limiting Fast Charging Conditions. ACS Applied Energy Materials, 2021, 4, 1063-1068.	2.5	37
43	Transient x-ray absorption spectroscopy of hydrated halogen atom. Journal of Chemical Physics, 2008, 128, 061102.	1.2	35
44	Apparent Increasing Lithium Diffusion Coefficient with Applied Current in Graphite. Journal of the Electrochemical Society, 2020, 167, 120528.	1.3	34
45	Reactions of Photoexcited Aromatic Radical Cations with Polar Solventsâ€. Journal of Physical Chemistry A, 1998, 102, 4976-4989.	1.1	33
46	On the Radiation Stability of Crown Ethers in Ionic Liquids. Journal of Physical Chemistry B, 2011, 115, 3903-3911.	1.2	33
47	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. Journal of Materials Chemistry A, 2015, 3, 7332-7337.	5.2	33
48	Redox Shuttles with Axisymmetric Scaffold for Overcharge Protection of Lithiumâ€‰ion Batteries. Advanced Energy Materials, 2016, 6, 1600795.	10.2	33
49	Elucidating Factors Controlling Long-Term Stability of Radical Anions for Negative Charge Storage in Nonaqueous Redox Flow Batteries. Journal of Physical Chemistry C, 2018, 122, 8116-8127.	1.5	33
50	Radiation-Induced Fragmentation of Diamide Extraction Agents in Ionic Liquid Diluents. Journal of Physical Chemistry B, 2012, 116, 2234-2243.	1.2	32
51	Radiation Stability of Cations in Ionic Liquids. 2. Improved Radiation Resistance through Charge Delocalization in 1-Benzylpyridinium. Journal of Physical Chemistry B, 2013, 117, 14385-14399.	1.2	32
52	Substituted thiadiazoles as energy-rich anolytes for nonaqueous redox flow cells. Journal of Materials Chemistry A, 2018, 6, 6251-6254.	5.2	32
53	Lithium Acetylide: A Spectroscopic Marker for Lithium Deposition During Fast Charging of Li-Ion Cells. ACS Applied Energy Materials, 2019, 2, 873-881.	2.5	32
54	Fast Charging of Li-Ion Cells: Part IV. Temperature Effects and â€œSafe Linesâ€•to Avoid Lithium Plating. Journal of the Electrochemical Society, 2020, 167, 130508.	1.3	32

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55	Light Induced Fragmentation of Polyfunctional Carboxylated Compounds on Hydrated Metal Oxide Particles: From Simple Organic Acids to Peptides. Journal of Physical Chemistry C, 2009, 113, 17138-17150.	1.5	31
56	Deprotonation and Oligomerization in Photo-, Radiolytically, and Electrochemically Induced Redox Reactions in Hydrophobic Alkylalkylimidazolium Ionic Liquids. Journal of Physical Chemistry B, 2010, 114, 368-375.	1.2	31
57	Geminate recombination of hydroxyl radicals generated in 200 nm photodissociation of aqueous hydrogen peroxide. Chemical Physics Letters, 2004, 383, 481-485.	1.2	30
58	Ionic Liquids Based on Polynitrile Anions: Hydrophobicity, Low Proton Affinity, and High Radiolytic Resistance Combined. Journal of Physical Chemistry B, 2013, 117, 7084-7094.	1.2	30
59	Ultrafast pulse radiolysis using a terawatt laser wakefield accelerator. Journal of Applied Physics, 2007, 101, 053102.	1.1	29
60	Electron Localization in Solid Acetonitrile. Journal of Physical Chemistry A, 2002, 106, 9132-9144.	1.1	28
61	Radiation chemistry of organic liquids: Saturated hydrocarbons. Studies in Physical and Theoretical Chemistry, 2001, 87, 175-221.	0.0	27
62	Radiation Stability of Cations in Ionic Liquids. 1. Alkyl and Benzyl Derivatives of 5-Membered Ring Heterocycles. Journal of Physical Chemistry B, 2013, 117, 14372-14384.	1.2	27
63	Toward Improved Catholyte Materials for Redox Flow Batteries: What Controls Chemical Stability of Persistent Radical Cations?. Journal of Physical Chemistry C, 2017, 121, 23347-23358.	1.5	27
64	Ionic Species in Pulse Radiolysis of Supercritical Carbon Dioxide. 2. Ab Initio Studies on the Structure and Optical Properties of (CO2)n+, (CO2)2-, and CO3- Ions. Journal of Physical Chemistry A, 2002, 106, 11871-11881.	1.1	26
65	Geminate recombination of electrons generated by above-the-gap (12.4 eV) photoionization of liquid water. Chemical Physics Letters, 2004, 398, 102-106.	1.2	26
66	Comparing calendar and cycle life stability of redox active organic molecules for nonaqueous redox flow batteries. Journal of Power Sources, 2018, 397, 214-222.	4.0	26
67	Ionic and Neutral Species in Pulse Radiolysis of Supercritical CO2. 1. Transient Absorption Spectroscopy, Electric Field Effect, and Charge Dynamics. Journal of Physical Chemistry A, 2002, 106, 11855-11870.	1.1	25
68	Mechanistic Aspects of Photooxidation of Polyhydroxylated Molecules on Metal Oxides. Journal of Physical Chemistry C, 2011, 115, 4642-4648.	1.5	25
69	In situ X-ray spatial profiling reveals uneven compression of electrode assemblies and steep lateral gradients in lithium-ion coin cells. Physical Chemistry Chemical Physics, 2020, 22, 21977-21987.	1.3	25
70	An organophosphine oxide redox shuttle additive that delivers long-term overcharge protection for 4 V lithium-ion batteries. Journal of Materials Chemistry A, 2015, 3, 10710-10714.	5.2	24
71	In the Bottlebrush Garden: The Structural Aspects of Coordination Polymer Phases formed in Lanthanide Extraction with Alkyl Phosphoric Acids. Journal of Physical Chemistry B, 2015, 119, 11910-11927.	1.2	24
72	Electrocatalysis Paradigm for Protection of Cathode Materials in High-Voltage Lithium-Ion Batteries. Journal of Physical Chemistry C, 2016, 120, 15119-15128.	1.5	24

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73	Fast Charging of Li-Ion Cells: Part II. Nonlinear Contributions to Cell and Electrode Polarization. Journal of the Electrochemical Society, 2019, 166, A3305-A3313.	1.3	24
74	Allotropic Control: How Certain Fluorinated Carbonate Electrolytes Protect Aluminum Current Collectors by Promoting the Formation of Insoluble Coordination Polymers. Journal of Physical Chemistry C, 2016, 120, 18435-18444.	1.5	23
75	Photo- and Radiation-Chemistry of Halide Anions in Ionic Liquids. Journal of Physical Chemistry A, 2013, 117, 5742-5756.	1.1	21
76	On the structure of trapped holes in borosilicates. Journal of Chemical Physics, 2000, 113, 10723-10732.	1.2	20
77	Auger Electrons as Probes for Composite Micro- and Nanostructured Materials: Application to Solid Electrolyte Interphases in Graphite and Silicon-Graphite Electrodes. Journal of Physical Chemistry C, 2017, 121, 23333-23346.	1.5	20
78	On Transferability of Performance Metrics for Redox-Active Molecules. Journal of Physical Chemistry C, 2019, 123, 16516-16524.	1.5	20
79	Dehydration Rather Than HF Capture Explains Performance Improvements of Li-Ion Cells by Ceramic Nanoparticles. ACS Applied Energy Materials, 2019, 2, 5380-5385.	2.5	19
80	Photostimulated electron detrapping and the two-state model for electron transport in nonpolar liquids. Journal of Chemical Physics, 2005, 122, 134503.	1.2	18
81	Hydrogen-Bonding Interactions and Protic Equilibria in Room-Temperature Ionic Liquids Containing Crown Ethers. Journal of Physical Chemistry B, 2011, 115, 3912-3918.	1.2	18
82	Extraction and Reductive Stripping of Pertechnetate from Spent Nuclear Fuel Waste Streams. Separation Science and Technology, 2011, 46, 357-368.	1.3	18
83	Chemical â€œPicklingâ€•of Phosphite Additives Mitigates Impedance Rise in Li Ion Batteries. Journal of Physical Chemistry C, 2018, 122, 9811-9824.	1.5	18
84	Self-Assembled Solute Networks in Crowded Electrolyte Solutions and Nanoconfinement of Charged Redoxmer Molecules. Journal of Physical Chemistry B, 2020, 124, 10226-10236.	1.2	18
85	Crowded electrolytes containing redoxmers in different states of charge: Solution structure, properties, and fundamental limits on energy density. Journal of Molecular Liquids, 2021, 334, 116533.	2.3	18
86	Spontaneous aggregation of lithium ion coordination polymers in fluorinated electrolytes for high-voltage batteries. Physical Chemistry Chemical Physics, 2016, 18, 10846-10849.	1.3	17
87	Unexpected electrochemical behavior of an anolyte redoxmer in flow battery electrolytes: solvating cations help to fight against the thermodynamicâ€“kinetic dilemma. Journal of Materials Chemistry A, 2020, 8, 13470-13479.	5.2	17
88	Fast Charging of Li-Ion Cells: Part V. Design and Demonstration of Protocols to Avoid Li-Plating. Journal of the Electrochemical Society, 2021, 168, 010512.	1.3	17
89	Quantifying gas generation from slurries used in fabrication of Si-containing electrodes for lithium-ion cells. Journal of Power Sources, 2018, 395, 289-294.	4.0	16
90	Pulse radiolysis of alkanes: a time-resolved EPR studyâ€”part I. Alkyl radicals. Radiation Physics and Chemistry, 1995, 46, 83-96.	1.4	15

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91	Electron trapping and hydrogen atoms in oxide glasses. Journal of Chemical Physics, 1999, 111, 5124-5140.	1.2	15
92	Electron Localization and Radiation Chemistry of Amides. Journal of Physical Chemistry A, 2012, 116, 1746-1757.	1.1	15
93	Radiation Stability of Cations in Ionic Liquids. 3. Guanidinium Cations. Journal of Physical Chemistry B, 2013, 117, 14400-14407.	1.2	15
94	Chemical Stability of Lithium 2-Trifluoromethyl-4,5-dicyanoimidazolide, an Electrolyte Salt for Li-Ion Cells. Journal of Physical Chemistry C, 2016, 120, 28463-28471.	1.5	15
95	Realistic Ion Dynamics through Charge Renormalization in Nonaqueous Electrolytes. Journal of Physical Chemistry B, 2020, 124, 3214-3220.	1.2	15
96	TEMPO allegro: liquid catholyte redoxmers for nonaqueous redox flow batteries. Journal of Materials Chemistry A, 2021, 9, 16769-16775.	5.2	15
97	Spin-Polarized Nitroxide Radicals in Organic Glasses. Journal of Physical Chemistry A, 2002, 106, 4838-4845.	1.1	14
98	Photooxidation of Nucleic Acids on Metal Oxides: Physicochemical and Astrobiological Perspectives. Journal of Physical Chemistry C, 2011, 115, 3393-3403.	1.5	14
99	An extremely durable redox shuttle additive for overcharge protection of lithium-ion batteries. Materials Today Energy, 2019, 13, 308-311.	2.5	13
100	Amphiphile Organization in Organic Solutions: An Alternative Explanation for Small-Angle X-ray Scattering Features in Malonamide/Alkane Mixtures. Journal of Physical Chemistry B, 2020, 124, 10822-10831.	1.2	13
101	Radiation Stability of Cations in Ionic Liquids. 5. Task-Specific Ionic Liquids Consisting of Biocompatible Cations and the Puzzle of Radiation Hypersensitivity. Journal of Physical Chemistry B, 2014, 118, 10477-10492.	1.2	12
102	Fast Charging of Li-Ion Cells: Part III. Relaxation Dynamics and Trap-Controlled Lithium Ion Transport. Journal of the Electrochemical Society, 2019, 166, A4168-A4174.	1.3	12
103	4-(Trimethylsilyl) Morpholine as a Multifunctional Electrolyte Additive in High Voltage Lithium Ion Batteries. Journal of the Electrochemical Society, 2020, 167, 070533.	1.3	12
104	Electron Trapping by Polar Molecules in Alkane Liquids:â€‰ Cluster Chemistry in Dilute Solution. Journal of Physical Chemistry A, 2005, 109, 5754-5769.	1.1	11
105	The Radiation Chemistry of Ionic Liquids and its Implications for their Use in Nuclear Fuel Processing. ACS Symposium Series, 2010, , 119-134.	0.5	11
106	Facile in Situ Syntheses of Cathode Protective Electrolyte Additives for High Energy Density Li-Ion Cells. Chemistry of Materials, 2019, 31, 2459-2468.	3.2	11
107	Spatially-resolved lithiation dynamics from operando X-ray diffraction and electrochemical modeling of lithium-ion cells. Journal of Power Sources, 2021, 484, 229247.	4.0	11
108	Recombination of geminate (OH,eaqâ^) pairs in concentrated alkaline solutions: lack of evidence for hydroxyl radical deprotonation. Chemical Physics Letters, 2004, 389, 379-384.	1.2	10

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109	Toward Electron Encapsulation:â€‰ Polynitrile Approach. Journal of Physical Chemistry A, 2006, 110, 8126-8136.	1.1	10
110	Pumpâ€“probe polarized transient hole burning (PTHB) dynamics of hydrated electron revisited. Chemical Physics Letters, 2008, 467, 84-87.	1.2	10
111	Novel tandem column method for the rapid isolation of radiostrontium from human urine. Analytica Chimica Acta, 2012, 746, 114-122.	2.6	10
112	The AHA Moment: Assessment of the Redox Stability of Ionic Liquids Based on Aromatic Heterocyclic Anions (AHAs) for Nuclear Separations and Electric Energy Storage. Journal of Physical Chemistry B, 2015, 119, 14766-14779.	1.2	10
113	Structural underpinnings of cathode protection by in situ generated lithium oxyfluorophosphates. Journal of Power Sources, 2019, 438, 227039.	4.0	10
114	Observation of Microheterogeneity in Highly Concentrated Nonaqueous Electrolyte Solutions. Journal of the American Chemical Society, 2019, 141, 8041-8046.	6.6	10
115	Competitive Pi-Stacking and H-Bond Piling Increase Solubility of Heterocyclic Redoxmers. Journal of Physical Chemistry B, 2020, 124, 10409-10418.	1.2	10
116	Radiation Stability of Cations in Ionic Liquids. 4. Task-Specific Antioxidant Cations for Nuclear Separations and Photolithography. Journal of Physical Chemistry B, 2013, 117, 14797-14807.	1.2	9
117	Redox-active polymers (redoxmers) for electrochemical energy storage. MRS Communications, 2019, 9, 1151-1167.	0.8	9
118	Fluorescence-Enabled Self-Reporting for Redox Flow Batteries. ACS Energy Letters, 2020, 5, 3062-3068.	8.8	9
119	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. Journal of the Electrochemical Society, 2021, 168, 110555.	1.3	9
120	Can a single molecule trap the electron?. Chemical Physics Letters, 2006, 431, 364-369.	1.2	8
121	The Structure and Dynamics of Solvated Electrons. , 2010, , 59-95.		8
122	Poly(4-vinylbenzoic acid): A Re-Engineered Binder for Improved Performance from Water-Free Slurry Processing for Silicon Graphite Composite Electrodes. ACS Applied Energy Materials, 2019, 2, 6348-6354.	2.5	8
123	Solvent-dependent complex reaction pathways of bromoform revealed by time-resolved X-ray solution scattering and X-ray transient absorption spectroscopy. Structural Dynamics, 2019, 6, 064902.	0.9	8
124	Critical role of structural order in bipolar redox-active molecules for organic redox flow batteries. Journal of Materials Chemistry A, 2021, 9, 23563-23573.	5.2	8
125	Electron solvation by clustered H-bond complexes of water with tri-n-butylphosphate. Chemical Physics Letters, 2008, 465, 234-237.	1.2	7
126	Surface Modified, Collapsible Controlled Pore Glass Materials for Sequestration and Immobilization of Trivalent Metal Ions. Industrial & Engineering Chemistry Research, 2011, 50, 4686-4696.	1.8	7

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127	Geminate recombination dynamics studied via electron reexcitation: kinetic analysis for anion CTTS photosystems. Chemical Physics Letters, 2004, 395, 264-268.	1.2	6
128	Sequestration, Fluorometric Detection, And Mass Spectroscopy Analysis of Lanthanide Ions Using Surface Modified Magnetic Microspheres for Microfluidic Manipulation. Journal of the American Chemical Society, 2009, 131, 15705-15710.	6.6	6
129	Improved performance through tight coupling of redox cycles of sulfur and 2,6-polyanthraquinone in lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2017, 5, 24103-24109.	5.2	6
130	On the nature of infrared absorbing trapped electron center in low-temperature ice-Ih. Chemical Physics Letters, 2007, 443, 289-292.	1.2	5
131	Insights from incorporating reference electrodes in symmetric lithium-ion cells with layered oxide or graphite electrodes. Journal of Power Sources, 2019, 438, 227033.	4.0	4
132	Magnetic Extraction, Detection, and Isotope Analysis of Metal Ions Using Surface Modified Microspheres for Lab-on-a-Chip Applications. Separation Science and Technology, 2010, 45, 186-197.	1.3	3
133	Radiation Induced Reactions and Fragmentation in Room Temperature Ionic Liquids. , 2014, , 453-485.		3
134	Cross-Platform Classifier of Chemical Stability for Charged Redoxmers. , 2021, 3, 1605-1609.		2
135	Fluorination Enables Simultaneous Improvements of a Dialkoxybenzene-Based Redoxmer for Nonaqueous Redox Flow Batteries. ACS Applied Materials & Interfaces, 2022, 14, 28834-28841.	4.0	2
136	General Impossibility to â€œPrescribeâ€•Diffusion for a Geminate Pair in a Central Force Field and Peculiarities of Geminate Dynamics in Ionic Liquids. Journal of Physical Chemistry A, 2011, 115, 4636-4639.	1.1	1
137	Electrochemical Modeling and Experimental Verification of Lithiation Gradients in Oxide Cathodes of Lithium-Ion Cells. Journal of the Electrochemical Society, 2022, 169, 040503.	1.3	1
138	Redox Flow Batteries: Annulated Dialkoxybenzenes as Catholyte Materials for Nonâ€aqueous Redox Flow Batteries: Achieving High Chemical Stability through Bicyclic Substitution (Adv. Energy Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	1.2	0
139	Self-Reporting Redoxmers: State of Health Metrics for Redox Flow Batteries. ECS Meeting Abstracts, 2021, MA2021-01, 33-33.	0.0	0
140	Multiple charging and chemical stability of tripodal catholyte redoxmers. Chemical Physics Letters, 2022, 787, 139212.	1.2	0