

Ryoichi Tatara

List of Publications by Year in descending order

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53
papers

2,369
citations

218677

26
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214800

47
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54
all docs

54
docs citations

54
times ranked

2809
citing authors

#	ARTICLE	IF	CITATIONS
1	Na Diffusion in Hard Carbon Studied with Positive Muon Spin Rotation and Relaxation. ACS Physical Chemistry Au, 2022, 2, 98-107.	4.0	7
2	Active material and interphase structures governing performance in sodium and potassium ion batteries. Chemical Science, 2022, 13, 6121-6158.	7.4	41
3	All-Solid-State Potassium Polymer Batteries Enabled by the Effective Pretreatment of Potassium Metal. ACS Energy Letters, 2022, 7, 2244-2246.	17.4	20
4	Solvate electrolytes for Li and Na batteries: structures, transport properties, and electrochemistry. Physical Chemistry Chemical Physics, 2021, 23, 21419-21436.	2.8	32
5	Molecularly Tunable Polyanions for Single-Ion Conductors and Poly(solvate ionic liquids). Chemistry of Materials, 2021, 33, 524-534.	6.7	53
6	Understanding the Reductive Decomposition of Highly Concentrated Li Salt/Sulfolane Electrolytes during Li Deposition and Dissolution. ACS Applied Energy Materials, 2021, 4, 1851-1859.	5.1	24
7	Structural Effects of Solvents on Li-Ion-Hopping Conduction in Highly Concentrated LiBF ₄ /Sulfone Solutions. Journal of Physical Chemistry B, 2021, 125, 6600-6608.	2.6	28
8	Transport Properties of Flexible Composite Electrolytes Composed of Li _{1.5} Al _{0.5} Ti _{1.5} (PO ₄) ₃ and a Poly(vinylidene fluoride-co-hexafluoropropylene) Gel Containing a Highly Concentrated Li[N(SO ₂ CF ₃) ₂]/Sulfolane Electrolyte. ACS Omega, 2021, 6, 16187-16193.	3.5	7
9	Impact of Surface Hydrophilicity of Gas-Diffusion-Type Biocathodes on Their Oxygen Reduction Ability for Biofuel Cells. Journal of the Electrochemical Society, 2021, 168, 074506.	2.9	3
10	Multi-Enzyme-Modified Bioanode Utilising Starch as a Fuel. ChemElectroChem, 2021, 8, 4199-4206.	3.4	4
11	Effect of Crystallinity of Synthetic Graphite on Electrochemical Potassium Intercalation into Graphite. Electrochemistry, 2021, 89, 433-438.	1.4	5
12	1,3,2-Dioxathiolane 2,2-Dioxide as an Electrolyte Additive for K-Metal Cells. ACS Energy Letters, 2021, 6, 3643-3649.	17.4	23
13	Design of Polymer Network and Li ⁺ Solvation Enables Thermally and Oxidatively Stable, Mechanically Reliable, and Highly Conductive Polymer Gel Electrolyte for Lithium Batteries. Journal of the Electrochemical Society, 2021, 168, 090538.	2.9	6
14	Highly Concentrated NaN(SO ₂ F) ₃ -Methylsulfolane Electrolyte Solution Showing High Na-Ion Transference Number under Anion-Blocking Conditions. Electrochemistry, 2021, 89, 590-596.	1.4	3
15	Multi-Enzyme-Modified Bioanode Utilising Starch as a Fuel. ChemElectroChem, 2021, 8, 4160.	3.4	0
16	Effect of Substituted Styrene-Butadiene Rubber Binders on the Stability of 4.5 V-Charged LiCoO ₂ Electrode. ChemElectroChem, 2021, 8, 4345-4352.	3.4	5
17	Hydrate Melt Electrolyte for Aqueous K-Ion Batteries. ECS Meeting Abstracts, 2021, MA2021-02, 218-218.	0.0	1
18	Revealing electrolyte oxidation <i>via</i> carbonate dehydrogenation on Ni-based oxides in Li-ion batteries by <i>in situ</i> Fourier transform infrared spectroscopy. Energy and Environmental Science, 2020, 13, 183-199.	30.8	202

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19	Graphiteâ€“Lithium Sulfide Battery with a Single-Phase Springly Solvating Electrolyte. ACS Energy Letters, 2020, 5, 1-7.	17.4	41
20	KFSA/glyme electrolytes for 4 V-class K-ion batteries. Journal of Materials Chemistry A, 2020, 8, 23766-23771.	10.3	26
21	Impact of Newly Developed Styreneâ€“Butadieneâ€“Rubber Binder on the Electrode Performance of High-Voltage LiNi _{0.5} Mn _{1.5} O ₄ Electrode. ACS Applied Energy Materials, 2020, 3, 7978-7987.	5.1	22
22	Application of Ionic Liquid as K-Ion Electrolyte of Graphite//K ₂ Mn[Fe(CN) ₆] Cell. ACS Energy Letters, 2020, 5, 2849-2857.	17.4	51
23	100 m Long Thermally Drawn Supercapacitor Fibers with Applications to 3D Printing and Textiles. Advanced Materials, 2020, 32, e2004971.	21.0	68
24	Quantitative Mapping of Molecular Substituents to Macroscopic Properties Enables Predictive Design of Oligoethylene Glycol-Based Lithium Electrolytes. ACS Central Science, 2020, 6, 1115-1128.	11.3	15
25	Highly concentrated LiN(SO ₂ CF ₃) ₂ /dinitrile electrolytes: Liquid structures, transport properties, and electrochemistry. Journal of Chemical Physics, 2020, 152, 104502.	3.0	20
26	The Role of Diphenyl Carbonate Additive on the Interfacial Reactivity of Positive Electrodes in Li-ion Batteries. Journal of the Electrochemical Society, 2020, 167, 040522.	2.9	8
27	Structures and Electrochemistry of Î³-Butyrolactone Solvates of Na Salts. Journal of Physical Chemistry C, 2020, 124, 15800-15811.	3.1	17
28	Solvent- and Anion-Dependent Li ⁺ â€“O ₂ ^{<sup>+</sup>} Coupling Strength and Implications on the Thermodynamics and Kinetics of Liâ€“O ₂ Batteries. Journal of Physical Chemistry C, 2020, 124, 4953-4967.	3.1	29
29	High Transference Number of Na Ion in Liquid-State Sulfolane Solvates of Sodium Bis(fluorosulfonyl)amide. Journal of Physical Chemistry C, 2020, 124, 4459-4469.	3.1	23
30	Thermodynamic Effect of Anion Activity on Electrochemical Reactions Involving Li ⁺ Ions in Roomâ€“Temperature Ionic Liquids. ChemElectroChem, 2019, 6, 4444-4449.	3.4	12
31	Design of S-Substituted Fluorinated Aryl Sulfonamide-Tagged (S-FAST) Anions To Enable New Solvate Ionic Liquids for Battery Applications. Chemistry of Materials, 2019, 31, 7558-7564.	6.7	11
32	Molecular Design of Stable Sulfamide- and Sulfonamide-Based Electrolytes for Aprotic Li-O ₂ Batteries. Chem, 2019, 5, 2630-2641.	11.7	53
33	Enhanced Cycling Performance of Ni-Rich Positive Electrodes (NMC) in Li-Ion Batteries by Reducing Electrolyte Free-Solvent Activity. ACS Applied Materials & Interfaces, 2019, 11, 34973-34988.	8.0	63
34	Concentrated Electrolytes for Enhanced Stability of Al-Alloy Negative Electrodes in Li-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A1867-A1874.	2.9	28
35	Editors' Choiceâ€“Coating-Dependent Electrode-Electrolyte Interface for Ni-Rich Positive Electrodes in Li-Ion Batteries. Journal of the Electrochemical Society, 2019, 166, A1022-A1030.	2.9	41
36	The Effect of Electrode-Electrolyte Interface on the Electrochemical Impedance Spectra for Positive Electrode in Li-Ion Battery. Journal of the Electrochemical Society, 2019, 166, A5090-A5098.	2.9	190

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37	Solvent-Dependent Oxidizing Power of Lil Redox Couples for Li-O ₂ Batteries. <i>Joule</i> , 2019, 3, 1106-1126.	24.0	82
38	Brush-First ROMP of poly(ethylene oxide) macromonomers of varied length: impact of polymer architecture on thermal behavior and Li ⁺ conductivity. <i>Journal of Polymer Science Part A</i> , 2019, 57, 448-455.	2.3	22
39	Electrolyte Composition in Li/O ₂ Batteries with Lil Redox Mediators: Solvation Effects on Redox Potentials and Implications for Redox Shuttling. <i>Journal of Physical Chemistry C</i> , 2018, 122, 1522-1534.	3.1	51
40	Tuning NaO ₂ Cube Sizes by Controlling Na ⁺ and Solvent Activity in Na ⁺ O ₂ Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 18316-18328.	3.1	29
41	Stability of Glyme Solvate Ionic Liquid as an Electrolyte for Rechargeable Li ⁺ O ₂ Batteries. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 6014-6021.	8.0	52
42	Effect of Anion in Glyme-based Electrolyte for Li-O ₂ Batteries: Stability/Solubility of Discharge Intermediate. <i>Chemistry Letters</i> , 2017, 46, 573-576.	1.3	14
43	Oxygen Reduction Reaction in Highly Concentrated Electrolyte Solutions of Lithium Bis(trifluoromethanesulfonyl)amide/Dimethyl Sulfoxide. <i>Journal of Physical Chemistry C</i> , 2017, 121, 9162-9172.	3.1	70
44	Three-Dimensionally Hierarchical Ni/Ni ₃ S ₂ /S Cathode for Lithium-Sulfur Battery. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 38477-38485.	8.0	60
45	Suppression of Water Absorption by Molecular Design of Ionic Liquid Electrolyte for Li ⁺ Air Battery. <i>Advanced Energy Materials</i> , 2017, 7, 1601753.	19.5	27
46	Amphoteric water as acid and base for protic ionic liquids and their electrochemical activity when used as fuel cell electrolytes. <i>Faraday Discussions</i> , 2017, 206, 353-364.	3.2	16
47	Li ⁺ Solvation and Ionic Transport in Lithium Solvate Ionic Liquids Diluted by Molecular Solvents. <i>Journal of Physical Chemistry C</i> , 2016, 120, 15792-15802.	3.1	114
48	Li ⁺ solvation in glyme-Li salt solvate ionic liquids. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 8248-8257.	2.8	222
49	Solvent Activity in Electrolyte Solutions Controls Electrochemical Reactions in Li-Ion and Li-Sulfur Batteries. <i>Journal of Physical Chemistry C</i> , 2015, 119, 3957-3970.	3.1	135
50	One-pot pyrolysis of lithium sulfate and graphene nanoplatelet aggregates: in situ formed Li ₂ S/graphene composite for lithium-sulfur batteries. <i>Nanoscale</i> , 2015, 7, 14385-14392.	5.6	73
51	One-step, template-free synthesis of highly porous nitrogen/sulfur-codoped carbons from a single protic salt and their application to CO ₂ capture. <i>Journal of Materials Chemistry A</i> , 2015, 3, 17849-17857.	10.3	36
52	Mechanism of Li Ion Desolvation at the Interface of Graphite Electrode and Glyme-Li Salt Solvate Ionic Liquids. <i>Journal of Physical Chemistry C</i> , 2014, 118, 20246-20256.	3.1	155
53	Solvate Ionic Liquid, [Li(triglyme)] ⁺ [NTf ₂] ⁻ , as Electrolyte for Rechargeable Li ⁺ Air Battery: Discharge Depth and Reversibility. <i>Chemistry Letters</i> , 2013, 42, 1053-1055.	1.3	29