## Yirui Zhang

## List of Publications by Year in descending order

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361413 526287 27 1,878 20 27 h-index citations g-index papers 28 28 28 2265 docs citations times ranked citing authors all docs

#	Article	IF	Citations
1	Understanding activity trends in electrochemical water oxidation to form hydrogen peroxide. Nature Communications, 2017, 8, 701.	12.8	333
2	Revealing electrolyte oxidation $\langle i \rangle via \langle   i \rangle$ carbonate dehydrogenation on Ni-based oxides in Li-ion batteries by $\langle i \rangle$ in situ $\langle   i \rangle$ Fourier transform infrared spectroscopy. Energy and Environmental Science, 2020, 13, 183-199.	30.8	202
3	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
4	Tunable metal hydroxide–organic frameworks for catalysing oxygen evolution. Nature Materials, 2022, 21, 673-680.	27.5	123
5	Enhancing oxygen reduction electrocatalysis by tuning interfacial hydrogen bonds. Nature Catalysis, 2021, 4, 753-762.	34.4	122
6	Cation- and pH-Dependent Hydrogen Evolution and Oxidation Reaction Kinetics. Jacs Au, 2021, 1, 1674-1687.	7.9	109
7	Lightâ€Driven BiVO <sub>4</sub> –C Fuel Cell with Simultaneous Production of H <sub>2</sub> O <sub>2</sub> . Advanced Energy Materials, 2018, 8, 1801158.	19.5	107
8	Stabilizing electrode–electrolyte interfaces to realize high-voltage Li     LiCoO <sub>2</sub> batteries by a sulfonamide-based electrolyte. Energy and Environmental Science, 2021, 14, 6030-6040.	30.8	84
9	Rapid flame doping of Co to WS <sub>2</sub> for efficient hydrogen evolution. Energy and Environmental Science, 2018, 11, 2270-2277.	30.8	74
10	Theory of coupled ion-electron transfer kinetics. Electrochimica Acta, 2021, 367, 137432.	5.2	64
11	Enhanced Cycling Performance of Ni-Rich Positive Electrodes (NMC) in Li-lon Batteries by Reducing Electrolyte Free-Solvent Activity. ACS Applied Materials & Samp; Interfaces, 2019, 11, 34973-34988.	8.0	63
12	Molecular Design of Stable Sulfamide- and Sulfonamide-Based Electrolytes for Aprotic Li-O2 Batteries. CheM, 2019, 5, 2630-2641.	11.7	53
13	pH- and Cation-Dependent Water Oxidation on Rutile RuO <sub>2</sub> (110). Journal of Physical Chemistry C, 2021, 125, 8195-8207.	3.1	45
14	A scaling law to determine phase morphologies during ion intercalation. Energy and Environmental Science, 2020, 13, 2142-2152.	30.8	43
15	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
16	Cation-Dependent Interfacial Structures and Kinetics for Outer-Sphere Electron-Transfer Reactions. Journal of Physical Chemistry C, 2021, 125, 4397-4411.	3.1	38
17	Tuning the Catalytic Activity of Fe-Phthalocyanine-Based Catalysts for the Oxygen Reduction Reaction by Ligand Functionalization. ACS Catalysis, 2022, 12, 7278-7287.	11.2	30
18	Surface Changes of LiNi <sub><i>y</i></sub> Co <sub>1â€"<i>x</i>â€"<i>y</i></sub> O <sub>2</sub> in Li-lon Batteries Using in Situ Surface-Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2020, 124, 4024-4031.	3.1	29

## YIRUI ZHANG

#	Article	IF	CITATION
19	Ligand-Dependent Energetics for Dehydrogenation: Implications in Li-Ion Battery Electrolyte Stability and Selective Oxidation Catalysis of Hydrogen-Containing Molecules. Chemistry of Materials, 2019, 31, 5464-5474.	6.7	28
20	Layer-Number-Dependent Exciton Recombination Behaviors of MoS <sub>2</sub> Determined by Fluorescence-Lifetime Imaging Microscopy. Journal of Physical Chemistry C, 2018, 122, 18651-18658.	3.1	21
21	Stability Trend of Metal–Organic Frameworks with Heterometal-Modified Hexanuclear Zr Building Units. Journal of Physical Chemistry C, 2019, 123, 28266-28274.	3.1	19
22	A method to measure heat flux in convection using Gardon gauge. Applied Thermal Engineering, 2016, 108, 1357-1361.	6.0	16
23	Triboluminescence modulated by humidity. Journal of Luminescence, 2017, 182, 22-28.	3.1	11
24	Enhanced Cycling of Ni-Rich Positive Electrodes by Fluorine Modification. Journal of the Electrochemical Society, 2021, 168, 060538.	2.9	10
25	Enhancement of Triboluminescence in the Presence of CO <sub>2</sub> by Sliding between Silica and Yttria-Stabilized Zirconia. Langmuir, 2015, 31, 8224-8227.	3.5	9
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	High temperature thermal radiation property measurements on large periodic micro-structured nickel surfaces fabricated using a femtosecond laser source. Applied Surface Science, 2018, 450, 200-208.	6.1	5