

William David McCulloch

List of Publications by Year in descending order

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citations

567281

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docs citations

23
times ranked

2919
citing authors

#	ARTICLE	IF	CITATIONS
1	K ⁺ Single Cation Ionic Liquids Electrolytes with Low Melting Asymmetric Salt. Journal of Physical Chemistry C, 2022, 126, 11407-11413.	3.1	8
2	Unusual Melting Trend in an Alkali Asymmetric Sulfonamide Salt Series: Single-Crystal Analysis and Modeling. Inorganic Chemistry, 2021, 60, 14679-14686.	4.0	5
3	Designing Potassium Battery Salts through a Solvent-in-Anion Concept for Concentrated Electrolytes and Mimicking Solvation Structures. Chemistry of Materials, 2020, 32, 10423-10434.	6.7	16
4	Use of Polarization Curves and Impedance Analyses to Optimize the "Triple-Phase Boundary" in O ₂ Batteries. ACS Applied Materials & Interfaces, 2019, 11, 2925-2934.	8.0	10
5	Frontispiece: Alkali-Oxygen Batteries Based on Reversible Superoxide Chemistry. Chemistry - A European Journal, 2018, 24, .	3.3	0
6	Potassium Superoxide: A Unique Alternative for Metal-Air Batteries. Accounts of Chemical Research, 2018, 51, 2335-2343.	15.6	99
7	Alkali-Oxygen Batteries Based on Reversible Superoxide Chemistry. Chemistry - A European Journal, 2018, 24, 17627-17637.	3.3	13
8	MoS ₂ as a long-life host material for potassium ion intercalation. Nano Research, 2017, 10, 1313-1321.	10.4	275
9	A self-limiting layer-by-layer etching technique for 2H-MoS ₂ . Applied Physics Express, 2017, 10, 035201.	2.4	15
10	Bilayer Dye Protected Aqueous Photocathodes for Tandem Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2017, 121, 8787-8795.	3.1	21
11	Reversible Dendrite-Free Potassium Plating and Stripping Electrochemistry for Potassium Secondary Batteries. Journal of the American Chemical Society, 2017, 139, 9475-9478.	13.7	395
12	Probing Mechanisms for Inverse Correlation between Rate Performance and Capacity in O ₂ Batteries. ACS Applied Materials & Interfaces, 2017, 9, 4301-4308.	8.0	49
13	Greatly Enhanced Anode Stability in O ₂ Batteries with an In Situ Formed Solvent- and Oxygen-Impermeable Protection Layer. Advanced Energy Materials, 2017, 7, .	19.5	34
14	High current density 2D/3D MoS ₂ /GaN Esaki tunnel diodes. Applied Physics Letters, 2016, 109, .	3.3	65
15	pH-Tuning a Solar Redox Flow Battery for Integrated Energy Conversion and Storage. ACS Energy Letters, 2016, 1, 578-582.	17.4	55
16	Concentrated Electrolyte for the Sodium-Oxygen Battery: Solvation Structure and Improved Cycle Life. Angewandte Chemie, 2016, 128, 15536-15540.	2.0	20
17	Concentrated Electrolyte for the Sodium-Oxygen Battery: Solvation Structure and Improved Cycle Life. Angewandte Chemie - International Edition, 2016, 55, 15310-15314.	13.8	97
18	Exploring Thermal Properties of MoS ₂ Using In Situ Quantitative STEM. Microscopy and Microanalysis, 2016, 22, 912-913.	0.4	0

#	ARTICLE	IF	CITATIONS
19	Solar-powered electrochemical energy storage: an alternative to solar fuels. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2766-2782.	10.3	109
20	Layer-transferred MoS ₂ /GaN PN diodes. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	69
21	Transferred large area single crystal MoS ₂ field effect transistors. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	21
22	Aqueous Lithium-Iodine Solar Flow Battery for the Simultaneous Conversion and Storage of Solar Energy. <i>Journal of the American Chemical Society</i> , 2015, 137, 8332-8335.	13.7	149
23	Potassium-Ion Oxygen Battery Based on a High Capacity Antimony Anode. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 26158-26166.	8.0	227