# William David McCulloch

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/8430784/publications.pdf

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|---|---|---|---|
| 23 papers | 1,752 citations | 567281 15 h-index | 713466 21 g-index |
| 23 all docs | 23 docs citations | 23 times ranked | 2919 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | 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 |
| 2 | MoS2 as a long-life host material for potassium ion intercalation. Nano Research, 2017, 10, 1313-1321. | 10.4 | 275 |
| 3 | Potassium-Ion Oxygen Battery Based on a High Capacity Antimony Anode. ACS Applied Materials & Interfaces, 2015, 7, 26158-26166. | 8.0 | 227 |
| 4 | Aqueous Lithiumâ€“Iodine Solar Flow Battery for the Simultaneous Conversion and Storage of Solar Energy. Journal of the American Chemical Society, 2015, 137, 8332-8335. | 13.7 | 149 |
| 5 | Solar-powered electrochemical energy storage: an alternative to solar fuels. Journal of Materials Chemistry A, 2016, 4, 2766-2782. | 10.3 | 109 |
| 6 | Potassium Superoxide: A Unique Alternative for Metalâ€“Air Batteries. Accounts of Chemical Research, 2018, 51, 2335-2343. | 15.6 | 99 |
| 7 | Concentrated Electrolyte for the Sodiumâ€“Oxygen Battery: Solvation Structure and Improved Cycle Life. Angewandte Chemie - International Edition, 2016, 55, 15310-15314. | 13.8 | 97 |
| 8 | Layer-transferred MoS2/GaN PN diodes. Applied Physics Letters, 2015, 107, . | 3.3 | 69 |
| 9 | High current density 2D/3D MoS2/GaN Esaki tunnel diodes. Applied Physics Letters, 2016, 109, . | 3.3 | 65 |
| 10 | pH-Tuning a Solar Redox Flow Battery for Integrated Energy Conversion and Storage. ACS Energy Letters, 2016, 1, 578-582. | 17.4 | 55 |
| 11 | Probing Mechanisms for Inverse Correlation between Rate Performance and Capacity in Kâ€“O<sub>2</sub> Batteries. ACS Applied Materials & Interfaces, 2017, 9, 4301-4308. | 8.0 | 49 |
| 12 | Greatly Enhanced Anode Stability in Kâ€Oxygen Batteries with an In Situ Formed Solventâ€•and Oxygenâ€Impermeable Protection Layer. Advanced Energy Materials, 2017, 7, . | 19.5 | 34 |
| 13 | Transferred large area single crystal MoS2 field effect transistors. Applied Physics Letters, 2015, 107, . | 3.3 | 21 |
| 14 | Bilayer Dye Protected Aqueous Photocathodes for Tandem Dye-Sensitized Solar Cells. Journal of Physical Chemistry C, 2017, 121, 8787-8795. | 3.1 | 21 |
| 15 | Concentrated Electrolyte for the Sodiumâ€“Oxygen Battery: Solvation Structure and Improved Cycle Life. Angewandte Chemie, 2016, 128, 15536-15540. | 2.0 | 20 |
| 16 | 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 |
| 17 | A self-limiting layer-by-layer etching technique for 2H-MoS<sub>2</sub>. Applied Physics Express, 2017, 10, 035201. | 2.4 | 15 |
| 18 | Alkaliâ€Oxygen Batteries Based on Reversible Superoxide Chemistry. Chemistry - A European Journal, 2018, 24, 17627-17637. | 3.3 | 13 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Use of Polarization Curves and Impedance Analyses to Optimize the â€œTriple-Phase Boundaryâ€•in Kâ€“O2 Batteries. ACS Applied Materials & Interfaces, 2019, 11, 2925-2934. | 8.0 | 10 |
| 20 | K<sup>+</sup> Single Cation Ionic Liquids Electrolytes with Low Melting Asymmetric Salt. Journal of Physical Chemistry C, 2022, 126, 11407-11413. | 3.1 | 8 |
| 21 | Unusual Melting Trend in an Alkali Asymmetric Sulfonamide Salt Series: Single-Crystal Analysis and Modeling. Inorganic Chemistry, 2021, 60, 14679-14686. | 4.0 | 5 |
| 22 | Exploring Thermal Properties of M0S2 Using In Situ Quantitative STEM. Microscopy and Microanalysis, 2016, 22, 912-913. | 0.4 | 0 |
| 23 | Frontispiece: Alkali-Oxygen Batteries Based on Reversible Superoxide Chemistry. Chemistry - A European Journal, 2018, 24, . | 3.3 | 0 |