

# Joshua W Gallaway

## List of Publications by Year in descending order

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papers

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623734

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docs citations

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Regenerable Cu-intercalated MnO <sub>2</sub> layered cathode for highly cyclable energy dense batteries. Nature Communications, 2017, 8, 14424.	12.8	216
2	Rechargeable Zinc Alkaline Anodes for Long-Cycle Energy Storage. Chemistry of Materials, 2017, 29, 4819-4832.	6.7	120
3	Rechargeability and economic aspects of alkaline zinc-manganese dioxide cells for electrical storage and load leveling. Journal of Power Sources, 2015, 276, 7-18.	7.8	104
4	Hetaerolite Profiles in Alkaline Batteries Measured by High Energy EDXRD. Journal of the Electrochemical Society, 2015, 162, A162-A168.	2.9	63
5	A conversion-based highly energy dense Cu <sup>2+</sup> intercalated Bi-birnessite/Zn alkaline battery. Journal of Materials Chemistry A, 2017, 5, 15845-15854.	10.3	63
6	Real-time materials evolution visualized within intact cycling alkaline batteries. Journal of Materials Chemistry A, 2014, 2, 2757-2764.	10.3	53
7	A calcium hydroxide interlayer as a selective separator for rechargeable alkaline Zn/MnO <sub>2</sub> batteries. Electrochemistry Communications, 2017, 81, 136-140.	4.7	49
8	An In Situ Synchrotron Study of Zinc Anode Planarization by a Bismuth Additive. Journal of the Electrochemical Society, 2014, 161, A275-A284.	2.9	48
9	Operando identification of the point of [Mn <sub>2</sub> O <sub>4</sub> ] spinel formation during $\hat{\Gamma}^3$ -MnO <sub>2</sub> discharge within batteries. Journal of Power Sources, 2016, 321, 135-142.	7.8	46
10	Rapid electrochemical synthesis of $\hat{\Gamma}^3$ -MnO <sub>2</sub> from $\hat{\Gamma}^3$ -MnO <sub>2</sub> and unleashing its performance as an energy dense electrode. Materials Today Energy, 2017, 6, 198-210.	4.7	30
11	Operando EDXRD Study of All-Solid-State Lithium Batteries Coupling Thioantimonate Superionic Conductors with Metal Sulfide. Advanced Energy Materials, 2021, 11, 2002861.	19.5	25
12	Energy dispersive X-ray diffraction (EDXRD) for operando materials characterization within batteries. Physical Chemistry Chemical Physics, 2020, 22, 20972-20989.	2.8	24
13	An Operando Study of the Initial Discharge of Bi and Bi/Cu Modified MnO <sub>2</sub> . Journal of the Electrochemical Society, 2018, 165, A2935-A2947.	2.9	20
14	Bismuth Enables the Formation of Disordered Birnessite in Rechargeable Alkaline Batteries. Journal of the Electrochemical Society, 2020, 167, 110514.	2.9	15
15	The relationship between coefficient of restitution and state of charge of zinc alkaline primary LR6 batteries. Journal of Materials Chemistry A, 2015, 3, 9395-9400.	10.3	13
16	Rechargeable Alkaline Zinc/Copper Oxide Batteries. ACS Applied Energy Materials, 2021, 4, 7073-7082.	5.1	13
17	Enhanced Electrochemical Stability of Sulfide-Based LiNi <sub>0.8</sub> Mn <sub>0.1</sub> Co <sub>0.1</sub> O <sub>2</sub> All-Solid-State Batteries by Ti Surface Doping. Batteries and Supercaps, 2021, 4, 529-535.	4.7	11
18	Aqueous Mn-Zn and Ni-Zn Batteries for Sustainable Energy Storage. , 2021, , 1-26.		1

#	ARTICLE	IF	CITATIONS
19	Exploring the Structure-Function-Performance Relationship of Carbon Electrodes Toward Rational Design of High-Performance Redox Flow Cells. ECS Meeting Abstracts, 2021, MA2021-01, 215-215.	0.0	0
20	(Invited) Operando Characterization of Transient Material Changes in Battery Cathode Materials By X-Ray Diffraction and Spectroscopy. ECS Meeting Abstracts, 2021, MA2021-01, 1977-1977.	0.0	0
21	The Electrochemistry of Low-Temperature Molten Quinones for All-Organic Redox Flow Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
22	Discharge Reactions of $\hat{\text{I}}^3\text{-MnO}_2$ and $\text{Mo}_6\text{S}_8$ Tracked in the Electrode Bulk of Sealed Devices By Energy Dispersive X-Ray Diffraction (EDXRD). ECS Meeting Abstracts, 2019, , .	0.0	0
23	Failure Analysis of the Rechargeable Porous Zinc Electrode in Alkaline Electrolyte. ECS Meeting Abstracts, 2019, , .	0.0	0
24	Breakdown and Reformation of Birnessite in Rechargeable, Bismuth Modified $\text{MnO}_2$ Alkaline Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 513-513.	0.0	0
25	(Invited) Bismuth Enables Formation of Disordered Birnessite in Rechargeable Alkaline Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 1036-1036.	0.0	0
26	Tech Highlights - Spring 2022. Electrochemical Society Interface, 2022, 31, 36-37.	0.4	0
27	Tech Highlights - Summer 2022. Electrochemical Society Interface, 2022, 31, 37-38.	0.4	0
28	(Invited) Operando Measurement of Heterogeneities in All-Solid-State Li Battery Electrodes. ECS Meeting Abstracts, 2022, MA2022-01, 1663-1663.	0.0	0
29	(Invited, Digital Presentation) The Discovery and Development of Rechargeable Zn/CuO Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 459-459.	0.0	0
30	Using High Energy X-Ray White Beam Tomography to Quantify the Location and Morphology of ZnO Discharge Products in Alkaline Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 579-579.	0.0	0
31	Exploring the Effectiveness of Carbon Cloth Electrodes for All-Vanadium Redox Flow Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 462-462.	0.0	0