Lee R Johnson

List of Publications by Year
in descending order

43 papers	3,606 citations	279798 23 h-index	345221 36 g-index
44 all docs	44 docs citations	44 times ranked	3573 citing authors

#	Article	IF	Citations
1	The role of LiO2 solubility in O2 reduction in aprotic solvents and its consequences for Liâ€“O2 batteries. Nature Chemistry, 2014, 6, 1091-1099.	13.6	942
2	Lithiumâ€“Oxygen Batteries and Related Systems: Potential, Status, and Future. Chemical Reviews, 2020, 120, 6626-6683.	47.7	593
3	Promoting solution phase discharge in Liâ€“O2 batteries containing weakly solvating electrolyteÂsolutions. Nature Materials, 2016, 15, 882-888.	27.5	446
4	A rechargeable lithiumâ€“oxygen battery with dual mediators stabilizing the carbon cathode. Nature Energy, 2017, 2, .	39.5	238
5	Role of Electrolyte Anions in the Naâ€“O₂ Battery: Implications for NaO₂ Solvation and the Stability of the Sodium Solid Electrolyte Interphase in Glyme Ethers. Chemistry of Materials, 2017, 29, 6066-6075.	6.7	141
6	High Capacity Naâ€“O₂ Batteries: Key Parameters for Solution-Mediated Discharge. Journal of Physical Chemistry C, 2016, 120, 20068-20076.	3.1	96
7	Kinetics of lithium peroxide oxidation by redox mediators and consequences for the lithiumâ€“oxygen cell. Nature Communications, 2018, 9, 767.	12.8	93
8	Synthesis of platinum nanoparticles using cellulosic reducing agents. Green Chemistry, 2010, 12, 220-222.	9.0	89
9	Synthesis of carbon-supported Pt nanoparticle electrocatalysts using nanocrystalline cellulose as reducing agent. Green Chemistry, 2011, 13, 1686.	9.0	87
10	The Interface between Li6.5La3Zr1.5Ta0.5O12 and Liquid Electrolyte. Joule, 2020, 4, 101-108.	24.0	81
11	2021 roadmap on lithium sulfur batteries. JPhys Energy, 2021, 3, 031501.	5.3	74
12	A Comprehensive Model for Non-Aqueous Lithium Air Batteries Involving Different Reaction Mechanisms. Journal of the Electrochemical Society, 2015, 162, A614-A621.	2.9	72
13	LiO₂: Cryosynthesis and Chemical/Electrochemical Reactivities. Journal of Physical Chemistry Letters, 2017, 8, 2334-2338.	4.6	70
14	Phenolâ€Catalyzed Discharge in the Aprotic Lithiumâ€Oxygen Battery. Angewandte Chemie - International Edition, 2017, 56, 6539-6543.	13.8	55
15	Molecular redox species for next-generation batteries. Chemical Society Reviews, 2021, 50, 5863-5883.	38.1	53
16	Sulfone-Based Electrolytes for Nonaqueous Liâ€“O₂ Batteries. Journal of Physical Chemistry C, 2014, 118, 18892-18898.	3.1	50
17	Hydrogen Oxidation and Oxygen Reduction at Platinum in Protic Ionic Liquids. Journal of Physical Chemistry C, 2012, 116, 18048-18056.	3.1	49
18	Singlet oxygen and dioxygen bond cleavage in the aprotic lithium-oxygen battery. Joule, 2022, 6, 185-192.	24.0	41

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19	Aprotic Liâ€“O₂ Battery: Influence of Complexing Agents on Oxygen Reduction in an Aprotic Solvent. Journal of Physical Chemistry C, 2014, 118, 3393-3401.	3.1	36
20	Stabilization of Polyoxometalate Charge Carriers via Redoxâ€Driven Nanoconfinement in Singleâ€Walled Carbon Nanotubes. Angewandte Chemie - International Edition, 2022, 61, e202115619.	13.8	35
21	Nanocomposite oxygen reduction electrocatalysts formed using bioderived reducing agents. Journal of Materials Chemistry, 2010, 20, 1737.	6.7	33
22	The Role of the Electrode Surface in Naâ€“Air Batteries: Insights in Electrochemical Product Formation and Chemical Growth of NaO₂. Advanced Energy Materials, 2018, 8, 1701581.	19.5	28
23	Electrocatalytic oxidation of methanol and carbon monoxide at platinum in protic ionic liquids. Electrochemistry Communications, 2012, 23, 122-124.	4.7	26
24	Tip generationâ€“substrate collectionâ€“tip collection mode scanning electrochemical microscopy of oxygen reduction electrocatalysts. Journal of Electroanalytical Chemistry, 2012, 682, 45-52.	3.8	24
25	Phenolâ€Catalyzed Discharge in the Aprotic Lithiumâ€Oxygen Battery. Angewandte Chemie, 2017, 129, 6639-6643.	2.0	24
26	High capacity surface route discharge at the potassium-O2 electrode. Journal of Electroanalytical Chemistry, 2018, 819, 542-546.	3.8	21
27	Electrochemistry of redox-active molecules confined within narrow carbon nanotubes. Chemical Society Reviews, 2021, 50, 10895-10916.	38.1	20
28	Understanding of the Electrogenerated Bulk Electrolyte Species in Sodium-Containing Ionic Liquid Electrolytes During the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2017, 121, 23307-23316.	3.1	17
29	Sustainability of Battery Technologies: Today and Tomorrow. ACS Sustainable Chemistry and Engineering, 2021, 9, 6507-6509.	6.7	16
30	Deposition of silver nanobowl arrays using polystyrene nanospheres both as reagents and as the templating material. Journal of Materials Chemistry, 2011, 21, 7555.	6.7	13
31	Scanning electrochemical microscopy at thermal sprayed anti-corrosion coatings: Effect of thermal spraying on heterogeneous electron transfer kinetics. Journal of Electroanalytical Chemistry, 2011, 657, 46-53.	3.8	11
32	Critical Role of the Interphase at Magnesium Electrodes in Chloride-Free, Simple Salt Electrolytes. ACS Applied Materials & Interfaces, 2021, 13, 29708-29713.	8.0	11
33	Mechanism of the Reactions of Synthetic Feâ€“S-Based Clusters with PhCOCl:â€‰ Parallel Pathways Involving Free and Coordinated Thiolate as Nucleophiles. Inorganic Chemistry, 2006, 45, 9423-9433.	4.0	5
34	Competitive Oxygen Reduction Pathways to Superoxide and Peroxide during Sodiumâ€Oxygen Battery Discharge. Batteries and Supercaps, 0, , .	4.7	2
35	The Sodium-Ion Battery: Effect of Electrolyte Additives on the SEI Layer of Hard Carbon Anodes. ECS Meeting Abstracts, 2020, MA2020-02, 767-767.	0.0	1
36	Stabilization of Polyoxometalate Charge Carriers via Redoxâ€Driven Nanoconfinement in Singleâ€Walled Carbon Nanotubes. Angewandte Chemie, 2022, 134, .	2.0	1

#	Article	IF	Citations
37	The Rechargeable Aprotic Lithium-oxygen Battery. ECS Meeting Abstracts, 2018, , .	0.0	0
38	The Rechargeable Aprotic Lithium-Oxygen Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
39	Oxygen Reduction Pathways in the Li-O2 Battery: Understanding Solvent-Water Interactions. ECS Meeting Abstracts, 2020, MA2020-02, 492-492.	0.0	0
40	(Invited) The Role of Electrolyte Solution in Next-Generation Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 742-742.	0.0	0
41	Electrolyte-Dependent SEI Formation and Its Consequences on Mg Electrode Cycling. ECS Meeting Abstracts, 2020, MA2020-02, 787-787.	0.0	0
42	(Invited) Interfaces in Solid-State Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 3779-3779.	0.0	0
43	Understanding the Behaviour of High-Nickel NMC Cathodes with Respect to the Vinylene Carbonate Additive. ECS Meeting Abstracts, 2022, MA2022-01, 332-332.	0.0	0