

Shrihari Sankarasubramanian

List of Publications by Year in descending order

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51
papers

718
citations

516710

16
h-index

552781

26
g-index

55
all docs

55
docs citations

55
times ranked

1014
citing authors

#	ARTICLE	IF	CITATIONS
1	A capacity fade model for lithium-ion batteries including diffusion and kinetics. <i>Electrochimica Acta</i> , 2012, 70, 248-254.	5.2	78
2	Efficient pH-gradient-enabled microscale bipolar interfaces in direct borohydride fuel cells. <i>Nature Energy</i> , 2019, 4, 281-289.	39.5	61
3	Impact of Surface Carbonyl- and Hydroxyl-Group Concentrations on Electrode Kinetics in an All-Vanadium Redox Flow Battery. <i>Journal of Physical Chemistry C</i> , 2019, 123, 6370-6378.	3.1	49
4	Detection of Reactive Oxygen Species in Anion Exchange Membrane Fuel Cells using In Situ Fluorescence Spectroscopy. <i>ChemSusChem</i> , 2017, 10, 3056-3062.	6.8	45
5	Ab initio investigation of the oxygen reduction reaction activity on noble metal (Pt, Au, Pd), Pt ₃ M (M = Fe, Co, Ni, Cu) and Pd ₃ M (M = Fe, Co, Ni, Cu) alloy surfaces, for Li O ₂ cells. <i>Journal of Power Sources</i> , 2016, 319, 202-209.	7.8	41
6	Understanding the Oxygen Reduction Reaction Activity and Oxidative Stability of Pt Supported on Nb-Doped TiO ₂ . <i>ChemSusChem</i> , 2019, 12, 3468-3480.	6.8	39
7	A high performance direct borohydride fuel cell using bipolar interfaces and noble metal-free Ni-based anodes. <i>Journal of Materials Chemistry A</i> , 2020, 8, 20543-20552.	10.3	34
8	Influence of Water Transport Across Microscale Bipolar Interfaces on the Performance of Direct Borohydride Fuel Cells. <i>ACS Applied Energy Materials</i> , 2020, 3, 4449-4456.	5.1	32
9	Elucidating the Oxygen Reduction Reaction Kinetics and the Origins of the Anomalous Tafel Behavior at the Lithium-Oxygen Cell Cathode. <i>Journal of Physical Chemistry C</i> , 2017, 121, 4789-4798.	3.1	29
10	Dimethyl Sulfoxide-Based Electrolytes for High-Current Potassium-Oxygen Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 19319-19327.	3.1	28
11	Tuning anion solvation energetics enhances potassium-oxygen battery performance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 14899-14904.	7.1	28
12	Highly Durable and Active Pt/Sb-Doped SnO ₂ Oxygen Reduction Reaction Electrocatalysts Produced by Atomic Layer Deposition. <i>ACS Applied Energy Materials</i> , 2020, 3, 5774-5783.	5.1	27
13	Advances in anion exchange membranes for electrochemical energy conversion. <i>Current Opinion in Electrochemistry</i> , 2018, 12, 240-245.	4.8	21
14	Pt/RuO ₂ -TiO ₂ Electrocatalysts Exhibit Excellent Hydrogen Evolution Activity in Alkaline Media. <i>Journal of the Electrochemical Society</i> , 2017, 164, F1234-F1240.	2.9	20
15	Enhancement of oxygen reduction reaction rate by addition of water to an oxidatively stable ionic liquid electrolyte for lithium-air cells. <i>Electrochemistry Communications</i> , 2016, 73, 55-58.	4.7	19
16	Methanesulfonic acid-based electrode-decoupled vanadium-cerium redox flow battery exhibits significantly improved capacity and cycle life. <i>Sustainable Energy and Fuels</i> , 2019, 3, 2417-2425.	4.9	19
17	Fuel and oxygen harvesting from Martian regolithic brine. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 31685-31689.	7.1	17
18	Self-Anchored Platinum-Decorated Antimony-Doped-Tin Oxide as a Durable Oxygen Reduction Electrocatalyst. <i>ACS Catalysis</i> , 2021, 11, 7006-7017.	11.2	17

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19	Thermal characterization of Li/sulfur, Li/ LiFePO_4 and Li/ LiV_3O_8 cells using Isothermal Micro-Calorimetry and Accelerating Rate Calorimetry. <i>Journal of Power Sources</i> , 2015, 289, 1-7.	7.8	14
20	Enhanced methane electrooxidation by ceria and nickel oxide impregnated perovskite anodes in solid oxide fuel cells. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 11287-11296.	7.1	14
21	Rotating Ring-Disc Electrode Investigation of the Aprotic Superoxide Radical Electrochemistry on Multi-Crystalline Surfaces and Correlation with Density Functional Theory Modeling: Implications for Lithium-Air Cells. <i>Journal of the Electrochemical Society</i> , 2016, 163, A2377-A2384.	2.9	12
22	Reactant-Transport Engineering Approach to High-Power Direct Borohydride Fuel Cells. <i>Cell Reports Physical Science</i> , 2020, 1, 100084.	5.6	12
23	Alkaline Stability of Pure Aliphatic-based Anion Exchange Membranes Containing Cycloaliphatic Quaternary Ammonium Cations. <i>Journal of the Electrochemical Society</i> , 2020, 167, 124504.	2.9	11
24	Binder-free thin graphite fiber mat sandwich electrode architectures for energy-efficient vanadium redox flow batteries. <i>Catalysis Today</i> , 2021, 370, 181-188.	4.4	9
25	Electrochemical implications of modulating the solvation shell around redox active organic species in aqueous organic redox flow batteries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	9
26	Impact of Surface Texturization on Overall Performance of Mono-Crystalline Silicon Solar Cells. <i>ECS Transactions</i> , 2015, 66, 9-17.	0.5	6
27	Effect of cathode porosity on the Lithium-air cell oxygen reduction reaction – A rotating ring-disk electrode investigation. <i>Electrochimica Acta</i> , 2017, 248, 570-577.	5.2	6
28	Co_3O_4 -Impregnated NiO/YSZ : An Efficient Catalyst for Direct Methane Electrooxidation. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 32578-32590.	8.0	6
29	Templated, carbothermal reduction synthesis of mesoporous silicon carbide from carbon nanotube–mesoporous silica core–shell composite. <i>Bulletin of Materials Science</i> , 2018, 41, 1.	1.7	5
30	Engineering block co-polymer anion exchange membrane domains for highly efficient electrode-decoupled redox flow batteries. <i>Sustainable Energy and Fuels</i> , 2021, 5, 3606-3616.	4.9	5
31	Ex-solution kinetics of nickel-ceria–doped strontium titanate perovskites. <i>Ionics</i> , 2021, 27, 2527-2536.	2.4	2
32	Metal–Nitrogen–Carbon Cluster–Decorated Titanium Carbide is a Durable and Inexpensive Oxygen Reduction Reaction Electrocatalyst. <i>ChemSusChem</i> , 2021, 14, 4680-4689.	6.8	2
33	Understanding the Oxygen Reduction Reaction Activity and Oxidative Stability of Pt Supported on Nb–Doped TiO_2 . <i>ChemSusChem</i> , 2019, 12, 3409-3409.	6.8	0
34	Impact of Surface Texturization on Overall Performance of Mono-Crystalline Silicon Solar Cells. <i>ECS Meeting Abstracts</i> , 2015, , .	0.0	0
35	Ab Initio Study Of Surface Segregation Effects And Li- O_2 Cell Oxygen Reduction Reaction Activity On Pd_3M (M=Fe, Co, Ni, Cu) Alloys. <i>ECS Meeting Abstracts</i> , 2015, , .	0.0	0
36	Thermal Study of Reaction Intermediate Stability during Electrochemical Sulfur Reduction in a Lithium-Sulfur Cell. <i>ECS Meeting Abstracts</i> , 2015, , .	0.0	0

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37	Ab Initio Study Of Li ₂ O ₂ On Noble Metal (Pt, Au, Pd), Pt ₃ M (M=Fe, Co, Ni, Cu) Alloy And Pd ₃ M (M=Fe, Co, Ni) Tj ETQq _{1,1} 0.784314 rgBT	0.0	0
38	Investigating the Oxygen Reduction Reaction in Lithium-Oxygen Cells. ECS Meeting Abstracts, 2016, , .	0.0	0
39	Pt Supported on Nb-Doped-TiO ₂ As a Highly Selective and Durable Electrocatalyst for PEFC Applications. ECS Meeting Abstracts, 2018, , .	0.0	0
40	Bipolar Polymer Electrolyte Interfaces As Separators for High Performance Direct Borohydride Fuel Cells. ECS Meeting Abstracts, 2018, , .	0.0	0
41	Oxygen Reduction Reaction Kinetics at the K-O ₂ Cell Cathode. ECS Meeting Abstracts, 2018, , .	0.0	0
42	Detection of Reactive Oxygen Species in AEM Fuel Cells Using in Situ Fluorescence Spectroscopy. ECS Meeting Abstracts, 2018, , .	0.0	0
43	Nanoparticle Surface Charge Alters Membrane Ionic Permeability. ECS Meeting Abstracts, 2019, , .	0.0	0
44	Pentavalent Metal Doped TiO ₂ As Corrosion-Resistant Electrocatalyst Supports in Polymer Electrolyte Membrane Fuel Cells. ECS Meeting Abstracts, 2019, , .	0.0	0
45	(Invited) Efficient pH-Gradient-Enabled Microscale Bipolar Interfaces in High Performance Direct Borohydride Fuel Cells. ECS Meeting Abstracts, 2019, , .	0.0	0
46	Atomic Layer Deposition (ALD) of Pt on Sb-SnO ₂ Nanoparticles Produces Ultra-Stable, Active Catalysts for PEMFC Application. ECS Meeting Abstracts, 2019, , .	0.0	0
47	Tailoring Cation Solvation in Electrode-Decoupled Redox Flow Batteries Significantly Enhances Capacity and Cycle Life. ECS Meeting Abstracts, 2020, MA2020-01, 508-508.	0.0	0
48	Impact of Solvation Energetics on the Oxygen Reduction Reaction in Alkali-Metal/Oxygen Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 439-439.	0.0	0
49	Metalâ€Nitrogenâ€Carbon Clusterâ€Decorated Titanium Carbide is a Durable and Inexpensive Oxygen Reduction Reaction Electrocatalyst. ChemSusChem, 2021, 14, 4613-4614.	6.8	0
50	Electrolytic Fuel and Oxygen Harvesting from Ultra-Cold, Hypersaline Martian Regolithic Brines. ECS Meeting Abstracts, 2021, MA2021-02, 1755-1755.	0.0	0
51	High-Performance Direct Borohydride Fuel Cells Using Non-PGM Electrocatalysts. ECS Meeting Abstracts, 2020, MA2020-02, 2386-2386.	0.0	0