

Alex Schechter

List of Publications by Year in descending order

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5984
citing authors

#	ARTICLE	IF	CITATIONS
1	Methyl formate and dimethyl ether electro-oxidation on Pt Pd Sn catalyst supported on carbon nanotube decorated with carbon dots. <i>Materials Today Sustainability</i> , 2022, 17, 100095.	4.1	4
2	Effect of Mn Doped Ni ²⁺ Co Mixed Oxide Catalysts on Urea Oxidation. <i>ChemCatChem</i> , 2022, 14, .	3.7	3
3	Hydrogen Production in Microbial Electrolysis Cells Based on Bacterial Anodes Encapsulated in a Small Bioreactor Platform. <i>Microorganisms</i> , 2022, 10, 1007.	3.6	5
4	Mechanisms of electrochemical nitrogen gas reduction to ammonia under ambient conditions: a focused review. <i>Journal of Solid State Electrochemistry</i> , 2022, 26, 1897-1917.	2.5	11
5	Spinel Nickel Ferrite Nanoparticles Supported on a 1T/2H Mixed-Phase MoS ₂ Heterostructured Composite as a Bifunctional Electrocatalyst for Oxygen Evolution and Oxygen Reduction Reactions. <i>Energy & Fuels</i> , 2022, 36, 7782-7794.	5.1	8
6	Surface modifications of carbon nanodots reveal the chemical source of their bright fluorescence. <i>Nanoscale Advances</i> , 2021, 3, 716-724.	4.6	15
7	Plasma-Modified FeGly/C as a Pt-Free Stable ORR Electrocatalyst in an Acid Electrolyte. <i>ACS Applied Energy Materials</i> , 2021, 4, 564-574.	5.1	16
8	Bioinspired oxygen selective membrane for Zn ²⁺ air batteries. <i>Journal of Materials Science</i> , 2021, 56, 9382-9394.	3.7	8
9	Metal ²⁺ Organic Polymer-Derived Interconnected Fe ²⁺ Ni Alloy by Carbon Nanotubes as an Advanced Design of Urea Oxidation Catalysts. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 8461-8473.	8.0	62
10	Facile and scalable ambient pressure chemical vapor deposition-assisted synthesis of layered silver selenide (I ² -Ag ₂ Se) on Ag foil as a possible oxygen reduction catalyst in alkaline medium. <i>Electrochimica Acta</i> , 2021, 370, 137709.	5.2	16
11	Advances in Catalytic Electrooxidation of Urea: A Review. <i>Energy Technology</i> , 2021, 9, 2100017.	3.8	75
12	Hydrogen Production on Demand by a Pump Controlled Hydrolysis of Granulated Sodium Borohydride. <i>Energy & Fuels</i> , 2021, 35, 11507-11514.	5.1	13
13	Hydrogen production in a semi ² chamber microbial electrolysis cell based on anode encapsulated in a dialysis bag. <i>International Journal of Energy Research</i> , 2021, 45, 19074.	4.5	6
14	Dependable polysulfone based anion exchange membranes incorporating triazatriangulenium cations. <i>Solid State Ionics</i> , 2021, 370, 115731.	2.7	14
15	Edge Cooling of a Fuel Cell during Aerial Missions by Ambient Air. <i>Micromachines</i> , 2021, 12, 1432.	2.9	5
16	Electrochemical and Chemical Instability of Vanadium Nitride in the Synthesis of Ammonia Directly from Nitrogen. <i>ChemCatChem</i> , 2020, 12, 438-443.	3.7	21
17	Pd ²⁺ Decorated Tungsten as Pt ²⁺ Free Bimetallic Catalysts for Hydrogen Oxidation Reaction in Alkaline Electrolyte. <i>Israel Journal of Chemistry</i> , 2020, 60, 563-569.	2.3	8
18	Electrochemical Oxidation of Glycine with Bimetallic Nickel ²⁺ Manganese Oxide Catalysts. <i>ChemElectroChem</i> , 2020, 7, 561-568.	3.4	12

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19	Immobilization of bacterial cells on carbon-cloth anode using alginate for hydrogen generation in a microbial electrolysis cell. <i>Journal of Power Sources</i> , 2020, 455, 227986.	7.8	25
20	Tailored Pt Coatings on Metallic Tin—An Effective Catalyst for Fuel Cells Anodes. <i>Journal of the Electrochemical Society</i> , 2020, 167, 044512.	2.9	5
21	NH ₃ -Plasma pre-treated carbon supported active iron–nitrogen catalyst for oxygen reduction in acid and alkaline electrolytes. <i>Catalysis Science and Technology</i> , 2020, 10, 1675-1687.	4.1	24
22	Hydrogen production on-demand by hydride salt and water two-phase generator. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 15270-15280.	7.1	10
23	Plasma Treatment As an Effective Way of Modifying Carbon-Based Electrocatalysts for an Enhanced Oxygen Reduction Reaction. <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 1620-1620.	0.0	0
24	Enhancement of Electrochemical Activity in Bioelectrochemical Systems by Using Bacterial Anodes: An Overview. , 2020, , 211-238.		2
25	Catalytic current mapping of oxygen reduction on isolated Pt particles by atomic force microscopy-scanning electrochemical microscopy. <i>Applied Catalysis B: Environmental</i> , 2019, 256, 117843.	20.2	14
26	Improvement of Microbial Electrolysis Cell Activity by Using Anode Based on Combined Plasma-Pretreated Carbon Cloth and Stainless Steel. <i>Energies</i> , 2019, 12, 1968.	3.1	18
27	A Comparative Study of Plasma-Treated Oxygen-Doped Single-Walled and Multiwalled Carbon Nanotubes as Electrocatalyst for Efficient Oxygen Reduction Reaction. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 11396-11406.	6.7	35
28	Ternary nickel cobalt manganese spinel oxide nanoparticles as heterogeneous electrocatalysts for oxygen evolution and oxygen reduction reaction. <i>Materials Chemistry and Physics</i> , 2019, 229, 190-196.	4.0	31
29	Simultaneous Mapping of Oxygen Reduction Activity and Hydrogen Peroxide Generation on Electrocatalytic Surfaces. <i>ChemSusChem</i> , 2019, 12, 2708-2714.	6.8	11
30	Electrochemical Ammonia Generation Directly from Nitrogen and Air Using an Iron-Oxide/Titania-Based Catalyst at Ambient Conditions. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 7981-7989.	8.0	41
31	Dimethyl Ether Oxidation on an Active SnO ₂ /Pt/C Catalyst for High-Power Fuel Cells. <i>ChemElectroChem</i> , 2019, 6, 2407-2414.	3.4	11
32	Functionalization of Graphene—A Critical Overview of its Improved Physical, Chemical and Electrochemical Properties. <i>Carbon Nanostructures</i> , 2019, , 139-173.	0.1	3
33	Simultaneous SECM-AFM-Ters Mapping of Electrocatalytic Reactions on a Nanometric Scale. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
34	Ammonia Electrochemical Synthesis Using Platinum Ruthenium Alloy at Ambient Pressure and Low Temperature. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
35	Enhanced Anodic Reaction of Dimethyl Ether (DME) on Ptpdsn Based Catalysts for High Power Low Temperature Fuel Cells. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
36	Titanium hydride—a stable support for Pt catalysts in oxygen reduction reaction. <i>Journal of Solid State Electrochemistry</i> , 2018, 22, 2049-2058.	2.5	3

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37	Nanoscale mapping of catalytic hotspots on Fe, N-modified HOPG by scanning electrochemical microscopy-atomic force microscopy. <i>Nanoscale</i> , 2018, 10, 6962-6970.	5.6	20
38	Electrochemical synthesis of ammonia using ruthenium-platinum alloy at ambient pressure and low temperature. <i>Electrochemistry Communications</i> , 2018, 90, 96-100.	4.7	87
39	Ultra-Low Loading of Highly Active Pt and PtSn Catalysts on Hierarchical Tin as Anodes in Direct Methanol Fuel Cells. <i>Journal of the Electrochemical Society</i> , 2018, 165, F1242-F1248.	2.9	14
40	Exfoliated molybdenum di-sulfide (MoS ₂) electrode for hydrogen production in microbial electrolysis cell. <i>Bioelectrochemistry</i> , 2018, 123, 201-210.	4.6	33
41	Electrodeposited Ternary Fe-Mo-P as an Efficient Electrode Material for Bifunctional Water Splitting in Neutral pH. <i>Electrocatalysis</i> , 2018, 9, 682-688.	3.0	11
42	Electrochemical investigation of urea oxidation reaction on $\text{Ni}(\text{OH})_2$ and Ni/Ni(OH) ₂ . <i>Electrochimica Acta</i> , 2018, 278, 405-411.	5.2	112
43	Highly active Pt _x Pd _y /SnO ₂ /C catalyst for dimethyl ether oxidation in fuel cells. <i>Journal of Power Sources</i> , 2018, 396, 335-344.	7.8	16
44	Enhanced Urea Activity of Oxidation on Nickel-Deposited Tin Dendrites. <i>ChemElectroChem</i> , 2017, 4, 1037-1043.	3.4	36
45	Atomic Force Microscopic and Raman Investigation of Boron-Doped Diamond Nanowire Electrodes and Their Activity toward Oxygen Reduction. <i>Journal of Physical Chemistry C</i> , 2017, 121, 3397-3403.	3.1	13
46	Unraveling the Oxygen-Reduction Sites in Graphitic-Carbon Co-N-C-Type Electrocatalysts Prepared by Single-Precursor Pyrolysis. <i>ChemCatChem</i> , 2017, 9, 1969-1978.	3.7	18
47	Electrochemical Oxygen Reduction Activity of Metal Embedded Nitrogen Doped Carbon Nanostructures Derived from Pyrolysis of Nitrogen-Rich Guanidinium Salt. <i>Journal of the Electrochemical Society</i> , 2017, 164, F781-F789.	2.9	8
48	Electroactivity of NiCr Catalysts for Urea Oxidation in Alkaline Electrolyte. <i>ChemCatChem</i> , 2017, 9, 3374-3379.	3.7	69
49	On the synthesis of RuSe oxygen reduction nano-catalysts for direct methanol fuel cells. <i>Journal of Solid State Electrochemistry</i> , 2017, 21, 3103-3111.	2.5	3
50	Novel RuCoSe as non-platinum catalysts for oxygen reduction reaction in microbial fuel cells. <i>Journal of Power Sources</i> , 2017, 362, 140-146.	7.8	14
51	Modeling the mechanical behavior of sodium borohydride (NaBH ₄) powder. <i>Materials and Design</i> , 2016, 108, 240-249.	7.0	8
52	Superoleophobic Surfaces Obtained via Hierarchical Metallic Meshes. <i>Langmuir</i> , 2016, 32, 4134-4140.	3.5	31
53	Exceptionally Active and Stable Spinel Nickel Manganese Oxide Electrocatalysts for Urea Oxidation Reaction. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 12176-12185.	8.0	130
54	Insights on the Electrochemical Atomic Force Microscopic Catalytic Oxygen Reduction on Tip Guided Platinum Particle Deposits. <i>Electrochimica Acta</i> , 2016, 217, 100-107.	5.2	4

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55	Morphological study of branched Sn structure formed under selected electrochemical conditions. <i>Journal of Materials Science</i> , 2016, 51, 8471-8483.	3.7	11
56	Vertically Aligned Nitrogen-Doped Carbon Nanotube Carpet Electrodes: Highly Sensitive Interfaces for the Analysis of Serum from Patients with Inflammatory Bowel Disease. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 9600-9609.	8.0	16
57	Electrochemical Oxygen Reduction Activity of Cobalt-Nitrogen-Carbon Composite Catalyst Prepared by Single Precursor Pyrolysis under Autogenic Pressure. <i>Journal of the Electrochemical Society</i> , 2016, 163, F428-F436.	2.9	13
58	How to grow a movable mini-garden in a droplet: Growing chemical gardens in a water and aqueous ethanol solutions droplets deposited on a superhydrophobic surface. <i>Colloids and Interface Science Communications</i> , 2015, 7, 12-15.	4.1	3
59	Ruthenium Phosphide Synthesis and Electroactivity toward Oxygen Reduction in Acid Solutions. <i>ACS Catalysis</i> , 2015, 5, 4260-4267.	11.2	46
60	The Synthesis of Metallic β -Sn Nanostructures for Use as a Novel Pt Catalyst Support and Evaluation of Their Activity Toward Methanol Electrooxidation. <i>Electrocatalysis</i> , 2015, 6, 554-562.	3.0	9
61	Electrocatalytic activity of nitrogen plasma treated vertically aligned carbon nanotube carpets towards oxygen reduction reaction. <i>Electrochemistry Communications</i> , 2014, 49, 42-46.	4.7	23
62	Phenol degradation in bio-electrochemical cells. <i>International Biodeterioration and Biodegradation</i> , 2013, 84, 155-160.	3.9	53
63	Current production in a microbial fuel cell using a pure culture of <i>Cupriavidus basilensis</i> growing in acetate or phenol as a carbon source. <i>Microbial Biotechnology</i> , 2013, 6, 425-434.	4.2	78
64	Effect of external voltage on <i>Pseudomonas putida</i> F1 in a bio electrochemical cell using toluene as sole carbon and energy source. <i>Microbiology (United Kingdom)</i> , 2012, 158, 414-423.	1.8	22
65	Four-Electron Oxygen Reduction by Brominated Cobalt Corrole. <i>Inorganic Chemistry</i> , 2012, 51, 22-24.	4.0	105
66	High resolution remote sensing of particles and aerosols in the W-band (92-100 GHz)., 2011, , .		0
67	[¹ H and [³¹ P NMR Study of Phosphoric Acid-“Doped Polybenzimidazole under Controlled Water Activity. <i>Journal of the Electrochemical Society</i> , 2009, 156, B283.	2.9	35
68	Free-standing, Thermostable, Micrometer-scale Honeycomb Polymer Films and their Properties. <i>Macromolecular Materials and Engineering</i> , 2008, 293, 872-877.	3.6	26
69	The Reversible Giant Change in the Contact Angle on the Polysulfone and Polyethersulfone Films Exposed to UV Irradiation. <i>Langmuir</i> , 2008, 24, 5977-5980.	3.5	33
70	Imidazole and 1-methyl imidazole in phosphoric acid doped polybenzimidazole, electrolyte for fuel cells. <i>Solid State Ionics</i> , 2002, 147, 181-187.	2.7	200
71	Prototype systems for rechargeable magnesium batteries. <i>Nature</i> , 2000, 407, 724-727.	27.8	1,946
72	X-ray Photoelectron Spectroscopy Study of Surface Films Formed on Li Electrodes Freshly Prepared in Alkyl Carbonate Solutions. <i>Langmuir</i> , 1999, 15, 3334-3342.	3.5	174

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73	The Study of Surface Film Formation on Noble-Metal Electrodes in Alkyl Carbonates/Li Salt Solutions, Using Simultaneous in Situ AFM, EQCM, FTIR, and EIS. Langmuir, 1999, 15, 2947-2960.	3.5	131
74	Recent Studies of Interfacial Phenomena which Determine the Electrochemical Behavior of Lithium and Lithiated Carbon Anodes with the Emphasis on In Situ Techniques. Materials Research Society Symposia Proceedings, 1997, 496, 587.	0.1	1
75	Recent studies on the correlation between surface chemistry, morphology, three-dimensional structures and performance of Li and Li-C intercalation anodes in several important electrolyte systems. Journal of Power Sources, 1997, 68, 91-98.	7.8	444