

Andrew A Gewirth

List of Publications by Year in descending order

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186
papers

10,967
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28190

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docs citations

189
times ranked

13257
citing authors

#	ARTICLE	IF	CITATIONS
1	Electroreduction of Dioxygen for Fuel-Cell Applications: Materials and Challenges. <i>Inorganic Chemistry</i> , 2010, 49, 3557-3566.	1.9	647
2	Nonprecious Metal Catalysts for Oxygen Reduction in Heterogeneous Aqueous Systems. <i>Chemical Reviews</i> , 2018, 118, 2313-2339.	23.0	642
3	Nanoporous Copper-Silver Alloys by Additive-Controlled Electrodeposition for the Selective Electroreduction of CO ₂ to Ethylene and Ethanol. <i>Journal of the American Chemical Society</i> , 2018, 140, 5791-5797.	6.6	599
4	Electrochemical Applications of in Situ Scanning Probe Microscopy. <i>Chemical Reviews</i> , 1997, 97, 1129-1162.	23.0	442
5	Insights into the Low Overpotential Electroreduction of CO ₂ to CO on a Supported Gold Catalyst in an Alkaline Flow Electrolyzer. <i>ACS Energy Letters</i> , 2018, 3, 193-198.	8.8	384
6	Electrochemical CO ₂ -to-ethylene conversion on polyamine-incorporated Cu electrodes. <i>Nature Catalysis</i> , 2021, 4, 20-27.	16.1	313
7	Identification of carbon-encapsulated iron nanoparticles as active species in non-precious metal oxygen reduction catalysts. <i>Nature Communications</i> , 2016, 7, 12582.	5.8	261
8	In Situ Raman Spectroscopy of Sulfur Speciation in Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 1709-1719.	4.0	249
9	Inhibition Due to the Interaction of Polyethylene Glycol, Chloride, and Copper in Plating Baths: A Surface-Enhanced Raman Study. <i>Journal of Physical Chemistry B</i> , 2003, 107, 9415-9423.	1.2	235
10	Nanoporous Copper Films by Additive-Controlled Electrodeposition: CO ₂ Reduction Catalysis. <i>ACS Catalysis</i> , 2017, 7, 3313-3321.	5.5	224
11	A Highly Efficient Single-Chain Metal-Organic Nanoparticle Catalyst for Alkyne-Azide Click Reactions in Water and in Cells. <i>Journal of the American Chemical Society</i> , 2016, 138, 11077-11080.	6.6	190
12	Sparingly Solvating Electrolytes for High Energy Density Lithium-Sulfur Batteries. <i>ACS Energy Letters</i> , 2016, 1, 503-509.	8.8	190
13	The Interplay of Al and Mg Speciation in Advanced Mg Battery Electrolyte Solutions. <i>Journal of the American Chemical Society</i> , 2016, 138, 328-337.	6.6	186
14	Cu complexes that catalyze the oxygen reduction reaction. <i>Coordination Chemistry Reviews</i> , 2013, 257, 130-139.	9.5	178
15	Strain Anisotropies and Self-Limiting Capacities in Single-Crystalline 3D Silicon Microstructures: Models for High Energy Density Lithium-Ion Battery Anodes. <i>Advanced Functional Materials</i> , 2011, 21, 2412-2422.	7.8	176
16	Electrolytic Conditioning of a Magnesium Aluminum Chloride Complex for Reversible Magnesium Deposition. <i>Journal of Physical Chemistry C</i> , 2014, 118, 27623-27630.	1.5	167
17	Oxygen Reduction Activity of a Copper Complex of 3,5-Diamino-1,2,4-triazole Supported on Carbon Black. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 165-167.	7.2	156
18	High Activity Oxygen Evolution Reaction Catalysts from Additive-Controlled Electrodeposited Ni and NiFe Films. <i>ACS Catalysis</i> , 2016, 6, 1159-1164.	5.5	146

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19	Highly reversible Zn anode with a practical areal capacity enabled by a sustainable electrolyte and superacid interfacial chemistry. <i>Joule</i> , 2022, 6, 1103-1120.	11.7	131
20	A Method for Filling Complex Polymeric Microfluidic Devices and Arrays. <i>Analytical Chemistry</i> , 2001, 73, 3193-3197.	3.2	130
21	Proton transfer dynamics control the mechanism of O ₂ reduction by a non-precious metal electrocatalyst. <i>Nature Materials</i> , 2016, 15, 754-759.	13.3	126
22	Mechanism of Oxygen Electroreduction on Gold Surfaces in Basic Media. <i>Journal of Physical Chemistry B</i> , 2006, 110, 2565-2571.	1.2	119
23	Evolution at the Solid Electrolyte/Gold Electrode Interface during Lithium Deposition and Stripping. <i>Chemistry of Materials</i> , 2017, 29, 3029-3037.	3.2	117
24	Restored iron transport by a small molecule promotes absorption and hemoglobinization in animals. <i>Science</i> , 2017, 356, 608-616.	6.0	112
25	Electrochemical stiffness in lithium-ion batteries. <i>Nature Materials</i> , 2016, 15, 1182-1187.	13.3	111
26	Mechanic Study of Copper Deposition onto Gold Surfaces by Scaling and Spectral Analysis of In Situ Atomic Force Microscopic Images. <i>Journal of the Electrochemical Society</i> , 1996, 143, 3122-3132.	1.3	110
27	Preparation of Nonprecious Metal Electrocatalysts for the Reduction of Oxygen Using a Low-Temperature Sacrificial Metal. <i>Journal of the American Chemical Society</i> , 2020, 142, 5477-5481.	6.6	110
28	A Nitrogen-Doped Carbon Catalyst for Electrochemical CO ₂ Conversion to CO with High Selectivity and Current Density. <i>ChemSusChem</i> , 2017, 10, 1094-1099.	3.6	109
29	Controlling Speciation during CO ₂ Reduction on Cu-Alloy Electrodes. <i>ACS Catalysis</i> , 2020, 10, 672-682.	5.5	107
30	Thiol-based electrolyte additives for high-performance lithium-sulfur batteries. <i>Nano Energy</i> , 2017, 32, 50-58.	8.2	106
31	ZnNiMnCo ₂ O ₄ Spinel as a High-Voltage and High-Capacity Cathode Material for Nonaqueous Zn-Ion Batteries. <i>Advanced Energy Materials</i> , 2018, 8, 1800589.	10.2	105
32	In Situ Surface-Enhanced Raman Spectroscopy of the Electrochemical Reduction of Carbon Dioxide on Silver with 3,5-Diamino-1,2,4-Triazole. <i>Journal of Physical Chemistry C</i> , 2014, 118, 17567-17576.	1.5	97
33	System Design Rules for Intensifying the Electrochemical Reduction of CO ₂ to CO on Ag Nanoparticles. <i>ChemElectroChem</i> , 2020, 7, 2001-2011.	1.7	90
34	Rocking-Chair-Type Metal Hybrid Supercapacitors. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 30853-30862.	4.0	86
35	Multicopper Models for the Laccase Active Site: Effect of Nuclearity on Electrocatalytic Oxygen Reduction. <i>Inorganic Chemistry</i> , 2014, 53, 8505-8516.	1.9	85
36	Dopant Modulated Li Insertion in Si for Battery Anodes: Theory and Experiment. <i>Journal of Physical Chemistry C</i> , 2011, 115, 18916-18921.	1.5	84

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37	ZnAl ₂ O ₄ Spinel as Cathode Materials for Non-Aqueous Zn Batteries with an Open Circuit Voltage of ~2 V. <i>Chemistry of Materials</i> , 2017, 29, 9351-9359.	3.2	83
38	Vibrational Spectroscopic and Mass Spectrometric Studies of the Interaction of Bis(3-sulfopropyl)-disulfide with Cu Surfaces. <i>Journal of the Electrochemical Society</i> , 2006, 153, C97.	1.3	79
39	Shell-isolated nanoparticle enhanced Raman spectroscopy (SHINERS) investigation of benzotriazole film formation on Cu(100), Cu(111), and Cu(poly). <i>Journal of Raman Spectroscopy</i> , 2012, 43, 46-50.	1.2	77
40	Potential Dependence of the Local pH in a CO ₂ Reduction Electrolyzer. <i>ACS Catalysis</i> , 2021, 11, 255-263.	5.5	77
41	Peroxide Electroreduction on Bi-Modified Au Surfaces: A Vibrational Spectroscopy and Density Functional Calculations. <i>Journal of the American Chemical Society</i> , 2003, 125, 7086-7099.	6.6	76
42	Understanding the Effect of Interlayers at the Thiophosphate Solid Electrolyte/Lithium Interface for All-Solid-State Li Batteries. <i>Chemistry of Materials</i> , 2018, 30, 8747-8756.	3.2	75
43	Beyond Local Solvation Structure: Nanometric Aggregates in Battery Electrolytes and Their Effect on Electrolyte Properties. <i>ACS Energy Letters</i> , 2022, 7, 461-470.	8.8	75
44	Copper Deposition in the Presence of Surface-Confined Additives. <i>Journal of the Electrochemical Society</i> , 1997, 144, 96-105.	1.3	74
45	Observation of an Inverse Kinetic Isotope Effect in Oxygen Evolution Electrochemistry. <i>ACS Catalysis</i> , 2016, 6, 5706-5714.	5.5	73
46	Exploring Salt and Solvent Effects in Chloride-Based Electrolytes for Magnesium Electrodeposition and Dissolution. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13524-13534.	1.5	71
47	Mechanism of Electrochemical Reduction of Hydrogen Peroxide on Copper in Acidic Sulfate Solutions. <i>Langmuir</i> , 2007, 23, 9911-9918.	1.6	68
48	Face-Dependent Shell-Isolated Nanoparticle Enhanced Raman Spectroscopy of 2,2'-Bipyridine on Au(100) and Au(111). <i>Journal of Physical Chemistry C</i> , 2012, 116, 5128-5140.	1.5	68
49	Understanding Ca Electrodeposition and Speciation Processes in Nonaqueous Electrolytes for Next-Generation Ca-Ion Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 21536-21542.	4.0	64
50	Characterization of the Cathode Electrolyte Interface in Lithium Ion Batteries by Desorption Electrospray Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2016, 88, 7171-7177.	3.2	62
51	Investigation of Fluoroethylene Carbonate Effects on Tin-based Lithium-Ion Battery Electrodes. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 6557-6566.	4.0	60
52	Effect of Concentration on the Electrochemistry and Speciation of the Magnesium Aluminum Chloride Complex Electrolyte Solution. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 35729-35739.	4.0	60
53	Toward a Four-Electron Redox Quinone Polymer for High Capacity Lithium Ion Storage. <i>Advanced Energy Materials</i> , 2018, 8, 1700960.	10.2	60
54	Identification of lithium-sulfur battery discharge products through 6Li and 33S solid-state MAS and 7Li solution NMR spectroscopy. <i>Surface Science</i> , 2015, 631, 295-300.	0.8	58

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55	Effect of Hydrofluoroether Cosolvent Addition on Li Solvation in Acetonitrile-Based Solvate Electrolytes and Its Influence on S Reduction in a Li-S Battery. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 34360-34371.	4.0	58
56	Effect of the Hydrofluoroether Cosolvent Structure in Acetonitrile-Based Solvate Electrolytes on the Li ⁺ Solvation Structure and Li-S Battery Performance. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 39357-39370.	4.0	58
57	Evidence for Decoupled Electron and Proton Transfer in the Electrochemical Oxidation of Ammonia on Pt(100). <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 387-392.	2.1	57
58	Gold Nanoparticles on Polymer-Wrapped Carbon Nanotubes: An Efficient and Selective Catalyst for the Electroreduction of CO ₂ . <i>ChemPhysChem</i> , 2017, 18, 3274-3279.	1.0	57
59	Surface Coverage and SEI Induced Electrochemical Surface Stress Changes during Li Deposition in a Model System for Li-Ion Battery Anodes. <i>Journal of the Electrochemical Society</i> , 2013, 160, A888-A896.	1.3	55
60	Investigating the Li-O ₂ Battery in an Ether-Based Electrolyte Using Differential Electrochemical Mass Spectrometry. <i>Journal of the Electrochemical Society</i> , 2013, 160, A549-A552.	1.3	55
61	The Long-Term Stability of KO ₂ in K ₂ O ₂ Batteries. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 1227-1231.	7.2	55
62	Voltammetric and Force Spectroscopic Examination of Oxide Formation on Cu(111) in Basic Solution. <i>Journal of Physical Chemistry B</i> , 2002, 106, 12211-12220.	1.2	53
63	Binder-Focused Approaches to Improve the Stability of Cathodes for CO ₂ Electroreduction. <i>ACS Applied Energy Materials</i> , 2021, 4, 5175-5186.	2.5	53
64	Proton switch for modulating oxygen reduction by a copper electrocatalyst embedded in a hybrid bilayer membrane. <i>Nature Materials</i> , 2014, 13, 619-623.	13.3	51
65	Elucidating Proton Involvement in the Rate-Determining Step for Pt/Pd-Based and Non-Precious-Metal Oxygen Reduction Reaction Catalysts Using the Kinetic Isotope Effect. <i>Journal of Physical Chemistry Letters</i> , 2016, 7, 3542-3547.	2.1	50
66	Identification of Li-Ion Battery SEI Compounds through ⁷ Li and ¹³ C Solid-State MAS NMR Spectroscopy and MALDI-TOF Mass Spectrometry. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 371-380.	4.0	49
67	The First-Cycle Electrochemical Lithiation of Crystalline Ge: Dopant and Orientation Dependence and Comparison with Si. <i>Journal of Physical Chemistry Letters</i> , 2011, 2, 3092-3095.	2.1	48
68	Synergetic Role of Li ⁺ during Mg Electrodeposition/Dissolution in Borohydride Diglyme Electrolyte Solution: Voltammetric Stripping Behaviors on a Pt Microelectrode Indicative of Mg-Li Alloying and Facilitated Dissolution. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 2494-2502.	4.0	46
69	Potential-Step Chronocoulometric Investigation of the Surface Coverages of Coadsorbed Bi and Hydroxide on Au(111) Electrodes. <i>Langmuir</i> , 1996, 12, 4909-4913.	1.6	43
70	Nitrate Reduction Catalyzed by Underpotentially Deposited Cd on Au(111): Identification of the Electroactive Surface Structure. <i>Langmuir</i> , 2000, 16, 9501-9512.	1.6	43
71	Revealing the Role of the Metal in Non-Precious-Metal Catalysts for Oxygen Reduction via Selective Removal of Fe. <i>ACS Energy Letters</i> , 2018, 3, 823-828.	8.8	43
72	Adsorption Configuration and Local Ordering of Silicotungstate Anions on Ag(100) Electrode Surfaces. <i>Journal of the American Chemical Society</i> , 2001, 123, 8838-8843.	6.6	42

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73	Solidâ€Liquid Lithium Electrolyte Nanocomposites Derived from Porous Molecular Cages. <i>Journal of the American Chemical Society</i> , 2018, 140, 7504-7509.	6.6	41
74	Passivation Dynamics in the Anisotropic Deposition and Stripping of Bulk Magnesium Electrodes During Electrochemical Cycling. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 18406-18414.	4.0	39
75	3-Mercapto-1-Propanesulfonate for Cu Electrodeposition Studied by in Situ Shell-Isolated Nanoparticle-Enhanced Raman Spectroscopy, Density Functional Theory Calculations, and Cyclic Voltammetry. <i>Journal of Physical Chemistry C</i> , 2015, 119, 23453-23462.	1.5	39
76	Incorporating Solvate and Solid Electrolytes for Allâ€Solidâ€State Li₂S Batteries with High Capacity and Long Cycle Life. <i>Advanced Energy Materials</i> , 2019, 9, 1900938.	10.2	38
77	Elucidating Zn and Mg Electrodeposition Mechanisms in Nonaqueous Electrolytes for Next-Generation Metal Batteries. <i>Journal of Physical Chemistry C</i> , 2018, 122, 13790-13796.	1.5	37
78	Interactions between the Keggin-Type Lacunary Polyoxometalate, $\text{H}_{12}\text{-SiW}_{11}\text{O}_{39}^{8-}$, and Electrode Surfaces. <i>Langmuir</i> , 2003, 19, 8934-8942.	1.6	35
79	Lithium Intercalation Behavior in Multilayer Silicon Electrodes. <i>Advanced Energy Materials</i> , 2014, 4, 1301494.	10.2	35
80	Attenuation of surface-enhanced Raman spectroscopy response in gold-platinum core-shell nanoparticles. <i>Journal of Raman Spectroscopy</i> , 2002, 33, 243-251.	1.2	32
81	Highly dispersed, single-site copper catalysts for the electroreduction of CO ₂ to methane. <i>Journal of Electroanalytical Chemistry</i> , 2020, 875, 113862.	1.9	32
82	Potential-Step Chronocoulometric and Quartz Crystal Microbalance Investigation of Coadsorbed Cadmium and Sulfate on Au(111) Electrodes. <i>Langmuir</i> , 1997, 13, 6302-6309.	1.6	31
83	The Longâ€Term Stability of KO₂ in Kâ€O₂ Batteries. <i>Angewandte Chemie</i> , 2018, 130, 1241-1245.	1.6	30
84	CoS ₂ as a Sulfur Redox-Active Cathode Material for High-Capacity Nonaqueous Zn Batteries. <i>Journal of Physical Chemistry C</i> , 2019, 123, 8740-8745.	1.5	30
85	Real-Time Observations of Interfacial Lithiation in a Metal Silicide Thin Film. <i>Journal of Physical Chemistry C</i> , 2012, 116, 22341-22345.	1.5	29
86	Photoresponsive Molecular Switch for Regulating Transmembrane Proton-Transfer Kinetics. <i>Journal of the American Chemical Society</i> , 2015, 137, 14059-14062.	6.6	29
87	Characterization of Water Structure on Silver Electrode Surfaces by SERS with Two-Dimensional Correlation Spectroscopy. <i>Analytical Chemistry</i> , 2010, 82, 1305-1310.	3.2	28
88	Electrochemical Stiffness Changes in Lithium Manganese Oxide Electrodes. <i>Advanced Energy Materials</i> , 2017, 7, 1601778.	10.2	28
89	Potential-Dependent Layering in the Electrochemical Double Layer of Water-in-Salt Electrolytes. <i>ACS Applied Energy Materials</i> , 2020, 3, 8086-8094.	2.5	28
90	Influence of Aromatic Functionality on Quaternary Ammonium Levelers for Cu Plating. <i>Journal of the Electrochemical Society</i> , 2011, 158, D323.	1.3	27

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91	The effect of water-containing electrolyte on lithium-sulfur batteries. <i>Journal of Power Sources</i> , 2017, 369, 50-56.	4.0	27
92	Investigating the effect of aging on transpassive behavior of Ni-based alloys in sulfuric acid with shell-isolated nanoparticle enhanced Raman spectroscopy (SHINERS). <i>Corrosion Science</i> , 2013, 67, 67-74.	3.0	25
93	Covalent Ag-C Bonding Contacts from Unprotected Terminal Acetylenes for Molecular Junctions. <i>Nano Letters</i> , 2020, 20, 5490-5495.	4.5	25
94	In Situ EQCM Study Examining Irreversible Changes the Sulfur-Carbon Cathode in Lithium-Sulfur Batteries. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 20820-20828.	4.0	24
95	Influence of Oxides on the Stress Evolution and Reversibility during SnO _x Conversion and Li-Sn Alloying Reactions. <i>Advanced Energy Materials</i> , 2015, 5, 1400317.	10.2	24
96	Multimodal Study of the Speciations and Activities of Supported Pd Catalysts During the Hydrogenation of Ethylene. <i>Journal of Physical Chemistry C</i> , 2017, 121, 18962-18972.	1.5	24
97	Raman and QCM Studies of PPG and PEG Adsorption on Cu Electrode Surfaces. <i>Journal of the Electrochemical Society</i> , 2018, 165, D687-D695.	1.3	24
98	Direct Observation of Interfacial Mechanical Failure in Thiophosphate Solid Electrolytes with Operando X-Ray Tomography. <i>Advanced Materials Interfaces</i> , 2020, 7, 2000751.	1.9	24
99	Decreasing the Energy Consumption of the CO ₂ Electrolysis Process Using a Magnetic Field. <i>ACS Energy Letters</i> , 2021, 6, 2427-2433.	8.8	24
100	The Flip-Flop Diffusion Mechanism across Lipids in a Hybrid Bilayer Membrane. <i>Biophysical Journal</i> , 2016, 110, 2451-2462.	0.2	23
101	Improving Cell Resistance and Cycle Life with Solvate-Coated Thiophosphate Solid Electrolytes in Lithium Batteries. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 2014-2021.	4.0	23
102	Formation of Ordered Multilayers from Polyoxometalates and Silver on Electrode Surfaces. <i>Journal of Physical Chemistry B</i> , 2004, 108, 7927-7933.	1.2	22
103	Electrochemically Driven Reorientation of Three Ionic States of <i>p</i> -Aminobenzoic Acid on Ag(111). <i>Journal of Physical Chemistry C</i> , 2009, 113, 2417-2424.	1.5	22
104	Anion Transport through Lipids in a Hybrid Bilayer Membrane. <i>Analytical Chemistry</i> , 2015, 87, 2403-2409.	3.2	22
105	LiMn ₂ O ₄ @Au Particles as Cathodes for Li-Ion Batteries. <i>Journal of the Electrochemical Society</i> , 2015, 162, A26-A29.	1.3	22
106	Electrochemical Surface Stress Development during CO and NO Oxidation on Pt. <i>Journal of Physical Chemistry C</i> , 2016, 120, 8674-8683.	1.5	22
107	Controlling Interfacial Properties of Lithium-Ion Battery Cathodes with Alkylphosphonate Self-Assembled Monolayers. <i>Advanced Materials Interfaces</i> , 2018, 5, 1701292.	1.9	22
108	Chain length variation to probe the mechanism of accelerator additives in copper electrodeposition. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 16838-16847.	1.3	21

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109	Oriented LiMn ₂ O ₄ Particle Fracture from Delithiation-Driven Surface Stress. ACS Applied Materials & Interfaces, 2020, 12, 49182-49191.	4.0	20
110	Effect of Mn and Cu Addition on Lithiation and SEI Formation on Model Anode Electrodes. Journal of the Electrochemical Society, 2014, 161, A513-A518.	1.3	19
111	Interfacial Leveler-Accelerator Interactions in Cu Electrodeposition. Journal of the Electrochemical Society, 2021, 168, 042501.	1.3	19
112	Dimensionally Controlled Lithiation of Chromium Oxide. Chemistry of Materials, 2016, 28, 47-54.	3.2	18
113	Effect of Support on Oxygen Reduction Reaction Activity of Supported Iron Porphyrins. ACS Catalysis, 2022, 12, 1139-1149.	5.5	18
114	Electrochemical and In Situ Scanning Force Microscopy Investigation of Anion Effects on Ag(111) Electrode Surfaces. Journal of the Electrochemical Society, 1995, 142, 3027-3033.	1.3	17
115	Potential-Step Chronocoulometric and Quartz Crystal Microbalance Investigation of Underpotentially Deposited Tl on Au(111) Electrodes. Journal of Physical Chemistry B, 1998, 102, 818-823.	1.2	16
116	Energy Storage Mechanisms in High-Capacity Graphitic C ₃ N ₄ Cathodes for Al-Ion Batteries. Journal of Physical Chemistry C, 2020, 124, 10288-10297.	1.5	16
117	In Situ Strain Measurement in Solid-State Li-Ion Battery Electrodes. Journal of the Electrochemical Society, 2021, 168, 010516.	1.3	16
118	Synthesis of Manganese Oxide Microspheres by Ultrasonic Spray Pyrolysis and Their Application as Supercapacitors. Particle and Particle Systems Characterization, 2015, 32, 899-906.	1.2	15
119	Effects of Ring Substitution on the Binding and Oxidation of Cyanophenols on Au(111) Electrodes. The Journal of Physical Chemistry, 1996, 100, 7204-7211.	2.9	14
120	SERS study of hydrogen peroxide electroreduction on a Pb-modified Au electrode. Journal of Raman Spectroscopy, 2005, 36, 715-724.	1.2	14
121	Reversible Li-Ion Conversion Reaction for a Ti _x Ge Alloy in a Ti/Ge Multilayer. ACS Applied Materials & Interfaces, 2017, 9, 8169-8176.	4.0	14
122	In situ surface stress measurement and computational analysis examining the oxygen reduction reaction on Pt and Pd. Electrochimica Acta, 2018, 260, 400-406.	2.6	14
123	Structure Sensitive Adsorption of DMSO on Au Surfaces. Journal of Physical Chemistry B, 2000, 104, 873-877.	1.2	13
124	Enabling High Capacity and Coulombic Efficiency for Li ⁺ /NCM811 Cells Using a Highly Concentrated Electrolyte. Batteries and Supercaps, 2021, 4, 294-303.	2.4	13
125	Observation of Electrode Poisoning during the Electrooxidation of Aromatic Alcohols on (111)Au. Journal of the Electrochemical Society, 1996, 143, 2088-2092.	1.3	12
126	Synthesis and characterization of molybdate-modified platinum nanoparticles. Physical Chemistry Chemical Physics, 2004, 6, 1310.	1.3	12

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127	Insight into the electrochemical reduction of CO ₂ on gold via surface-enhanced Raman spectroscopy and N-containing additives. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 1149-1154.	1.2	12
128	Proton transfer dynamics dictate quinone speciation at lipid-modified electrodes. <i>Physical Chemistry Chemical Physics</i> , 2017, 19, 7086-7093.	1.3	12
129	Cathode/Electrolyte Interface-Dependent Changes in Stress and Strain in Lithium Iron Phosphate Composite Cathodes. <i>Journal of the Electrochemical Society</i> , 2019, 166, A2707-A2714.	1.3	11
130	Operando Observations and First-Principles Calculations of Reduced Lithium Insertion in Au-Coated LiMn ₂ O ₄ . <i>Advanced Materials Interfaces</i> , 2019, 6, 1801923.	1.9	11
131	Suppression of Copper Electrodeposition by PEG in Methanesulfonic Acid Electrolytes. <i>Journal of the Electrochemical Society</i> , 2019, 166, D551-D558.	1.3	10
132	Origin of Enhanced Cyclability in Covalently Modified LiMn _{1.5} Ni _{0.5} O ₄ Cathodes. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 39890-39901.	4.0	10
133	Dynamic Surface Stress Response during Reversible Mg Electrodeposition and Stripping. <i>Journal of the Electrochemical Society</i> , 2016, 163, A2679-A2684.	1.3	9
134	Origins of Less Noble Behavior by Au during CO Adsorption. <i>ACS Catalysis</i> , 2018, 8, 2247-2252.	5.5	9
135	High Energy Density CNT/Nal Composite Cathodes for Sodium-Ion Batteries. <i>Advanced Materials Interfaces</i> , 2018, 5, 1801342.	1.9	9
136	Nanoheterogeneity of LiTFSI Solutions Transitions Close to a Surface and with Concentration. <i>Nano Letters</i> , 2021, 21, 2304-2309.	4.5	9
137	Atomic force microscopic study of polymeric film growth in copper electroplating bath with benzotriazole. <i>Journal of Electroanalytical Chemistry</i> , 2007, 601, 242-250.	1.9	8
138	Model Ge microstructures as anodes for Li-ion batteries. <i>Journal of Solid State Electrochemistry</i> , 2013, 17, 3015-3020.	1.2	8
139	X-ray diffraction microscopy of lithiated silicon microstructures. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	8
140	Potential dependence of the structure of water at the hydrophobic liquid interface. <i>Journal of Electroanalytical Chemistry</i> , 2007, 609, 94-98.	1.9	6
141	Anisotropic Mg Electrodeposition and Alloying with Ag-based Anodes from Non-Coordinating Mixed-Metal Borohydride Electrolytes for Mg Hybrid Batteries. <i>Electrochimica Acta</i> , 2017, 229, 112-120.	2.6	6
142	Trimethylsilyl Azide (TMSN ₃) Enhanced Li-O ₂ Battery Electrolytes. <i>ACS Applied Energy Materials</i> , 2019, 2, 2662-2671.	2.5	6
143	Understanding the influence of carbon addition on the corrosion behavior and mechanical properties of Al alloy. <i>Journal of Materials Science</i> , 2019, 54, 2668-2679.	1.7	6
144	Structure of Monolayers of Silicotungstate Anions on Ag(111) and Au(111) Electrode Surfaces. <i>Materials Research Society Symposia Proceedings</i> , 1996, 451, 99.	0.1	6

#	ARTICLE	IF	CITATIONS
145	Electrodes: Lithium Intercalation Behavior in Multilayer Silicon Electrodes (Adv. Energy Mater.) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 2	10.2	4
146	Tailoring the Lithium Solid Electrolyte Interphase for Highly Concentrated Electrolytes with Direct Exposure to Halogenated Solvents. ACS Applied Energy Materials, 2022, 5, 2768-2779.	2.5	4
147	Conversion of Co Nanoparticles to CoS in Metal-Organic Framework-Derived Porous Carbon during Cycling Facilitates Na ₂ S Reactivity in a Na-S Battery. ACS Applied Materials & Interfaces, 2020, 12, 29285-29295.	4.0	3
148	Pressure-Dependent Electrochemical Behavior of Di-Lithium Rhodizonate Cathodes. Chemistry of Materials, 2021, 33, 5738-5747.	3.2	3
149	The JPC Periodic Table. Journal of Physical Chemistry A, 2019, 123, 5837-5848.	1.1	2
150	The JPC Periodic Table. Journal of Physical Chemistry Letters, 2019, 10, 4051-4062.	2.1	2
151	Effects of Superparamagnetic Iron Nanoparticles on Electrocatalysts for the Reduction of Oxygen. Inorganic Chemistry, 2021, 60, 4236-4242.	1.9	2
152	The Adsorption Structure of Polyethylene Imine on Copper Surfaces for Electrodeposition. Physica Status Solidi - Rapid Research Letters, 0, , 2100351.	1.2	2
153	In-Situ Observation of Oxide Monolayer Formation on Copper Solid-Liquid Interfaces. Materials Research Society Symposia Proceedings, 1994, 332, 121.	0.1	1
154	The JPC Periodic Table. Journal of Physical Chemistry B, 2019, 123, 5973-5984.	1.2	1
155	The JPC Periodic Table. Journal of Physical Chemistry C, 2019, 123, 17063-17074.	1.5	1
156	Using Magnetometry to Understand the Relative Role of Magnetic Particles in Co-Based Catalysts for the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2021, 125, 17709-17717.	1.5	1
157	In-Situ Scanning Probe Microscopy of Solid-Liquid Interfaces: Role of Epitaxial Oxide Adlayers on Cu Electrodeposition. Materials Research Society Symposia Proceedings, 1994, 355, 247.	0.1	0
158	LITHIUM-ION BATTERIES: Strain Anisotropies and Self-Limiting Capacities in Single-Crystalline 3D Silicon Microstructures: Models for High Energy Density Lithium-Ion Battery Anodes (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 2	0.0	0
159	Operando and multimodal studies of speciation and activity of Pt catalysts during the hydrogenation of ethylene. Microscopy and Microanalysis, 2017, 23, 892-893.	0.2	0
160	Lithium-Ion Batteries: Operando Observations and First-Principles Calculations of Reduced Lithium Insertion in Au-Coated LiMn ₂ O ₄ (Adv. Mater. Interfaces 4/2019). Advanced Materials Interfaces, 2019, 6, 1970026.	1.9	0
161	(Keynote) Nanostructured Materials for CO ₂ and Oxygen Reduction. ECS Meeting Abstracts, 2021, MA2021-01, 1898-1898.	0.0	0
162	Improving Cell Resistance and Cycle Life with Solvate/Thiophosphate Hybrid Electrolytes in Lithium Metal and Lithium Sulfur Batteries. ECS Meeting Abstracts, 2021, MA2021-01, 444-444.	0.0	0

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163	(Invited) Copper Electrodeposition for Catalysis and Devices. ECS Meeting Abstracts, 2021, MA2021-01, 928-928.	0.0	0
164	(Invited) Potential Dependent Layering in the Electrochemical Double Layer of Highly Concentrated Electrolytes. ECS Meeting Abstracts, 2021, MA2021-01, 1772-1772.	0.0	0
165	Using Magnetic Fields to Intensify the CO2 Electrolysis Process. ECS Meeting Abstracts, 2021, MA2021-01, 942-942.	0.0	0
166	System Design Rules for Intensified CO2 Electroreduction. ECS Meeting Abstracts, 2021, MA2021-01, 943-943.	0.0	0
167	First Principles Studies of Solid-Solid Interfaces between LiMn2O4 and Protective Coatings. ECS Meeting Abstracts, 2019, , .	0.0	0
168	Chemical Consequences of Flow- CO2 Reduction in a Microfluidic Flow Cell. ECS Meeting Abstracts, 2019, , .	0.0	0
169	(Invited) Nanostructured Copper and Copper Alloys for CO2 Reduction. ECS Meeting Abstracts, 2019, , .	0.0	0
170	Towards Durable, Selective Catalysts and Electrodes for CO2 Electroreduction to Value-Added Chemicals and Fuels. ECS Meeting Abstracts, 2019, , .	0.0	0
171	Improving Cell Resistance and Cycle Life with Solvate/Thiophosphate Hybrid Electrolytes in Lithium Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
172	Understanding the Effect of Interlayer on the Performance of All-Solid-State Li2s Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
173	Intensifying the CO2 Electrolysis Process. ECS Meeting Abstracts, 2019, , .	0.0	0
174	In Situ Chemo-Mechanical Responses of Lithium Iron Phosphate Electrodes during Electrochemical Cycling. ECS Meeting Abstracts, 2019, , .	0.0	0
175	Elucidating Zn, Mg, and Ca Electrodeposition Mechanisms in Nonaqueous Electrolytes for Next-Generation Metal Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
176	(Industrial Electrochemistry and Electrochemical Engineering Division Student Achievement Award) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Abstracts, 2020, MA2020-01, 1255-1255.	0.0	0
177	Electrodeposition for Oxygen Evolution and CO2 Reduction. ECS Meeting Abstracts, 2020, MA2020-01, 1190-1190.	0.0	0
178	(Invited) Molecular Models for Electrodeposition Inhibitors, Suppressors, and Anti-Suppressors. ECS Meeting Abstracts, 2020, MA2020-01, 1149-1149.	0.0	0
179	Identification of Active Species and Mechanisms in Non-Precious Metal Oxygen Reduction Catalysts By Poisoning and Magnetic Measurements. ECS Meeting Abstracts, 2020, MA2020-01, 2598-2598.	0.0	0
180	(Industrial Electrochemistry and Electrochemical Engineering Division Student Achievement Award) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 Meeting Abstracts, 2020, MA2020-02, 3202-3202.	0.0	0

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181	Towards Durable, Selective Catalysts and Electrodes for the Electroreduction of CO ₂ to Value-Added Chemicals and Fuels. ECS Meeting Abstracts, 2020, MA2020-02, 3039-3039.	0.0	0
182	(Invited) Multivalent Battery Chemistries: Anodes, Cathodes, and Electrolytes. ECS Meeting Abstracts, 2020, MA2020-02, 202-202.	0.0	0
183	(Keynote) Electrodeposited Catalysts for High Efficiency CO ₂ Electrolyzers. ECS Meeting Abstracts, 2020, MA2020-02, 3211-3211.	0.0	0
184	Improving Cell Resistance and Cycle Life with Solvate/Thiophosphate Hybrid Electrolytes in Lithium Metal and Lithium Sulfur Batteries. ECS Meeting Abstracts, 2020, MA2020-02, 961-961.	0.0	0
185	(Keynote) Identification of Active Species and Mechanisms in Non-Precious Metal Oxygen Reduction Catalysts By Reductive Treatments and Magnetic Measurements. ECS Meeting Abstracts, 2022, MA2022-01, 2058-2058.	0.0	0
186	(Invited) Using Electrodeposition to Make Electrocatalysts. ECS Meeting Abstracts, 2022, MA2022-01, 1165-1165.	0.0	0