Andrew A Gewirth

List of Publications by Citations

161 papers	8,123 citations	48 h-index	86 g-index
189 ext. papers	9,519 ext. citations	9.6 avg, IF	6.67 L-index

#	Paper	IF	Citations
161	Electroreduction of dioxygen for fuel-cell applications: materials and challenges. *Inorganic Chemistry*, **2010**, 49, 3557-66	5.1	588
160	Nonprecious Metal Catalysts for Oxygen Reduction in Heterogeneous Aqueous Systems. *Chemical Reviews*, **2018**, 118, 2313-2339	68.1	457
159	Nanoporous Copper-Silver Alloys by Additive-Controlled Electrodeposition for the Selective Electroreduction of CO to Ethylene and Ethanol. *Journal of the American Chemical Society*, **2018**, 140, 5791-5797	16.4	398
158	Electrochemical Applications of in Situ Scanning Probe Microscopy. *Chemical Reviews*, **1997**, 97, 1129-1162	68.1	379
157	Insights into the Low Overpotential Electroreduction of CO2 to CO on a Supported Gold Catalyst in an Alkaline Flow Electrolyzer. *ACS Energy Letters*, **2018**, 3, 193-198	20.1	263
156	Identification of carbon-encapsulated iron nanoparticles as active species in non-precious metal oxygen reduction catalysts. *Nature Communications*, **2016**, 7, 12582	17.4	206
155	Inhibition Due to the Interaction of Polyethylene Glycol, Chloride, and Copper in Plating Baths: A Surface-Enhanced Raman Study. *Journal of Physical Chemistry B*, **2003**, 107, 9415-9423	3.4	202
154	In situ Raman spectroscopy of sulfur speciation in lithium-sulfur batteries. *ACS Applied Materials & Interfaces*, **2015**, 7, 1709-19	9.5	199
153	Nanoporous Copper Films by Additive-Controlled Electrodeposition: CO2 Reduction Catalysis. *ACS Catalysis*, **2017**, 7, 3313-3321	13.1	172
152	Strain Anisotropies and Self-Limiting Capacities in Single-Crystalline 3D Silicon Microstructures: Models for High Energy Density Lithium-Ion Battery Anodes. *Advanced Functional Materials*, **2011**, 21, 2412-2422	15.6	164
151	Cu complexes that catalyze the oxygen reduction reaction. *Coordination Chemistry Reviews*, **2013**, 257, 130-139	23.2	152
150	The Interplay of Al and Mg Speciation in Advanced Mg Battery Electrolyte Solutions. *Journal of the American Chemical Society*, **2016**, 138, 328-37	16.4	147
149	Sparingly Solvating Electrolytes for High Energy Density Lithium-Sulfur Batteries. *ACS Energy Letters*, **2016**, 1, 503-509	20.1	146
148	Oxygen reduction activity of a copper complex of 3,5-diamino-1,2,4-triazole supported on carbon black. *Angewandte Chemie - International Edition*, **2009**, 48, 165-7	16.4	141
147	Electrolytic Conditioning of a Magnesium Aluminum Chloride Complex for Reversible Magnesium Deposition. *Journal of Physical Chemistry C*, **2014**, 118, 27623-27630	3.8	139
146	A Highly Efficient Single-Chain Metal-Organic Nanoparticle Catalyst for Alkyne-Azide "Click" Reactions in Water and in Cells. *Journal of the American Chemical Society*, **2016**, 138, 11077-80	16.4	132
145	High Activity Oxygen Evolution Reaction Catalysts from Additive-Controlled Electrodeposited Ni and NiFe Films. *ACS Catalysis*, **2016**, 6, 1159-1164	13.1	122

144	A method for filling complex polymeric microfluidic devices and arrays. *Analytical Chemistry*, **2001**, 73, 3193-7	7.8	113
143	Mechanism of oxygen electroreduction on gold surfaces in basic media. *Journal of Physical Chemistry B*, **2006**, 110, 2565-71	3.4	106
142	Mechanic Study of Copper Deposition onto Gold Surfaces by Scaling and Spectral Analysis of In Situ Atomic Force Microscopic Images. *Journal of the Electrochemical Society*, **1996**, 143, 3122-3132	3.9	104
141	A Nitrogen-Doped Carbon Catalyst for Electrochemical CO Conversion to CO with High Selectivity and Current Density. *ChemSusChem*, **2017**, 10, 1094-1099	8.3	92
140	Electrochemical stiffness in lithium-ion batteries. *Nature Materials*, **2016**, 15, 1182-1187	27	85
139	Electrochemical CO2-to-ethylene conversion on polyamine-incorporated Cu electrodes. *Nature Catalysis*, **2021**, 4, 20-27	36.5	85
138	Evolution at the Solid Electrolyte/Gold Electrode Interface during Lithium Deposition and Stripping. *Chemistry of Materials*, **2017**, 29, 3029-3037	9.6	83
137	Proton transfer dynamics control the mechanism of O2 reduction by a non-precious metal electrocatalyst. *Nature Materials*, **2016**, 15, 754-9	27	83
136	In Situ Surface-Enhanced Raman Spectroscopy of the Electrochemical Reduction of Carbon Dioxide on Silver with 3,5-Diamino-1,2,4-Triazole. *Journal of Physical Chemistry C*, **2014**, 118, 17567-17576	3.8	75
135	Restored iron transport by a small molecule promotes absorption and hemoglobinization in animals. *Science*, **2017**, 356, 608-616	33.3	73
134	Dopant Modulated Li Insertion in Si for Battery Anodes: Theory and Experiment. *Journal of Physical Chemistry C*, **2011**, 115, 18916-18921	3.8	73
133	ZnNixMnxCo2xO4 Spinel as a High-Voltage and High-Capacity Cathode Material for Nonaqueous Zn-Ion Batteries. *Advanced Energy Materials*, **2018**, 8, 1800589	21.8	72
132	Thiol-based electrolyte additives for high-performance lithium-sulfur batteries. *Nano Energy*, **2017**, 32, 50-58	17.1	71
131	Multicopper models for the laccase active site: effect of nuclearity on electrocatalytic oxygen reduction. *Inorganic Chemistry*, **2014**, 53, 8505-16	5.1	70
130	Peroxide electroreduction on bi-modified Au surfaces: vibrational spectroscopy and density functional calculations. *Journal of the American Chemical Society*, **2003**, 125, 7086-99	16.4	68
129	ZnAlxCo2xO4 Spinels as Cathode Materials for Non-Aqueous Zn Batteries with an Open Circuit Voltage of V. *Chemistry of Materials*, **2017**, 29, 9351-9359	9.6	67
128	Copper Deposition in the Presence of Surface-Confined Additives. *Journal of the Electrochemical Society*, **1997**, 144, 96-105	3.9	65
127	Vibrational Spectroscopic and Mass Spectrometric Studies of the Interaction of Bis(3-sulfopropyl)-disulfide with Cu Surfaces. *Journal of the Electrochemical Society*, **2006**, 153, C97	3.9	65

126	Shell-isolated nanoparticle enhanced Raman spectroscopy (SHINERS) investigation of benzotriazole film formation on Cu(100), Cu(111), and Cu(poly). *Journal of Raman Spectroscopy*, **2012**, 43, 46-50	2.3	64
125	Mechanism of electrochemical reduction of hydrogen peroxide on copper in acidic sulfate solutions. *Langmuir*, **2007**, 23, 9911-8	4	63
124	Preparation of Nonprecious Metal Electrocatalysts for the Reduction of Oxygen Using a Low-Temperature Sacrificial Metal. *Journal of the American Chemical Society*, **2020**, 142, 5477-5481	16.4	62
123	Face-Dependent Shell-Isolated Nanoparticle Enhanced Raman Spectroscopy of 2,2?-Bipyridine on Au(100) and Au(111). *Journal of Physical Chemistry C*, **2012**, 116, 5128-5140	3.8	60
122	Exploring Salt and Solvent Effects in Chloride-Based Electrolytes for Magnesium Electrodeposition and Dissolution. *Journal of Physical Chemistry C*, **2015**, 119, 13524-13534	3.8	58
121	Controlling Speciation during CO2 Reduction on Cu-Alloy Electrodes. *ACS Catalysis*, **2020**, 10, 672-682	13.1	58
120	"Rocking-Chair"-Type Metal Hybrid Supercapacitors. *ACS Applied Materials & Interfaces*, **2016**, 8, 30853-30862	9.5	54
119	Investigation of fluoroethylene carbonate effects on tin-based lithium-ion battery electrodes. *ACS Applied Materials & Interfaces*, **2015**, 7, 6557-66	9.5	53
118	Understanding the Effect of Interlayers at the Thiophosphate Solid Electrolyte/Lithium Interface for All-Solid-State Li Batteries. *Chemistry of Materials*, **2018**, 30, 8747-8756	9.6	53
117	Investigating the Li-O2Battery in an Ether-Based Electrolyte Using Differential Electrochemical Mass Spectrometry. *Journal of the Electrochemical Society*, **2013**, 160, A549-A552	3.9	52
116	Identification of lithium□sulfur battery discharge products through 6Li and 33S solid-state MAS and 7Li solution NMR spectroscopy. *Surface Science*, **2015**, 631, 295-300	1.8	50
115	Characterization of the Cathode Electrolyte Interface in Lithium Ion Batteries by Desorption Electrospray Ionization Mass Spectrometry. *Analytical Chemistry*, **2016**, 88, 7171-7	7.8	50
114	Observation of an Inverse Kinetic Isotope Effect in Oxygen Evolution Electrochemistry. *ACS Catalysis*, **2016**, 6, 5706-5714	13.1	49
113	Gold Nanoparticles on Polymer-Wrapped Carbon Nanotubes: An Efficient and Selective Catalyst for the Electroreduction of CO. *ChemPhysChem*, **2017**, 18, 3274-3279	3.2	48
112	System Design Rules for Intensifying the Electrochemical Reduction of CO2 to CO on Ag Nanoparticles. *ChemElectroChem*, **2020**, 7, 2001-2011	4.3	48
111	The Long-Term Stability of KO in K-O Batteries. *Angewandte Chemie - International Edition*, **2018**, 57, 1227-1231	16.4	48
110	Voltammetric and Force Spectroscopic Examination of Oxide Formation on Cu(111) in Basic Solution. *Journal of Physical Chemistry B*, **2002**, 106, 12211-12220	3.4	47
109	Toward a Four-Electron Redox Quinone Polymer for High Capacity Lithium Ion Storage. *Advanced Energy Materials*, **2018**, 8, 1700960	21.8	46

108	Surface Coverage and SEI Induced Electrochemical Surface Stress Changes during Li Deposition in a Model System for Li-Ion Battery Anodes. *Journal of the Electrochemical Society*, **2013**, 160, A888-A896	3.9	46
107	Evidence for Decoupled Electron and Proton Transfer in the Electrochemical Oxidation of Ammonia on Pt(100). *Journal of Physical Chemistry Letters*, **2016**, 7, 387-92	6.4	45
106	Understanding Ca Electrodeposition and Speciation Processes in Nonaqueous Electrolytes for Next-Generation Ca-Ion Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 21536-21542	9.5	42
105	Proton switch for modulating oxygen reduction by a copper electrocatalyst embedded in a hybrid bilayer membrane. *Nature Materials*, **2014**, 13, 619-23	27	42
104	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. *ACS Applied Materials & Interfaces*, **2015**, 7, 2494-502	9.5	41
103	The First-Cycle Electrochemical Lithiation of Crystalline Ge: Dopant and Orientation Dependence and Comparison with Si. *Journal of Physical Chemistry Letters*, **2011**, 2, 3092-3095	6.4	41
102	Effect of Hydrofluoroether Cosolvent Addition on Li Solvation in Acetonitrile-Based Solvate Electrolytes and Its Influence on S Reduction in a Li-S Battery. *ACS Applied Materials & Interfaces*, **2016**, 8, 34360-34371	9.5	40
101	Effect of Concentration on the Electrochemistry and Speciation of the Magnesium Aluminum Chloride Complex Electrolyte Solution. *ACS Applied Materials & Interfaces*, **2017**, 9, 35729-35739	9.5	40
100	Effect of the Hydrofluoroether Cosolvent Structure in Acetonitrile-Based Solvate Electrolytes on the Li Solvation Structure and Li-S Battery Performance. *ACS Applied Materials & Interfaces*, **2017**, 9, 39357-39370	9.5	39
99	Adsorption configuration and local ordering of silicotungstate anions on Ag(100) electrode surfaces. *Journal of the American Chemical Society*, **2001**, 123, 8838-43	16.4	39
98	Revealing the Role of the Metal in Non-Precious-Metal Catalysts for Oxygen Reduction via Selective Removal of Fe. *ACS Energy Letters*, **2018**, 3, 823-828	20.1	38
97	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. *Journal of Physical Chemistry Letters*, **2016**, 7, 3542-7	6.4	38
96	Nitrate Reduction Catalyzed by Underpotentially Deposited Cd on Au(111): Identification of the Electroactive Surface Structure. *Langmuir*, **2000**, 16, 9501-9512	4	38
95	Potential-Step Chronocoulometric Investigation of the Surface Coverages of Coadsorbed Bi and Hydroxide on Au(111) Electrodes. *Langmuir*, **1996**, 12, 4909-4913	4	38
94	Identification of Li-Ion Battery SEI Compounds through (7)Li and (13)C Solid-State MAS NMR Spectroscopy and MALDI-TOF Mass Spectrometry. *ACS Applied Materials & Interfaces*, **2016**, 8, 371-80	9.5	36
93	Interactions between the Keggin-Type Lacunary Polyoxometalate, $SiW_{11}O_{39}^{8-}$, and Electrode Surfaces. *Langmuir*, **2003**, 19, 8934-8942	4	34
92	Lithium Intercalation Behavior in Multilayer Silicon Electrodes. *Advanced Energy Materials*, **2014**, 4, 1301494	21.8	31
91	Attenuation of surface-enhanced Raman spectroscopy response in gold–platinum core-shell nanoparticles. *Journal of Raman Spectroscopy*, **2002**, 33, 243-251	2.3	31

90	Passivation Dynamics in the Anisotropic Deposition and Stripping of Bulk Magnesium Electrodes During Electrochemical Cycling. *ACS Applied Materials & Interfaces*, **2015**, 7, 18406-14	9.5	29
89	Incorporating Solvate and Solid Electrolytes for All-Solid-State Li2S Batteries with High Capacity and Long Cycle Life. *Advanced Energy Materials*, **2019**, 9, 1900938	21.8	28
88	Solid-Liquid Lithium Electrolyte Nanocomposites Derived from Porous Molecular Cages. *Journal of the American Chemical Society*, **2018**, 140, 7504-7509	16.4	28
87	3-Mercapto-1-Propanesulfonate for Cu Electrodeposition Studied by in Situ Shell-Isolated Nanoparticle-Enhanced Raman Spectroscopy, Density Functional Theory Calculations, and Cyclic Voltammetry. *Journal of Physical Chemistry C*, **2015**, 119, 23453-23462	3.8	28
86	The Long-Term Stability of KO2 in K-O2 Batteries. *Angewandte Chemie*, **2018**, 130, 1241-1245	3.6	27
85	Elucidating Zn and Mg Electrodeposition Mechanisms in Nonaqueous Electrolytes for Next-Generation Metal Batteries. *Journal of Physical Chemistry C*, **2018**, 122, 13790-13796	3.8	26
84	Characterization of water structure on silver electrode surfaces by SERS with two-dimensional correlation spectroscopy. *Analytical Chemistry*, **2010**, 82, 1305-10	7.8	26
83	Influence of Aromatic Functionality on Quaternary Ammonium Levelers for Cu Plating. *Journal of the Electrochemical Society*, **2011**, 158, D323	3.9	26
82	Potential-Step Chronocoulometric and Quartz Crystal Microbalance Investigation of Coadsorbed Cadmium and Sulfate on Au(111) Electrodes. *Langmuir*, **1997**, 13, 6302-6309	4	26
81	Potential Dependence of the Local pH in a CO2 Reduction Electrolyzer. *ACS Catalysis*, **2021**, 11, 255-263	13.1	23
80	Real-Time Observations of Interfacial Lithiation in a Metal Silicide Thin Film. *Journal of Physical Chemistry C*, **2012**, 116, 22341-22345	3.8	22
79	Investigating the effect of aging on transpassive behavior of Ni-based alloys in sulfuric acid with shell-isolated nanoparticle enhanced Raman spectroscopy (SHINERS). *Corrosion Science*, **2013**, 67, 67-74	6.8	22
78	Formation of Ordered Multilayers from Polyoxometalates and Silver on Electrode Surfaces. *Journal of Physical Chemistry B*, **2004**, 108, 7927-7933	3.4	22
77	CoS2 as a Sulfur Redox-Active Cathode Material for High-Capacity Nonaqueous Zn Batteries. *Journal of Physical Chemistry C*, **2019**, 123, 8740-8745	3.8	21
76	Photoresponsive molecular switch for regulating transmembrane proton-transfer kinetics. *Journal of the American Chemical Society*, **2015**, 137, 14059-62	16.4	21
75	LiMn2O4@Au Particles as Cathodes for Li-Ion Batteries. *Journal of the Electrochemical Society*, **2015**, 162, A26-A29	3.9	21
74	Influence of Oxides on the Stress Evolution and Reversibility during SnOx Conversion and Li-Sn Alloying Reactions. *Advanced Energy Materials*, **2015**, 5, 1400317	21.8	21
73	In Situ EQCM Study Examining Irreversible Changes the Sulfur-Carbon Cathode in Lithium-Sulfur Batteries. *ACS Applied Materials & Interfaces*, **2015**, 7, 20820-8	9.5	20

72	Electrochemical Surface Stress Development during CO and NO Oxidation on Pt. *Journal of Physical Chemistry C*, **2016**, 120, 8674-8683	3.8	20
71	Electrochemical Stiffness Changes in Lithium Manganese Oxide Electrodes. *Advanced Energy Materials*, **2017**, 7, 1601778	21.8	18
70	Multimodal Study of the Speciations and Activities of Supported Pd Catalysts During the Hydrogenation of Ethylene. *Journal of Physical Chemistry C*, **2017**, 121, 18962-18972	3.8	18
69	Anion transport through lipids in a hybrid bilayer membrane. *Analytical Chemistry*, **2015**, 87, 2403-9	7.8	18
68	The effect of water-containing electrolyte on lithium-sulfur batteries. *Journal of Power Sources*, **2017**, 369, 50-56	8.9	17
67	Highly dispersed, single-site copper catalysts for the electroreduction of CO2 to methane. *Journal of Electroanalytical Chemistry*, **2020**, 875, 113862	4.1	17
66	Effect of Mn and Cu Addition on Lithiation and SEI Formation on Model Anode Electrodes. *Journal of the Electrochemical Society*, **2014**, 161, A513-A518	3.9	17
65	Electrochemically Driven Reorientation of Three Ionic States of p-Aminobenzoic Acid on Ag(111). *Journal of Physical Chemistry C*, **2009**, 113, 2417-2424	3.8	17
64	Improving Cell Resistance and Cycle Life with Solvate-Coated Thiophosphate Solid Electrolytes in Lithium Batteries. *ACS Applied Materials & Interfaces*, **2019**, 11, 2014-2021	9.5	17
63	The Flip-Flop Diffusion Mechanism across Lipids in a Hybrid Bilayer Membrane. *Biophysical Journal*, **2016**, 110, 2451-2462	2.9	16
62	Highly reversible Zn anode with a practical areal capacity enabled by a sustainable electrolyte and superacid interfacial chemistry. *Joule*, **2022**, 6, 1103-1120	27.8	16
61	Controlling Interfacial Properties of Lithium-Ion Battery Cathodes with Alkylphosphonate Self-Assembled Monolayers. *Advanced Materials Interfaces*, **2018**, 5, 1701292	4.6	14
60	Synthesis of Manganese Oxide Microspheres by Ultrasonic Spray Pyrolysis and Their Application as Supercapacitors. *Particle and Particle Systems Characterization*, **2015**, 32, 899-906	3.1	14
59	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	3.9	14
58	SERS study of hydrogen peroxide electroreduction on a Pb-modified Au electrode. *Journal of Raman Spectroscopy*, **2005**, 36, 715-724	2.3	13
57	Direct Observation of Interfacial Mechanical Failure in Thiophosphate Solid Electrolytes with Operando X-Ray Tomography. *Advanced Materials Interfaces*, **2020**, 7, 2000751	4.6	13
56	Raman and QCM Studies of PPG and PEG Adsorption on Cu Electrode Surfaces. *Journal of the Electrochemical Society*, **2018**, 165, D687-D695	3.9	13
55	Synthesis and characterization of molybdate-modified platinum nanoparticles. *Physical Chemistry Chemical Physics*, **2004**, 6, 1310	3.6	12

54	Structure Sensitive Adsorption of DMSO on Au Surfaces. *Journal of Physical Chemistry B*, **2000**, 104, 873-877	3.4	12
53	Reversible Li-Ion Conversion Reaction for a TiGe Alloy in a Ti/Ge Multilayer. *ACS Applied Materials & Interfaces*, **2017**, 9, 8169-8176	9.5	11
52	Covalent Ag-C Bonding Contacts from Unprotected Terminal Acetylenes for Molecular Junctions. *Nano Letters*, **2020**, 20, 5490-5495	11.5	11
51	Dimensionally Controlled Lithiation of Chromium Oxide. *Chemistry of Materials*, **2016**, 28, 47-54	9.6	11
50	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	3.4	11
49	Binder-Focused Approaches to Improve the Stability of Cathodes for CO2 Electroreduction. *ACS Applied Energy Materials*, **2021**, 4, 5175-5186	6.1	11
48	Energy Storage Mechanisms in High-Capacity Graphitic C3N4 Cathodes for Al-Ion Batteries. *Journal of Physical Chemistry C*, **2020**, 124, 10288-10297	3.8	11
47	Beyond Local Solvation Structure: Nanometric Aggregates in Battery Electrolytes and Their Effect on Electrolyte Properties. *ACS Energy Letters*, **2022**, 7, 461-470	20.1	11
46	Insight into the electrochemical reduction of CO2 on gold via surface-enhanced Raman spectroscopy and N-containing additives. *Journal of Solid State Electrochemistry*, **2016**, 20, 1149-1154	2.6	10
45	Effects of Ring Substitution on the Binding and Oxidation of Cyanophenols on Au(111) Electrodes. *The Journal of Physical Chemistry*, **1996**, 100, 7204-7211		9
44	Potential-Dependent Layering in the Electrochemical Double Layer of Water-in-Salt Electrolytes. *ACS Applied Energy Materials*, **2020**, 3, 8086-8094	6.1	9
43	Decreasing the Energy Consumption of the CO2 Electrolysis Process Using a Magnetic Field. *ACS Energy Letters*, **2021**, 6, 2427-2433	20.1	9
42	Operando Observations and First-Principles Calculations of Reduced Lithium Insertion in Au-Coated LiMn2O4. *Advanced Materials Interfaces*, **2019**, 6, 1801923	4.6	9
41	In situ surface stress measurement and computational analysis examining the oxygen reduction reaction on Pt and Pd. *Electrochimica Acta*, **2018**, 260, 400-406	6.7	9
40	Chain length variation to probe the mechanism of accelerator additives in copper electrodeposition. *Physical Chemistry Chemical Physics*, **2019**, 21, 16838-16847	3.6	8
39	Proton transfer dynamics dictate quinone speciation at lipid-modified electrodes. *Physical Chemistry Chemical Physics*, **2017**, 19, 7086-7093	3.6	7
38	Model Ge microstructures as anodes for Li-ion batteries. *Journal of Solid State Electrochemistry*, **2013**, 17, 3015-3020	2.6	7
37	Atomic force microscopic study of polymeric film growth in copper electroplating bath with benzotriazole. *Journal of Electroanalytical Chemistry*, **2007**, 601, 242-250	4.1	7

36	Observation of Electrode Poisoning during the Electro-oxidation of Aromatic Alcohols on (111)Au. *Journal of the Electrochemical Society*, **1996**, 143, 2088-2092	3.9	7
35	Oriented LiMnO Particle Fracture from Delithiation-Driven Surface Stress. *ACS Applied Materials & Interfaces*, **2020**, 12, 49182-49191	9.5	7
34	Dynamic Surface Stress Response during Reversible Mg Electrodeposition and Stripping. *Journal of the Electrochemical Society*, **2016**, 163, A2679-A2684	3.9	7
33	In Situ Strain Measurement in Solid-State Li-Ion Battery Electrodes. *Journal of the Electrochemical Society*, **2021**, 168, 010516	3.9	7
32	Origins of Less Noble Behavior by Au during CO Adsorption. *ACS Catalysis*, **2018**, 8, 2247-2252	13.1	6
31	X-ray diffraction microscopy of lithiated silicon microstructures. *Applied Physics Letters*, **2013**, 102, 131903	3.4	6
30	Structure of Momolayers of Silicotungstate Anions on Ag(111) and Au(111) Electrode Surfaces. *Materials Research Society Symposia Proceedings*, **1996**, 451, 99		6
29	Enabling High Capacity and Coulombic Efficiency for Li-NCM811 Cells Using a Highly Concentrated Electrolyte. *Batteries and Supercaps*, **2021**, 4, 294-303	5.6	6
28	Anisotropic Mg Electrodeposition and Alloying with Ag-based Anodes from Non-Coordinating Mixed-Metal Borohydride Electrolytes for Mg Hybrid Batteries. *Electrochimica Acta*, **2017**, 229, 112-120	6.7	5
27	Suppression of Copper Electrodeposition by PEG in Methanesulfonic Acid Electrolytes. *Journal of the Electrochemical Society*, **2019**, 166, D551-D558	3.9	5
26	Origin of Enhanced Cyclability in Covalently Modified LiMnNiO Cathodes. *ACS Applied Materials & Interfaces*, **2019**, 11, 39890-39901	9.5	5
25	Trimethylsilyl Azide (TMSN3) Enhanced Li□2 Battery Electrolytes. *ACS Applied Energy Materials*, **2019**, 2, 2662-2671	6.1	5
24	Interfacial Leveler-Accelerator Interactions in Cu Electrodeposition. *Journal of the Electrochemical Society*, **2021**, 168, 042501	3.9	5
23	Understanding the influence of carbon addition on the corrosion behavior and mechanical properties of Al alloy □ovetics□ *Journal of Materials Science*, **2019**, 54, 2668-2679	4.3	5
22	Cathode/Electrolyte Interface-Dependent Changes in Stress and Strain in Lithium Iron Phosphate Composite Cathodes. *Journal of the Electrochemical Society*, **2019**, 166, A2707-A2714	3.9	4
21	Electrodes: Lithium Intercalation Behavior in Multilayer Silicon Electrodes (Adv. Energy Mater. 7/2014). *Advanced Energy Materials*, **2014**, 4, n/a-n/a	21.8	4
20	Potential dependence of the structure of water at the hydrophobic liquid interface. *Journal of Electroanalytical Chemistry*, **2007**, 609, 94-98	4.1	4
19	High Energy Density CNT/NaI Composite Cathodes for Sodium-Ion Batteries. *Advanced Materials Interfaces*, **2018**, 5, 1801342	4.6	4

18	Effect of Support on Oxygen Reduction Reaction Activity of Supported Iron Porphyrins. *ACS Catalysis*,1139-1149	13.1	2
17	Conversion of Co Nanoparticles to CoS in Metal-Organic Framework-Derived Porous Carbon during Cycling Facilitates NaS Reactivity in a Na-S Battery. *ACS Applied Materials & Interfaces*, **2020**, 12, 29285-29295	9.5	1
16	The Periodic Table. *Journal of Physical Chemistry A*, **2019**, 123, 5837-5848	2.8	1
15	The JPC Periodic Table. *Journal of Physical Chemistry C*, **2019**, 123, 17063-17074	3.8	1
14	The JPC Periodic Table. *Journal of Physical Chemistry Letters*, **2019**, 10, 4051-4062	6.4	1
13	In-Situ Observation of Oxide Monolayer Formation on Copper Solid-Liquid Interfaces. *Materials Research Society Symposia Proceedings*, **1994**, 332, 121		1
12	Pressure-Dependent Electrochemical Behavior of Di-Lithium Rhodizonate Cathodes. *Chemistry of Materials*, **2021**, 33, 5738-5747	9.6	1
11	Effects of Superparamagnetic Iron Nanoparticles on Electrocatalysts for the Reduction of Oxygen. *Inorganic Chemistry*, **2021**, 60, 4236-4242	5.1	1
10	Nanoheterogeneity of LiTFSI Solutions Transitions Close to a Surface and with Concentration. *Nano Letters*, **2021**, 21, 2304-2309	11.5	1
9	The Adsorption Structure of Polyethylene Imine on Copper Surfaces for Electrodeposition. *Physica Status Solidi - Rapid Research Letters*,2100351	2.5	1
8	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	3.8	0
7	Tailoring the Lithium Solid Electrolyte Interphase for Highly Concentrated Electrolytes with Direct Exposure to Halogenated Solvents. *ACS Applied Energy Materials*, **2022**, 5, 2768-2779	6.1	0
6	Lithium-Ion Batteries: Operando Observations and First-Principles Calculations of Reduced Lithium Insertion in Au-Coated LiMn2O4 (Adv. Mater. Interfaces 4/2019). *Advanced Materials Interfaces*, **2019**, 6, 1970026	4.6	
5	Operando and multimodal studies of speciation and activity of Pt catalysts during the hydrogenation of ethylene. *Microscopy and Microanalysis*, **2017**, 23, 892-893	0.5	
4	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. 13/2011). *Advanced Functional Materials*, **2011**, 21, 2411-2411	15.6	
3	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		
2	(Industrial Electrochemistry and Electrochemical Engineering Division Student Achievement Award Address) System-Level Approaches for Intensifying the CO2 Electrolysis Process. *ECS Meeting Abstracts*, **2020**, MA2020-02, 3202-3202	0	
1	System Design Rules for Intensified CO2 Electroreduction. *ECS Meeting Abstracts*, **2021**, MA2021-01, 943-943	0	