Serhiy Cherevko

List of Publications by Citations

163 papers	9,609 citations	51 h-index	94 g-index
200 ext. papers	11,645 ext. citations	8.8 avg, IF	6.76 L-index

#	Paper	IF	Citations
163	Oxygen electrochemistry as a cornerstone for sustainable energy conversion. *Angewandte Chemie - International Edition*, **2014**, 53, 102-21	16.4	1002
162	Oxygen and hydrogen evolution reactions on Ru, RuO 2 , Ir, and IrO 2 thin film electrodes in acidic and alkaline electrolytes: A comparative study on activity and stability. *Catalysis Today*, **2016**, 262, 170-180	5.3	693
161	Molecular Insight in Structure and Activity of Highly Efficient, Low-Ir Ir-Ni Oxide Catalysts for Electrochemical Water Splitting (OER). *Journal of the American Chemical Society*, **2015**, 137, 13031-40	16.4	435
160	Dissolution of platinum: limits for the deployment of electrochemical energy conversion?. *Angewandte Chemie - International Edition*, **2012**, 51, 12613-5	16.4	303
159	Dissolution of Noble Metals during Oxygen Evolution in Acidic Media. *ChemCatChem*, **2014**, 6, 2219-2223	5.2	288
158	The stability number as a metric for electrocatalyst stability benchmarking. *Nature Catalysis*, **2018**, 1, 508-515	36.5	281
157	Towards a comprehensive understanding of platinum dissolution in acidic media. *Chemical Science*, **2014**, 5, 631-638	9.4	261
156	Gold nanowire array electrode for non-enzymatic voltammetric and amperometric glucose detection. *Sensors and Actuators B: Chemical*, **2009**, 142, 216-223	8.5	203
155	The Common Intermediates of Oxygen Evolution and Dissolution Reactions during Water Electrolysis on Iridium. *Angewandte Chemie - International Edition*, **2018**, 57, 2488-2491	16.4	201
154	Stability of nanostructured iridium oxide electrocatalysts during oxygen evolution reaction in acidic environment. *Electrochemistry Communications*, **2014**, 48, 81-85	5.1	185
153	A Comparative Study on Gold and Platinum Dissolution in Acidic and Alkaline Media. *Journal of the Electrochemical Society*, **2014**, 161, H822-H830	3.9	182
152	Durability of platinum-based fuel cell electrocatalysts: Dissolution of bulk and nanoscale platinum. *Nano Energy*, **2016**, 29, 275-298	17.1	175
151	Electrodeposition of three-dimensional porous silver foams. *Electrochemistry Communications*, **2010**, 12, 467-470	5.1	147
150	Direct electrodeposition of nanoporous gold with controlled multimodal pore size distribution. *Electrochemistry Communications*, **2011**, 13, 16-19	5.1	141
149	Oxygen evolution activity and stability of iridium in acidic media. Part 2. Electrochemically grown hydrous iridium oxide. *Journal of Electroanalytical Chemistry*, **2016**, 774, 102-110	4.1	140
148	Highly active nanostructured palladium-ceria electrocatalysts for the hydrogen oxidation reaction in alkaline medium. *Nano Energy*, **2017**, 33, 293-305	17.1	125
147	A Perspective on Low-Temperature Water Electrolysis Challenges in Alkaline and Acidic Technology. *International Journal of Electrochemical Science*, **2018**, 1173-1226	2.2	125

146	Die Elektrochemie des Sauerstoffs als Meilenstein f□eine nachhaltige Energieumwandlung. *Angewandte Chemie*, **2014**, 126, 104-124	3.6	118
145	Atomic-scale insights into surface species of electrocatalysts in three dimensions. *Nature Catalysis*, **2018**, 1, 300-305	36.5	117
144	The porous CuO electrode fabricated by hydrogen bubble evolution and its application to highly sensitive non-enzymatic glucose detection. *Talanta*, **2010**, 80, 1371-7	6.2	114
143	Dissolution of Platinum in the Operational Range of Fuel Cells. *ChemElectroChem*, **2015**, 2, 1471-1478	4.3	112
142	Oxygen evolution activity and stability of iridium in acidic media. Part 1. □Metallic iridium. *Journal of Electroanalytical Chemistry*, **2016**, 773, 69-78	4.1	108
141	Gold dissolution: towards understanding of noble metal corrosion. *RSC Advances*, **2013**, 3, 16516	3.7	101
140	Activity and Stability of Electrochemically and Thermally Treated Iridium for the Oxygen Evolution Reaction. *Journal of the Electrochemical Society*, **2016**, 163, F3132-F3138	3.9	98
139	Rational design of the electrode morphology for oxygen evolution □enhancing the performance for catalytic water oxidation. *RSC Advances*, **2014**, 4, 9579	3.7	92
138	Impact of key deposition parameters on the morphology of silver foams prepared by dynamic hydrogen template deposition. *Electrochimica Acta*, **2010**, 55, 6383-6390	6.7	87
137	Nickel-molybdenum alloy catalysts for the hydrogen evolution reaction: Activity and stability revised. *Electrochimica Acta*, **2018**, 259, 1154-1161	6.7	85
136	On the Need of Improved Accelerated Degradation Protocols (ADPs): Examination of Platinum Dissolution and Carbon Corrosion in Half-Cell Tests. *Journal of the Electrochemical Society*, **2016**, 163, F1510-F1514	3.9	82
135	Stability and Activity of Non-Noble-Metal-Based Catalysts Toward the Hydrogen Evolution Reaction. *Angewandte Chemie - International Edition*, **2017**, 56, 9767-9771	16.4	81
134	Stability limits of tin-based electrocatalyst supports. *Scientific Reports*, **2017**, 7, 4595	4.9	81
133	Degradation of iridium oxides via oxygen evolution from the lattice: correlating atomic scale structure with reaction mechanisms. *Energy and Environmental Science*, **2019**, 12, 3548-3555	35.4	81
132	Electroplating of metal nanotubes and nanowires in a high aspect-ratio nanotemplate. *Electrochemistry Communications*, **2008**, 10, 514-518	5.1	76
131	Electrocatalytic synthesis of hydrogen peroxide on Au-Pd nanoparticles: From fundamentals to continuous production. *Chemical Physics Letters*, **2017**, 683, 436-442	2.5	73
130	Electrochemical dissolution of gold in acidic medium. *Electrochemistry Communications*, **2013**, 28, 44-46	5.1	70
129	Catalyst Stability Benchmarking for the Oxygen Evolution Reaction: The Importance of Backing Electrode Material and Dissolution in Accelerated Aging Studies. *ChemSusChem*, **2017**, 10, 4140-4143	8.3	69

128	Coupling of a scanning flow cell with online electrochemical mass spectrometry for screening of reaction selectivity. *Review of Scientific Instruments*, **2014**, 85, 104101	1.7	68
127	Electrifying model catalysts for understanding electrocatalytic reactions in liquid electrolytes. *Nature Materials*, **2018**, 17, 592-598	27	67
126	Ultrahigh-energy and stable supercapacitors based on intertwined porous MoO3MWCNT nanocomposites. *Electrochimica Acta*, **2011**, 58, 76-80	6.7	67
125	Temperature-Dependent Dissolution of Polycrystalline Platinum in Sulfuric Acid Electrolyte. *Electrocatalysis*, **2014**, 5, 235-240	2.7	64
124	Stability Limits of Ni-Based Hydrogen Oxidation Electrocatalysts for Anion Exchange Membrane Fuel Cells. *ACS Catalysis*, **2019**, 9, 6837-6845	13.1	59
123	Nanoporous palladium with sub-10 nm dendrites by electrodeposition for ethanol and ethylene glycol oxidation. *Nanoscale*, **2012**, 4, 103-5	7.7	59
122	GoldPalladium Bimetallic Catalyst Stability: Consequences for Hydrogen Peroxide Selectivity. *ACS Catalysis*, **2017**, 7, 5699-5705	13.1	58
121	Nanoporous Pt@Au(x)Cu(100-x) by hydrogen evolution assisted electrodeposition of Au(x)Cu(100-x) and galvanic replacement of Cu with Pt: electrocatalytic properties. *Langmuir*, **2012**, 28, 3306-15	4	58
120	Hydrogen sensing performance of electrodeposited conoidal palladium nanowire and nanotube arrays. *Sensors and Actuators B: Chemical*, **2009**, 136, 388-391	8.5	58
119	Hydrogen template assisted electrodeposition of sub-micrometer wires composing honeycomb-like porous Pb films. *Applied Surface Science*, **2011**, 257, 8054-8061	6.7	57
118	Electrochemical On-line ICP-MS in Electrocatalysis Research. *Chemical Record*, **2019**, 19, 2130-2142	6.6	54
117	The Electrochemical Dissolution of Noble Metals in Alkaline Media. *Electrocatalysis*, **2018**, 9, 153-161	2.7	54
116	On the Origin of the Improved Ruthenium Stability in RuO2IrO2Mixed Oxides. *Journal of the Electrochemical Society*, **2016**, 163, F3099-F3104	3.9	53
115	Tuning the Electrocatalytic Performance of Ionic Liquid Modified Pt Catalysts for the Oxygen Reduction Reaction via Cationic Chain Engineering. *ACS Catalysis*, **2018**, 8, 8244-8254	13.1	53
114	Facile preparation of three-dimensional porous hydrous ruthenium oxide electrode for supercapacitors. *Journal of Power Sources*, **2013**, 244, 806-811	8.9	53
113	The Stability Challenge on the Pathway to Low and Ultra-Low Platinum Loading for Oxygen Reduction in Fuel Cells. *ChemElectroChem*, **2016**, 3, 51-54	4.3	53
112	Towards maximized utilization of iridium for the acidic oxygen evolution reaction. *Nano Research*, **2019**, 12, 2275-2280	10	51
111	Dissolution of Platinum in Presence of Chloride Traces. *Electrochimica Acta*, **2015**, 179, 24-31	6.7	50

110	Mechanisms of Manganese Oxide Electrocatalysts Degradation during Oxygen Reduction and Oxygen Evolution Reactions. *Journal of Physical Chemistry C*, **2019**, 123, 25267-25277	3.8	47
109	Effect of Pyrolysis Atmosphere and Electrolyte pH on the Oxygen Reduction Activity, Stability and Spectroscopic Signature of FeNx Moieties in Fe-N-C Catalysts. *Journal of the Electrochemical Society* , **2019**, 166, F3311-F3320	3.9	47
108	Stability and dissolution of electrocatalysts: Building the bridge between model and "real world" systems. *Current Opinion in Electrochemistry*, **2018**, 8, 118-125	7.2	47
107	Unravelling Degradation Pathways of Oxide-Supported Pt Fuel Cell Nanocatalysts under In Situ Operating Conditions. *Advanced Energy Materials*, **2018**, 8, 1701663	21.8	46
106	The impact of dissolved reactive gases on platinum dissolution in acidic media. *Electrochemistry Communications*, **2014**, 40, 49-53	5.1	46
105	Platinum recycling going green via induced surface potential alteration enabling fast and efficient dissolution. *Nature Communications*, **2016**, 7, 13164	17.4	45
104	Selectivity Trends Between Oxygen Evolution and Chlorine Evolution on Iridium-Based Double Perovskites in Acidic Media. *ACS Catalysis*, **2019**, 9, 8561-8574	13.1	44
103	IrO2 coated TiO2 core-shell microparticles advance performance of low loading proton exchange membrane water electrolyzers. *Applied Catalysis B: Environmental*, **2020**, 269, 118762	21.8	41
102	Pt and Pd decorated Au nanowires: Extremely high activity of ethanol oxidation in alkaline media. *Electrochimica Acta*, **2011**, 56, 5771-5775	6.7	38
101	Die Auflösung von Platin – Grenzen für den Einsatz zur elektrochemischen Energieumwandlung?. *Angewandte Chemie*, **2012**, 124, 12782-12785	3.6	37
100	Atomistic Insights into the Stability of Pt Single-Atom Electrocatalysts. *Journal of the American Chemical Society*, **2020**, 142, 15496-15504	16.4	37
99	Insight into the Mechanisms of High Activity and Stability of Iridium Supported on Antimony-Doped Tin Oxide Aerogel for Anodes of Proton Exchange Membrane Water Electrolyzers. *ACS Catalysis*, **2020**, 10, 2508-2516	13.1	36
98	Effect of Ionic Liquid Modification on the ORR Performance and Degradation Mechanism of Trimetallic PtNiMo/C Catalysts. *ACS Catalysis*, **2019**, 9, 8682-8692	13.1	35
97	Screening of material libraries for electrochemical CO2 reduction catalysts – Improving selectivity of Cu by mixing with Co. *Journal of Catalysis*, **2016**, 343, 248-256	7.3	35
96	Spot the difference at the nanoscale: identical location electron microscopy in electrocatalysis. *Current Opinion in Electrochemistry*, **2019**, 15, 73-82	7.2	34
95	Particle Size Effect on Platinum Dissolution: Considerations for Accelerated Stability Testing of Fuel Cell Catalysts. *ACS Catalysis*, **2020**, 10, 6281-6290	13.1	34
94	Pulse-reverse electrodeposition for mesoporous metal films: combination of hydrogen evolution assisted deposition and electrochemical dealloying. *Nanoscale*, **2012**, 4, 568-75	7.7	34
93	Evaluating Electrocatalysts at Relevant Currents in a Half-Cell: The Impact of Pt Loading on Oxygen Reduction Reaction. *Journal of the Electrochemical Society*, **2019**, 166, F1259-F1268	3.9	34

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91	Electrochemical dissolution of noble metals native oxides. *Journal of Electroanalytical Chemistry*, **2017**, 787, 11-13	4.1	32
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89	Impact of Palladium Loading and Interparticle Distance on the Selectivity for the Oxygen Reduction Reaction toward Hydrogen Peroxide. *Journal of Physical Chemistry C*, **2018**, 122, 15878-15885	3.8	32
88	Structure dependency of the atomic-scale mechanisms of platinum electro-oxidation and dissolution. *Nature Catalysis*, **2020**, 3, 754-761	36.5	30
87	The Effect of the Voltage Scan Rate on the Determination of the Oxygen Reduction Activity of Pt/C Fuel Cell Catalyst. *Electrocatalysis*, **2015**, 6, 237-241	2.7	29
86	Copper electroless plating in weakly alkaline electrolytes using DMAB as a reducing agent for metallization on polymer films. *Electrochimica Acta*, **2012**, 59, 179-185	6.7	28
85	Experimental Methodologies to Understand Degradation of Nanostructured Electrocatalysts for PEM Fuel Cells: Advances and Opportunities. *ChemElectroChem*, **2016**, 3, 1524-1536	4.3	28
84	High temperature stability study of carbon supported high surface area catalysts—Expanding the boundaries of ex-situ diagnostics. *Electrochimica Acta*, **2016**, 211, 744-753	6.7	28
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82	Particle Size Effect on Platinum Dissolution: Practical Considerations for Fuel Cells. *ACS Applied Materials & Interfaces*, **2020**, 12, 25718-25727	9.5	26
81	Atomically Defined Co3O4(111) Thin Films Prepared in Ultrahigh Vacuum: Stability under Electrochemical Conditions. *Journal of Physical Chemistry C*, **2018**, 122, 7236-7248	3.8	26
80	Porous Pd films as effective ethanol oxidation electrocatalysts in alkaline medium. *Materials Chemistry and Physics*, **2011**, 126, 36-40	4.4	26
79	Addressing stability challenges of using bimetallic electrocatalysts: the case of gold–palladium nanoalloys. *Catalysis Science and Technology*, **2017**, 7, 1848-1856	5.5	25
78	Pt Sub-Monolayer on Au: System Stability and Insights into Platinum Electrochemical Dissolution. *Journal of the Electrochemical Society*, **2016**, 163, H228-H233	3.9	25
77	Effect of Temperature on Gold Dissolution in Acidic Media. *Journal of the Electrochemical Society*, **2014**, 161, H501-H507	3.9	25
76	The influence of halides on the initial selective dissolution of Cu3Au (1 1 1). *Electrochimica Acta*, **2012**, 85, 384-392	6.7	25
75	On the limitations in assessing stability of oxygen evolution catalysts using aqueous model electrochemical cells. *Nature Communications*, **2021**, 12, 2231	17.4	25

74	Die gemeinsamen Zwischenprodukte von Sauerstoffentwicklung und Auflösung während der Wasserelektrolyse an Iridium. *Angewandte Chemie*, **2018**, 130, 2514-2517	3.6	25
73	Palladium electrodissolution from model surfaces and nanoparticles. *Electrochimica Acta*, **2017**, 229, 467-477	6.7	24
72	Dissolution of BiVO4 Photoanodes Revealed by Time-Resolved Measurements under Photoelectrochemical Conditions. *Journal of Physical Chemistry C*, **2019**, 123, 23410-23418	3.8	24
71	Dissolution Stability: The Major Challenge in the Regenerative Fuel Cells Bifunctional Catalysis. *Journal of the Electrochemical Society*, **2018**, 165, F1376-F1384	3.9	24
70	Time-resolved analysis of dissolution phenomena in photoelectrochemistry – A case study of WO3 photocorrosion. *Electrochemistry Communications*, **2018**, 96, 53-56	5.1	24
69	Oxygen Evolution Reaction on Tin Oxides Supported Iridium Catalysts: Do We Need Dopants?. *ChemElectroChem*, **2020**, 7, 2330-2339	4.3	23
68	High Performance FeNC and Mn-oxide/FeNC Layers for AEMFC Cathodes. *Journal of the Electrochemical Society*, **2020**, 167, 134505	3.9	23
67	Electrochemical copper dissolution: A benchmark for stable CO2 reduction on copper electrocatalysts. *Electrochemistry Communications*, **2020**, 115, 106739	5.1	22
66	Electrochemical dissolution of gold in presence of chloride and bromide traces studied by on-line electrochemical inductively coupled plasma mass spectrometry. *Electrochimica Acta*, **2016**, 222, 1056-1063	6.7	22
65	Improved Hydrogen Oxidation Reaction Activity and Stability of Buried Metal-Oxide Electrocatalyst Interfaces. *Chemistry of Materials*, **2020**, 32, 7716-7724	9.6	22
64	Formation of nanoporous nickel oxides for supercapacitors prepared by electrodeposition with hydrogen evolution reaction and electrochemical dealloying. *Korean Journal of Chemical Engineering*, **2012**, 29, 1802-1805	2.8	20
63	Platinum Dissolution in Realistic Fuel Cell Catalyst Layers. *Angewandte Chemie - International Edition*, **2021**, 60, 8882-8888	16.4	20
62	Increased Ir–Ir Interaction in Iridium Oxide during the Oxygen Evolution Reaction at High Potentials Probed by Operando Spectroscopy. *ACS Catalysis*, **2021**, 11, 10043-10057	13.1	20
61	The degradation of Pt/IrOx oxygen bifunctional catalysts. *Electrochimica Acta*, **2019**, 308, 400-409	6.7	19
60	Electrodeposition mechanism of palladium nanotube and nanowire arrays. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 3154-9	1.3	19
59	Numerical Simulation of an Electrochemical Flow Cell with V-Shape Channel Geometry. *Journal of the Electrochemical Society*, **2015**, 162, H860-H866	3.9	18
58	Dissolution of Platinum Single Crystals in Acidic Medium. *ChemPhysChem*, **2019**, 20, 2997-3003	3.2	18
57	The Dissolution Dilemma for Low Pt Loading Polymer Electrolyte Membrane Fuel Cell Catalysts. *Journal of the Electrochemical Society*, **2020**, 167, 164501	3.9	18

56	Different Photostability of BiVO in Near-pH-Neutral Electrolytes. *ACS Applied Energy Materials*, **2020**, 3, 9523-9527	6.1	18
55	Fabrication of a Robust PEM Water Electrolyzer Based on Non-Noble Metal Cathode Catalyst: [Mo S] Clusters Anchored to N-Doped Carbon Nanotubes. *Small*, **2020**, 16, e2003161	11	18
54	Hierarchical nanoporous films obtained by surface cracking on Cu-Au and ethanethiol on Au(001). *Electrochimica Acta*, **2014**, 140, 352-358	6.7	16
53	Influence of Fuels and pH on the Dissolution Stability of Bifunctional PtRu/C Alloy Electrocatalysts. *ACS Catalysis*, **2020**, 10, 10858-10870	13.1	16
52	Phase- and Surface Composition-Dependent Electrochemical Stability of Ir-Ru Nanoparticles during Oxygen Evolution Reaction. *ACS Catalysis*, **2021**, 11, 9300-9316	13.1	16
51	Fuel cell catalyst layer evaluation using a gas diffusion electrode half-cell: Oxygen reduction reaction on Fe-N-C in alkaline media. *Electrochemistry Communications*, **2020**, 116, 106761	5.1	15
50	Evolution of the PtNi Bimetallic Alloy Fuel Cell Catalyst under Simulated Operational Conditions. *ACS Applied Materials & Interfaces*, **2020**, 12, 17602-17610	9.5	15
49	Electrochemical stability of hexagonal tungsten carbide in the potential window of fuel cells and water electrolyzers investigated in a half-cell configuration. *Electrochimica Acta*, **2018**, 270, 70-76	6.7	15
48	□MoO3 nanowire-based amperometric biosensor for l-lactate detection. *Journal of Solid State Electrochemistry*, **2012**, 16, 2197-2201	2.6	15
47	Effect of thiol self-assembled monolayers and plasma polymer films on dealloying of Cu□Au alloys. *RSC Advances*, **2013**, 3, 6586	3.7	15
46	Using Instability of a Non-stoichiometric Mixed Oxide Oxygen Evolution Catalyst As a Tool to Improve Its Electrocatalytic Performance. *Electrocatalysis*, **2018**, 9, 139-145	2.7	14
45	Essentials of High Performance Water Electrolyzers □From Catalyst Layer Materials to Electrode Engineering. *Advanced Energy Materials*, **2021**, 11, 2101998	21.8	14
44	Visualizing Potential-Induced Pitting Corrosion of Ultrathin Single-Crystalline IrO2(110) Films on RuO2(110)/Ru(0001) under Electrochemical Water Splitting Conditions. *ChemCatChem*, **2020**, 12, 855-866	5.2	14
43	Stability and Activity of Non-Noble-Metal-Based Catalysts Toward the Hydrogen Evolution Reaction. *Angewandte Chemie*, **2017**, 129, 9899-9903	3.6	13
42	Limitations of aqueous model systems in the stability assessment of electrocatalysts for oxygen reactions in fuel cell and electrolyzers. *Current Opinion in Electrochemistry*, **2021**, 29, 100832	7.2	13
41	Single-Atom Catalysts: A Perspective toward Application in Electrochemical Energy Conversion. *Jacs Au*, **2021**, 1, 1086-1100		12
40	Cobalt Oxide-Supported Pt Electrocatalysts: Intimate Correlation between Particle Size, Electronic Metal-Support Interaction and Stability. *Journal of Physical Chemistry Letters*, **2020**, 11, 8365-8371	6.4	11
39	Electrochemical Oxidation of Isopropanol on Platinum-Ruthenium Nanoparticles Studied with Real-Time Product and Dissolution Analytics. *ACS Applied Materials & Interfaces*, **2020**, 12, 33670-33678	9.5	10

38	Structural Dynamics of Ultrathin Cobalt Oxide Nanoislands under Potential Control. *Advanced Functional Materials*, **2021**, 31, 2009923	15.6	10
37	Benchmarking Fuel Cell Electrocatalysts Using Gas Diffusion Electrodes: Inter-lab Comparison and Best Practices. *ACS Energy Letters*, **2022**, 7, 816-826	20.1	9
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35	Photocorrosion of WO3 Photoanodes in Different Electrolytes. *ACS Physical Chemistry Au*,		9
34	Periodicity in the Electrochemical Dissolution of Transition Metals. *Angewandte Chemie - International Edition*, **2021**, 60, 13343-13349	16.4	9
33	On the Time Resolution of Electrochemical Scanning Flow Cell Coupled to Downstream Analysis. *Journal of the Electrochemical Society*, **2019**, 166, H866-H870	3.9	9
32	Compositionally tuned magnetron co-sputtered PtxNi100-x alloy as a cathode catalyst for proton exchange membrane fuel cells. *Applied Surface Science*, **2020**, 511, 145486	6.7	8
31	Local Chemical Environment Governs Anode Processes in CO Electrolyzers. *ACS Energy Letters*, **2021**, 6, 3801-3808	20.1	8
30	On the effect of anion exchange ionomer binders in bipolar electrode membrane interface water electrolysis. *Journal of Materials Chemistry A*, **2021**, 9, 14285-14295	13	8
29	Sustainable generation of hydrogen using chemicals with regional oversupply Feasibility of the electrolysis in acido-alkaline reactor. *International Journal of Hydrogen Energy*, **2014**, 39, 16275-16281	6.7	7
28	Size and Composition Dependence of Oxygen Reduction Reaction Catalytic Activities of Mo-Doped PtNi/C Octahedral Nanocrystals. *ACS Catalysis*, **2021**, 11, 11407-11415	13.1	7
27	Toward the Continuous Production of Multigram Quantities of Highly Uniform Supported Metallic Nanoparticles and Their Application for Synthesis of Superior Intermetallic Pt-Alloy ORR Electrocatalysts.. *ACS Applied Energy Materials*, **2021**, 4, 13819-13829	6.1	6
26	On-Line Inductively Coupled Plasma Spectrometry in Electrochemistry: Basic Principles and Applications **2018**, 326-335		6
25	CrO-Mediated Performance Enhancement of Ni/NiO-Mg:SrTiO in Photocatalytic Water Splitting. *ACS Catalysis*, **2021**, 11, 11049-11058	13.1	6
24	Sacrificial Cu Layer Mediated the Formation of an Active and Stable Supported Iridium Oxygen Evolution Reaction Electrocatalyst. *ACS Catalysis*, **2021**, 11, 12510-12519	13.1	6
23	Operando Stability Studies of Ultrathin Single-Crystalline IrO2(110) Films under Acidic Oxygen Evolution Reaction Conditions. *ACS Catalysis*,12651-12660	13.1	6
22	Electrochemical Dissolution of Noble Metals **2018**, 68-75		5
21	Platinum Dissolution in Realistic Fuel Cell Catalyst Layers. *Angewandte Chemie*, **2021**, 133, 8964-8970	3.6	4

20	Interplay Among Dealloying, Ostwald Ripening, and Coalescence in PtXNi100X Bimetallic Alloys under Fuel-Cell-Related Conditions. *ACS Catalysis*, **2021**, 11, 11360-11370	13.1	4
19	MAXNET Energy Focusing Research in Chemical Energy Conversion on the Electrocatlytic Oxygen Evolution. *Green*, **2015**, 5,		3
18	Characterization of FePt film electrodeposited with a ferric electrolyte. *Korean Journal of Chemical Engineering*, **2009**, 26, 1766-1769	2.8	3
17	Electrochemical- and mechanical stability of catalyst layers in anion exchange membrane water electrolysis. *International Journal of Hydrogen Energy*, **2022**, 47, 4304-4314	6.7	3
16	Electrolyte Effects on the Stabilization of Prussian Blue Analogue Electrodes in Aqueous Sodium-Ion Batteries.. *ACS Applied Materials & Interfaces*, **2022**, 14, 3515-3525	9.5	3
15	Tuning the Anodic and Cathodic Dissolution of Gold by Varying the Surface Roughness. *ChemElectroChem*, **2021**, 8, 1524-1530	4.3	3
14	Electrocatalytic oxidation of 2-propanol on PtxIr100-x bifunctional electrocatalysts A thin-film materials library study. *Journal of Catalysis*, **2021**, 396, 387-394	7.3	3
13	Accessing In Situ Photocorrosion under Realistic Light Conditions: Photoelectrochemical Scanning Flow Cell Coupled to Online ICP-MS. *ACS Measurement Science Au*,		3
12	Model electrocatalysts for the oxidation of rechargeable electrofuels - carbon supported Pt nanoparticles prepared in UHV. *Electrochimica Acta*, **2021**, 389, 138716	6.7	3
11	Dissolution of Platinum in the Operational Range of Fuel Cells. *ChemElectroChem*, **2015**, 2, 1407-1407	4.3	2
10	Performance of Quaternized Polybenzimidazole-Cross-Linked Poly(vinylbenzyl chloride) Membranes in HT-PEMFCs. *ACS Applied Materials & Interfaces*, **2021**, 13, 56584-56596	9.5	2
9	Reduction of Oxide Layers on Au(111): The Interplay between Reduction Rate, Dissolution, and Restructuring. *Journal of Physical Chemistry C*, **2021**, 125, 22698-22704	3.8	1
8	Anisotropy of Pt nanoparticles on carbon- and oxide-support and their structural response to electrochemical oxidation probed by techniques. *Physical Chemistry Chemical Physics*, **2020**, 22, 22260-22270	3.6	1
7	Periodicity in the Electrochemical Dissolution of Transition Metals. *Angewandte Chemie*, **2021**, 133, 13455-13461	3.6	1
6	Photocorrosion of n- and p-Type Semiconducting Oxide Covered Metals: Case Studies of Anodized Titanium and Copper. *Physica Status Solidi (A) Applications and Materials Science*,	1.6	1
5	In-Operando Insights on the Hydrogen Evolution Reaction Activity and Stability of Non-Noble Metal Electrocatalysts for Water Electrolysis. *ECS Meeting Abstracts*, **2020**, MA2020-01, 1530-1530	0	
4	The Stability of Sulfur Stabilized Pt Single Atom Electroatalyst. *ECS Meeting Abstracts*, **2020**, MA2020-01, 2660-2660	0	
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2 Characterization of FePt film electrodeposited with a ferric electrolyte **2011**, 26, 1766

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