

Serhiy Cherevko

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/5835858/serhiy-cherevko-publications-by-year.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Benchmarking Fuel Cell Electrocatalysts Using Gas Diffusion Electrodes: Inter-lab Comparison and Best Practices. <i>ACS Energy Letters</i> , 2022 , 7, 816-826	20.1	9
162	Electrochemical- and mechanical stability of catalyst layers in anion exchange membrane water electrolysis. <i>International Journal of Hydrogen Energy</i> , 2022 , 47, 4304-4314	6.7	3
161	Electrolyte Effects on the Stabilization of Prussian Blue Analogue Electrodes in Aqueous Sodium-Ion Batteries.. <i>ACS Applied Materials & Interfaces</i> , 2022 , 14, 3515-3525	9.5	3
160	Interrelations of Oxygen Evolution and Iridium Dissolution Mechanisms.. <i>Angewandte Chemie - International Edition</i> , 2021 ,	16.4	9
159	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.. <i>ACS Applied Energy Materials</i> , 2021 , 4, 13819-13829	6.1	6
158	Performance of Quaternized Polybenzimidazole-Cross-Linked Poly(vinylbenzyl chloride) Membranes in HT-PEMFCs. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 56584-56596	9.5	2
157	Essentials of High Performance Water Electrolyzers [From Catalyst Layer Materials to Electrode Engineering. <i>Advanced Energy Materials</i> , 2021 , 11, 2101998	21.8	14
156	Local Chemical Environment Governs Anode Processes in CO Electrolyzers. <i>ACS Energy Letters</i> , 2021 , 6, 3801-3808	20.1	8
155	Reduction of Oxide Layers on Au(111): The Interplay between Reduction Rate, Dissolution, and Restructuring. <i>Journal of Physical Chemistry C</i> , 2021 , 125, 22698-22704	3.8	1
154	Platinum Dissolution in Realistic Fuel Cell Catalyst Layers. <i>Angewandte Chemie</i> , 2021 , 133, 8964-8970	3.6	4
153	Platinum Dissolution in Realistic Fuel Cell Catalyst Layers. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 8882-8888	16.4	20
152	On the limitations in assessing stability of oxygen evolution catalysts using aqueous model electrochemical cells. <i>Nature Communications</i> , 2021 , 12, 2231	17.4	25
151	Tuning the Anodic and Cathodic Dissolution of Gold by Varying the Surface Roughness. <i>ChemElectroChem</i> , 2021 , 8, 1524-1530	4.3	3
150	Electrocatalytic oxidation of 2-propanol on Pt _x Ir _{100-x} bifunctional electrocatalysts [A thin-film materials library study. <i>Journal of Catalysis</i> , 2021 , 396, 387-394	7.3	3
149	Periodicity in the Electrochemical Dissolution of Transition Metals. <i>Angewandte Chemie - International Edition</i> , 2021 , 60, 13343-13349	16.4	9
148	Periodicity in the Electrochemical Dissolution of Transition Metals. <i>Angewandte Chemie</i> , 2021 , 133, 13455-13461	3.6	14
147	Gas Diffusion Electrode Half Cells [A Powerful Tool for Fuel Cell Electrocatalyst Evaluation in Relevant Conditions. <i>ECS Meeting Abstracts</i> , 2021 , MA2021-01, 1868-1868	0	0

146	Single-Atom Catalysts: A Perspective toward Application in Electrochemical Energy Conversion. <i>Jacs Au</i> , 2021 , 1, 1086-1100		12
145	Increased Ir ^{IV} Interaction in Iridium Oxide during the Oxygen Evolution Reaction at High Potentials Probed by Operando Spectroscopy. <i>ACS Catalysis</i> , 2021 , 11, 10043-10057	13.1	20
144	On the effect of anion exchange ionomer binders in bipolar electrode membrane interface water electrolysis. <i>Journal of Materials Chemistry A</i> , 2021 , 9, 14285-14295	13	8
143	Phase- and Surface Composition-Dependent Electrochemical Stability of Ir-Ru Nanoparticles during Oxygen Evolution Reaction. <i>ACS Catalysis</i> , 2021 , 11, 9300-9316	13.1	16
142	Size and Composition Dependence of Oxygen Reduction Reaction Catalytic Activities of Mo-Doped PtNi/C Octahedral Nanocrystals. <i>ACS Catalysis</i> , 2021 , 11, 11407-11415	13.1	7
141	Interplay Among Dealloying, Ostwald Ripening, and Coalescence in PtXNi _{100-X} Bimetallic Alloys under Fuel-Cell-Related Conditions. <i>ACS Catalysis</i> , 2021 , 11, 11360-11370	13.1	4
140	CrO-Mediated Performance Enhancement of Ni/NiO-Mg:SrTiO in Photocatalytic Water Splitting. <i>ACS Catalysis</i> , 2021 , 11, 11049-11058	13.1	6
139	Sacrificial Cu Layer Mediated the Formation of an Active and Stable Supported Iridium Oxygen Evolution Reaction Electrocatalyst. <i>ACS Catalysis</i> , 2021 , 11, 12510-12519	13.1	6
138	Model electrocatalysts for the oxidation of rechargeable electrofuels - carbon supported Pt nanoparticles prepared in UHV. <i>Electrochimica Acta</i> , 2021 , 389, 138716	6.7	3
137	Limitations of aqueous model systems in the stability assessment of electrocatalysts for oxygen reactions in fuel cell and electrolyzers. <i>Current Opinion in Electrochemistry</i> , 2021 , 29, 100832	7.2	13
136	Structural Dynamics of Ultrathin Cobalt Oxide Nanoislands under Potential Control. <i>Advanced Functional Materials</i> , 2021 , 31, 2009923	15.6	10
135	Particle Size Effect on Platinum Dissolution: Considerations for Accelerated Stability Testing of Fuel Cell Catalysts. <i>ACS Catalysis</i> , 2020 , 10, 6281-6290	13.1	34
134	Fuel cell catalyst layer evaluation using a gas diffusion electrode half-cell: Oxygen reduction reaction on Fe-N-C in alkaline media. <i>Electrochemistry Communications</i> , 2020 , 116, 106761	5.1	15
133	Particle Size Effect on Platinum Dissolution: Practical Considerations for Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 25718-25727	9.5	26
132	Evolution of the PtNi Bimetallic Alloy Fuel Cell Catalyst under Simulated Operational Conditions. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 17602-17610	9.5	15
131	Electrochemical Oxidation of Isopropanol on Platinum-Ruthenium Nanoparticles Studied with Real-Time Product and Dissolution Analytics. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 33670-33678	9.5	10
130	IrO ₂ coated TiO ₂ core-shell microparticles advance performance of low loading proton exchange membrane water electrolyzers. <i>Applied Catalysis B: Environmental</i> , 2020 , 269, 118762	21.8	41
129	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. <i>ACS Catalysis</i> , 2020 , 10, 2508-2516	13.1	36

128	Compositionally tuned magnetron co-sputtered Pt _x Ni _{100-x} alloy as a cathode catalyst for proton exchange membrane fuel cells. <i>Applied Surface Science</i> , 2020 , 511, 145486	6.7	8
127	Electrochemical copper dissolution: A benchmark for stable CO ₂ reduction on copper electrocatalysts. <i>Electrochemistry Communications</i> , 2020 , 115, 106739	5.1	22
126	Oxygen Evolution Reaction on Tin Oxides Supported Iridium Catalysts: Do We Need Dopants?. <i>ChemElectroChem</i> , 2020 , 7, 2330-2339	4.3	23
125	High Performance FeNC and Mn-oxide/FeNC Layers for AEMFC Cathodes. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 134505	3.9	23
124	The Dissolution Dilemma for Low Pt Loading Polymer Electrolyte Membrane Fuel Cell Catalysts. <i>Journal of the Electrochemical Society</i> , 2020 , 167, 164501	3.9	18
123	In-Operando Insights on the Hydrogen Evolution Reaction Activity and Stability of Non-Noble Metal Electrocatalysts for Water Electrolysis. <i>ECS Meeting Abstracts</i> , 2020 , MA2020-01, 1530-1530	0	
122	The Stability of Sulfur Stabilized Pt Single Atom Electroatalyst. <i>ECS Meeting Abstracts</i> , 2020 , MA2020-01, 2660-2660	0	
121	(Invited) In Depth Analysis of the Promotion of Ni on Mg:SrTiO ₃ By CrO _x . <i>ECS Meeting Abstracts</i> , 2020 , MA2020-01, 1705-1705	0	
120	Visualizing Potential-Induced Pitting Corrosion of Ultrathin Single-Crystalline IrO ₂ (110) Films on RuO ₂ (110)/Ru(0001) under Electrochemical Water Splitting Conditions. <i>ChemCatChem</i> , 2020 , 12, 855-866	5.2	14
119	Different Photostability of BiVO in Near-pH-Neutral Electrolytes. <i>ACS Applied Energy Materials</i> , 2020 , 3, 9523-9527	6.1	18
118	Atomistic Insights into the Stability of Pt Single-Atom Electrocatalysts. <i>Journal of the American Chemical Society</i> , 2020 , 142, 15496-15504	16.4	37
117	Structure dependency of the atomic-scale mechanisms of platinum electro-oxidation and dissolution. <i>Nature Catalysis</i> , 2020 , 3, 754-761	36.5	30
116	Fabrication of a Robust PEM Water Electrolyzer Based on Non-Noble Metal Cathode Catalyst: [Mo S] Clusters Anchored to N-Doped Carbon Nanotubes. <i>Small</i> , 2020 , 16, e2003161	11	18
115	Influence of Fuels and pH on the Dissolution Stability of Bifunctional PtRu/C Alloy Electrocatalysts. <i>ACS Catalysis</i> , 2020 , 10, 10858-10870	13.1	16
114	Cobalt Oxide-Supported Pt Electrocatalysts: Intimate Correlation between Particle Size, Electronic Metal-Support Interaction and Stability. <i>Journal of Physical Chemistry Letters</i> , 2020 , 11, 8365-8371	6.4	11
113	Anisotropy of Pt nanoparticles on carbon- and oxide-support and their structural response to electrochemical oxidation probed by techniques. <i>Physical Chemistry Chemical Physics</i> , 2020 , 22, 22260-22270	3.6	1
112	Improved Hydrogen Oxidation Reaction Activity and Stability of Buried Metal-Oxide Electrocatalyst Interfaces. <i>Chemistry of Materials</i> , 2020 , 32, 7716-7724	9.6	22
111	Dissolution of BiVO ₄ Photoanodes Revealed by Time-Resolved Measurements under Photoelectrochemical Conditions. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 23410-23418	3.8	24

110	Mechanisms of Manganese Oxide Electrocatalysts Degradation during Oxygen Reduction and Oxygen Evolution Reactions. <i>Journal of Physical Chemistry C</i> , 2019 , 123, 25267-25277	3.8	47
109	Stability Limits of Ni-Based Hydrogen Oxidation Electrocatalysts for Anion Exchange Membrane Fuel Cells. <i>ACS Catalysis</i> , 2019 , 9, 6837-6845	13.1	59
108	Effect of Pyrolysis Atmosphere and Electrolyte pH on the Oxygen Reduction Activity, Stability and Spectroscopic Signature of Fe _{Nx} Moieties in Fe-N-C Catalysts. <i>Journal of the Electrochemical Society</i> , 2019 , 166, F3311-F3320	3.9	47
107	Spot the difference at the nanoscale: identical location electron microscopy in electrocatalysis. <i>Current Opinion in Electrochemistry</i> , 2019 , 15, 73-82	7.2	34
106	The degradation of Pt/IrO _x oxygen bifunctional catalysts. <i>Electrochimica Acta</i> , 2019 , 308, 400-409	6.7	19
105	Towards maximized utilization of iridium for the acidic oxygen evolution reaction. <i>Nano Research</i> , 2019 , 12, 2275-2280	10	51
104	Effect of Ionic Liquid Modification on the ORR Performance and Degradation Mechanism of Trimetallic PtNiMo/C Catalysts. <i>ACS Catalysis</i> , 2019 , 9, 8682-8692	13.1	35
103	Selectivity Trends Between Oxygen Evolution and Chlorine Evolution on Iridium-Based Double Perovskites in Acidic Media. <i>ACS Catalysis</i> , 2019 , 9, 8561-8574	13.1	44
102	Dissolution of Platinum Single Crystals in Acidic Medium. <i>ChemPhysChem</i> , 2019 , 20, 2997-3003	3.2	18
101	Evaluating Electrocatalysts at Relevant Currents in a Half-Cell: The Impact of Pt Loading on Oxygen Reduction Reaction. <i>Journal of the Electrochemical Society</i> , 2019 , 166, F1259-F1268	3.9	34
100	On the Time Resolution of Electrochemical Scanning Flow Cell Coupled to Downstream Analysis. <i>Journal of the Electrochemical Society</i> , 2019 , 166, H866-H870	3.9	9
99	Degradation of iridium oxides via oxygen evolution from the lattice: correlating atomic scale structure with reaction mechanisms. <i>Energy and Environmental Science</i> , 2019 , 12, 3548-3555	35.4	81
98	Electrochemical On-line ICP-MS in Electrocatalysis Research. <i>Chemical Record</i> , 2019 , 19, 2130-2142	6.6	54
97	Stability and dissolution of electrocatalysts: Building the bridge between model and real world systems. <i>Current Opinion in Electrochemistry</i> , 2018 , 8, 118-125	7.2	47
96	Atomic-scale insights into surface species of electrocatalysts in three dimensions. <i>Nature Catalysis</i> , 2018 , 1, 300-305	36.5	117
95	Atomically Defined Co ₃ O ₄ (111) Thin Films Prepared in Ultrahigh Vacuum: Stability under Electrochemical Conditions. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 7236-7248	3.8	26
94	Electrochemical stability of hexagonal tungsten carbide in the potential window of fuel cells and water electrolyzers investigated in a half-cell configuration. <i>Electrochimica Acta</i> , 2018 , 270, 70-76	6.7	15
93	Using Instability of a Non-stoichiometric Mixed Oxide Oxygen Evolution Catalyst As a Tool to Improve Its Electrocatalytic Performance. <i>Electrocatalysis</i> , 2018 , 9, 139-145	2.7	14

92	Unravelling Degradation Pathways of Oxide-Supported Pt Fuel Cell Nanocatalysts under In Situ Operating Conditions. <i>Advanced Energy Materials</i> , 2018 , 8, 1701663	21.8	46
91	Tuning the Electrocatalytic Performance of Ionic Liquid Modified Pt Catalysts for the Oxygen Reduction Reaction via Cationic Chain Engineering. <i>ACS Catalysis</i> , 2018 , 8, 8244-8254	13.1	53
90	Electrifying model catalysts for understanding electrocatalytic reactions in liquid electrolytes. <i>Nature Materials</i> , 2018 , 17, 592-598	27	67
89	The stability number as a metric for electrocatalyst stability benchmarking. <i>Nature Catalysis</i> , 2018 , 1, 508-515	36.5	281
88	The Electrochemical Dissolution of Noble Metals in Alkaline Media. <i>Electrocatalysis</i> , 2018 , 9, 153-161	2.7	54
87	Die gemeinsamen Zwischenprodukte von Sauerstoffentwicklung und Auflösung während der Wasserelektrolyse an Iridium. <i>Angewandte Chemie</i> , 2018 , 130, 2514-2517	3.6	25
86	The Common Intermediates of Oxygen Evolution and Dissolution Reactions during Water Electrolysis on Iridium. <i>Angewandte Chemie - International Edition</i> , 2018 , 57, 2488-2491	16.4	201
85	Nickel-molybdenum alloy catalysts for the hydrogen evolution reaction: Activity and stability revised. <i>Electrochimica Acta</i> , 2018 , 259, 1154-1161	6.7	85
84	Electrochemical Dissolution of Noble Metals 2018 , 68-75		5
83	Dissolution Stability: The Major Challenge in the Regenerative Fuel Cells Bifunctional Catalysis. <i>Journal of the Electrochemical Society</i> , 2018 , 165, F1376-F1384	3.9	24
82	A Perspective on Low-Temperature Water Electrolysis [Challenges in Alkaline and Acidic Technology. <i>International Journal of Electrochemical Science</i> , 2018 , 1173-1226	2.2	125
81	On-Line Inductively Coupled Plasma Spectrometry in Electrochemistry: Basic Principles and Applications 2018 , 326-335		6
80	Time-resolved analysis of dissolution phenomena in photoelectrochemistry [A case study of WO ₃ photocorrosion. <i>Electrochemistry Communications</i> , 2018 , 96, 53-56	5.1	24
79	In Situ Stability Studies of Platinum Nanoparticles Supported on Ruthenium/Titanium Mixed Oxide (RTO) for Fuel Cell Cathodes. <i>ACS Catalysis</i> , 2018 , 8, 9675-9683	13.1	32
78	Impact of Palladium Loading and Interparticle Distance on the Selectivity for the Oxygen Reduction Reaction toward Hydrogen Peroxide. <i>Journal of Physical Chemistry C</i> , 2018 , 122, 15878-15885	3.8	32
77	Highly active nanostructured palladium-ceria electrocatalysts for the hydrogen oxidation reaction in alkaline medium. <i>Nano Energy</i> , 2017 , 33, 293-305	17.1	125
76	Electrocatalytic synthesis of hydrogen peroxide on Au-Pd nanoparticles: From fundamentals to continuous production. <i>Chemical Physics Letters</i> , 2017 , 683, 436-442	2.5	73
75	Palladium electrodisolution from model surfaces and nanoparticles. <i>Electrochimica Acta</i> , 2017 , 229, 467-477	6.7	24

74	Electrochemical dissolution of noble metals native oxides. <i>Journal of Electroanalytical Chemistry</i> , 2017 , 787, 11-13	4.1	32
73	Stability and Activity of Non-Noble-Metal-Based Catalysts Toward the Hydrogen Evolution Reaction. <i>Angewandte Chemie</i> , 2017 , 129, 9899-9903	3.6	13
72	Stability and Activity of Non-Noble-Metal-Based Catalysts Toward the Hydrogen Evolution Reaction. <i>Angewandte Chemie - International Edition</i> , 2017 , 56, 9767-9771	16.4	81
71	Addressing stability challenges of using bimetallic electrocatalysts: the case of gold-palladium nanoalloys. <i>Catalysis Science and Technology</i> , 2017 , 7, 1848-1856	5.5	25
70	Catalyst Stability Benchmarking for the Oxygen Evolution Reaction: The Importance of Backing Electrode Material and Dissolution in Accelerated Aging Studies. <i>ChemSusChem</i> , 2017 , 10, 4140-4143	8.3	69
69	The Space Confinement Approach Using Hollow Graphitic Spheres to Unveil Activity and Stability of Pt-Co Nanocatalysts for PEMFC. <i>Advanced Energy Materials</i> , 2017 , 7, 1700835	21.8	33
68	Gold-Palladium Bimetallic Catalyst Stability: Consequences for Hydrogen Peroxide Selectivity. <i>ACS Catalysis</i> , 2017 , 7, 5699-5705	13.1	58
67	Stability limits of tin-based electrocatalyst supports. <i>Scientific Reports</i> , 2017 , 7, 4595	4.9	81
66	On the Origin of the Improved Ruthenium Stability in RuO ₂ /IrO ₂ Mixed Oxides. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F3099-F3104	3.9	53
65	Electrochemical dissolution of gold in presence of chloride and bromide traces studied by on-line electrochemical inductively coupled plasma mass spectrometry. <i>Electrochimica Acta</i> , 2016 , 222, 1056-1063	6.7	22
64	Platinum recycling going green via induced surface potential alteration enabling fast and efficient dissolution. <i>Nature Communications</i> , 2016 , 7, 13164	17.4	45
63	Oxygen evolution activity and stability of iridium in acidic media. Part 2. Electrochemically grown hydrous iridium oxide. <i>Journal of Electroanalytical Chemistry</i> , 2016 , 774, 102-110	4.1	140
62	Pt Sub-Monolayer on Au: System Stability and Insights into Platinum Electrochemical Dissolution. <i>Journal of the Electrochemical Society</i> , 2016 , 163, H228-H233	3.9	25
61	Durability of platinum-based fuel cell electrocatalysts: Dissolution of bulk and nanoscale platinum. <i>Nano Energy</i> , 2016 , 29, 275-298	17.1	175
60	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. <i>Catalysis Today</i> , 2016 , 262, 170-180	5.3	693
59	On the Need of Improved Accelerated Degradation Protocols (ADPs): Examination of Platinum Dissolution and Carbon Corrosion in Half-Cell Tests. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F1510-F1514	3.9	82
58	Experimental Methodologies to Understand Degradation of Nanostructured Electrocatalysts for PEM Fuel Cells: Advances and Opportunities. <i>ChemElectroChem</i> , 2016 , 3, 1524-1536	4.3	28
57	Activity and Stability of Electrochemically and Thermally Treated Iridium for the Oxygen Evolution Reaction. <i>Journal of the Electrochemical Society</i> , 2016 , 163, F3132-F3138	3.9	98

56	The Stability Challenge on the Pathway to Low and Ultra-Low Platinum Loading for Oxygen Reduction in Fuel Cells. <i>ChemElectroChem</i> , 2016 , 3, 51-54	4.3	53
55	Oxygen evolution activity and stability of iridium in acidic media. Part 1. [Metallic iridium. <i>Journal of Electroanalytical Chemistry</i> , 2016 , 773, 69-78	4.1	108
54	Screening of material libraries for electrochemical CO ₂ reduction catalysts [Improving selectivity of Cu by mixing with Co. <i>Journal of Catalysis</i> , 2016 , 343, 248-256	7.3	35
53	High temperature stability study of carbon supported high surface area catalysts [Expanding the boundaries of ex-situ diagnostics. <i>Electrochimica Acta</i> , 2016 , 211, 744-753	6.7	28
52	The Effect of the Voltage Scan Rate on the Determination of the Oxygen Reduction Activity of Pt/C Fuel Cell Catalyst. <i>Electrocatalysis</i> , 2015 , 6, 237-241	2.7	29
51	Dissolution of Platinum in the Operational Range of Fuel Cells. <i>ChemElectroChem</i> , 2015 , 2, 1471-1478	4.3	112
50	Dissolution of Platinum in Presence of Chloride Traces. <i>Electrochimica Acta</i> , 2015 , 179, 24-31	6.7	50
49	Molecular Insight in Structure and Activity of Highly Efficient, Low-Ir Ir-Ni Oxide Catalysts for Electrochemical Water Splitting (OER). <i>Journal of the American Chemical Society</i> , 2015 , 137, 13031-40	16.4	435
48	Numerical Simulation of an Electrochemical Flow Cell with V-Shape Channel Geometry. <i>Journal of the Electrochemical Society</i> , 2015 , 162, H860-H866	3.9	18
47	Dissolution of Platinum in the Operational Range of Fuel Cells. <i>ChemElectroChem</i> , 2015 , 2, 1407-1407	4.3	2
46	MAXNET Energy [Focusing Research in Chemical Energy Conversion on the Electrocatlytic Oxygen Evolution. <i>Green</i> , 2015 , 5,		3
45	Temperature-Dependent Dissolution of Polycrystalline Platinum in Sulfuric Acid Electrolyte. <i>Electrocatalysis</i> , 2014 , 5, 235-240	2.7	64
44	Towards a comprehensive understanding of platinum dissolution in acidic media. <i>Chemical Science</i> , 2014 , 5, 631-638	9.4	261
43	Rational design of the electrode morphology for oxygen evolution [enhancing the performance for catalytic water oxidation. <i>RSC Advances</i> , 2014 , 4, 9579	3.7	92
42	Dissolution of Noble Metals during Oxygen Evolution in Acidic Media. <i>ChemCatChem</i> , 2014 , 6, 2219-2223	5.2	288
41	Sustainable generation of hydrogen using chemicals with regional oversupply [Feasibility of the electrolysis in acido-alkaline reactor. <i>International Journal of Hydrogen Energy</i> , 2014 , 39, 16275-16281	6.7	7
40	The impact of dissolved reactive gases on platinum dissolution in acidic media. <i>Electrochemistry Communications</i> , 2014 , 40, 49-53	5.1	46
39	Stability of nanostructured iridium oxide electrocatalysts during oxygen evolution reaction in acidic environment. <i>Electrochemistry Communications</i> , 2014 , 48, 81-85	5.1	185

38	A Comparative Study on Gold and Platinum Dissolution in Acidic and Alkaline Media. <i>Journal of the Electrochemical Society</i> , 2014 , 161, H822-H830	3.9	182
37	Coupling of a scanning flow cell with online electrochemical mass spectrometry for screening of reaction selectivity. <i>Review of Scientific Instruments</i> , 2014 , 85, 104101	1.7	68
36	Oxygen electrochemistry as a cornerstone for sustainable energy conversion. <i>Angewandte Chemie - International Edition</i> , 2014 , 53, 102-21	16.4	1002
35	Effect of Temperature on Gold Dissolution in Acidic Media. <i>Journal of the Electrochemical Society</i> , 2014 , 161, H501-H507	3.9	25
34	Die Elektrochemie des Sauerstoffs als Meilenstein für eine nachhaltige Energiewandlung. <i>Angewandte Chemie</i> , 2014 , 126, 104-124	3.6	118
33	Hierarchical nanoporous films obtained by surface cracking on Cu-Au and ethanethiol on Au(001). <i>Electrochimica Acta</i> , 2014 , 140, 352-358	6.7	16
32	Gold dissolution: towards understanding of noble metal corrosion. <i>RSC Advances</i> , 2013 , 3, 16516	3.7	101
31	Electrochemical dissolution of gold in acidic medium. <i>Electrochemistry Communications</i> , 2013 , 28, 44-46	5.1	70
30	Facile preparation of three-dimensional porous hydrous ruthenium oxide electrode for supercapacitors. <i>Journal of Power Sources</i> , 2013 , 244, 806-811	8.9	53
29	Effect of thiol self-assembled monolayers and plasma polymer films on dealloying of CuAu alloys. <i>RSC Advances</i> , 2013 , 3, 6586	3.7	15
28	Copper electroless plating in weakly alkaline electrolytes using DMAB as a reducing agent for metallization on polymer films. <i>Electrochimica Acta</i> , 2012 , 59, 179-185	6.7	28
27	Utilization of surface active sites on gold in preparation of highly reactive interfaces for alcohols electrooxidation in alkaline media. <i>Electrochimica Acta</i> , 2012 , 69, 190-196	6.7	27
26	Die Auflösung von Platin – Grenzen für den Einsatz zur elektrochemischen Energiewandlung?. <i>Angewandte Chemie</i> , 2012 , 124, 12782-12785	3.6	37
25	Dissolution of platinum: limits for the deployment of electrochemical energy conversion?. <i>Angewandte Chemie - International Edition</i> , 2012 , 51, 12613-5	16.4	303
24	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. <i>Langmuir</i> , 2012 , 28, 3306-15	4	58
23	The influence of halides on the initial selective dissolution of Cu ₃ Au (1 1 1). <i>Electrochimica Acta</i> , 2012 , 85, 384-392	6.7	25
22	Pulse-reverse electrodeposition for mesoporous metal films: combination of hydrogen evolution assisted deposition and electrochemical dealloying. <i>Nanoscale</i> , 2012 , 4, 568-75	7.7	34
21	Formation of nanoporous nickel oxides for supercapacitors prepared by electrodeposition with hydrogen evolution reaction and electrochemical dealloying. <i>Korean Journal of Chemical Engineering</i> , 2012 , 29, 1802-1805	2.8	20

20	Nanoporous palladium with sub-10 nm dendrites by electrodeposition for ethanol and ethylene glycol oxidation. <i>Nanoscale</i> , 2012 , 4, 103-5	7.7	59
19	MoO ₃ nanowire-based amperometric biosensor for l-lactate detection. <i>Journal of Solid State Electrochemistry</i> , 2012 , 16, 2197-2201	2.6	15
18	Porous Pd films as effective ethanol oxidation electrocatalysts in alkaline medium. <i>Materials Chemistry and Physics</i> , 2011 , 126, 36-40	4.4	26
17	Ultrahigh-energy and stable supercapacitors based on intertwined porous MoO ₃ /MWCNT nanocomposites. <i>Electrochimica Acta</i> , 2011 , 58, 76-80	6.7	67
16	Hydrogen template assisted electrodeposition of sub-micrometer wires composing honeycomb-like porous Pb films. <i>Applied Surface Science</i> , 2011 , 257, 8054-8061	6.7	57
15	Direct electrodeposition of nanoporous gold with controlled multimodal pore size distribution. <i>Electrochemistry Communications</i> , 2011 , 13, 16-19	5.1	141
14	Pt and Pd decorated Au nanowires: Extremely high activity of ethanol oxidation in alkaline media. <i>Electrochimica Acta</i> , 2011 , 56, 5771-5775	6.7	38
13	Characterization of FePt film electrodeposited with a ferric electrolyte 2011 , 26, 1766		
12	The porous CuO electrode fabricated by hydrogen bubble evolution and its application to highly sensitive non-enzymatic glucose detection. <i>Talanta</i> , 2010 , 80, 1371-7	6.2	114
11	Impact of key deposition parameters on the morphology of silver foams prepared by dynamic hydrogen template deposition. <i>Electrochimica Acta</i> , 2010 , 55, 6383-6390	6.7	87
10	Electrodeposition of three-dimensional porous silver foams. <i>Electrochemistry Communications</i> , 2010 , 12, 467-470	5.1	147
9	Electrodeposition mechanism of palladium nanotube and nanowire arrays. <i>Journal of Nanoscience and Nanotechnology</i> , 2009 , 9, 3154-9	1.3	19
8	Characterization of FePt film electrodeposited with a ferric electrolyte. <i>Korean Journal of Chemical Engineering</i> , 2009 , 26, 1766-1769	2.8	3
7	Hydrogen sensing performance of electrodeposited conoidal palladium nanowire and nanotube arrays. <i>Sensors and Actuators B: Chemical</i> , 2009 , 136, 388-391	8.5	58
6	Gold nanowire array electrode for non-enzymatic voltammetric and amperometric glucose detection. <i>Sensors and Actuators B: Chemical</i> , 2009 , 142, 216-223	8.5	203
5	Electroplating of metal nanotubes and nanowires in a high aspect-ratio nanotemplate. <i>Electrochemistry Communications</i> , 2008 , 10, 514-518	5.1	76
4	Photocorrosion of WO ₃ Photoanodes in Different Electrolytes. <i>ACS Physical Chemistry Au</i> ,		9
3	Accessing In Situ Photocorrosion under Realistic Light Conditions: Photoelectrochemical Scanning Flow Cell Coupled to Online ICP-MS. <i>ACS Measurement Science Au</i> ,		3

2	Operando Stability Studies of Ultrathin Single-Crystalline IrO ₂ (110) Films under Acidic Oxygen Evolution Reaction Conditions. <i>ACS Catalysis</i> ,12651-12660	13.1	6
1	Photocorrosion of n- and p-Type Semiconducting Oxide Covered Metals: Case Studies of Anodized Titanium and Copper. <i>Physica Status Solidi (A) Applications and Materials Science</i> ,	1.6	1