Karl J J Mayrhofer

List of Publications by Year
in descending order

232 papers	29,418 citations	5891 81 h-index	4988 167 g-index
247 all docs	247 docs citations	247 times ranked	20431 citing authors

#	Article	IF	Citations
1	Benchmarking Fuel Cell Electrocatalysts Using Gas Diffusion Electrodes: Inter-lab Comparison and Best Practices. ACS Energy Letters, 2022, 7, 816-826.	8.8	58
2	Onâ€line Electrode Dissolution Monitoring during Organic Electrosynthesis: Direct Evidence of Electrode Dissolution during Kolbe Electrolysis. ChemSusChem, 2022, 15, e202102228.	3.6	7
3	CO₂ Electroreduction on Silver Foams Modified by Ionic Liquids with Different Cation Side Chain Length. ACS Applied Materials & Interfaces, 2022, 14, 14193-14201.	4.0	11
4	Analysing the relationship between the fields of thermo- and electrocatalysis taking hydrogen peroxide as a case study. Nature Communications, 2022, 13, 1973.	5.8	9
5	<i>Operando</i> Structureâ€“Activityâ€“Stability Relationship of Iridium Oxides during the Oxygen Evolution Reaction. ACS Catalysis, 2022, 12, 5174-5184.	5.5	40
6	Oxygen Reduction Reaction in Alkaline Media Causes Iron Leaching from Feâ€“Nâ€“C Electrocatalysts. Journal of the American Chemical Society, 2022, 144, 9753-9763.	6.6	59
7	Engineering gold-platinum core-shell nanoparticles by self-limitation in solution. Communications Chemistry, 2022, 5, .	2.0	10
8	The Interplay of Oxygen Reduction Reaction and Iron Dissolution from Fe-N-C Electrocatalysts. ECS Meeting Abstracts, 2022, MA2022-01, 1486-1486.	0.0	0
9	Accessing in Situ Photocorrosion Under Realistic Light Conditions. ECS Meeting Abstracts, 2022, MA2022-01, 1886-1886.	0.0	0
10	Influence of the Electrode-Electrolyte Interface on the Product Distribution of the HMF Electroreduction. ECS Meeting Abstracts, 2022, MA2022-01, 1546-1546.	0.0	0
11	Accelerated parametrization of catalyst performance in organic electrosynthesis. Current Opinion in Electrochemistry, 2022, 35, 101103.	2.5	0
12	On the effect of anion exchange ionomer binders in bipolar electrode membrane interface water electrolysis. Journal of Materials Chemistry A, 2021, 9, 14285-14295.	5.2	27
13	Oxide Reduction Precedes Carbon Dioxide Reduction on Oxide-Derived Copper Electrodes. Journal of Physical Chemistry C, 2021, 125, 1833-1838.	1.5	6
14	The Impact of Antimony on the Performance of Antimony Doped Tin Oxide Supported Platinum for the Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2021, 168, 024502.	1.3	4
15	Platinum Dissolution in Realistic Fuel Cell Catalyst Layers. Angewandte Chemie, 2021, 133, 8964-8970.	1.6	13
16	Stabilization of an iridium oxygen evolution catalyst by titanium oxides. JPhys Energy, 2021, 3, 034006.	2.3	19
17	Platinum Dissolution in Realistic Fuel Cell Catalyst Layers. Angewandte Chemie - International Edition, 2021, 60, 8882-8888.	7.2	63
18	Tuning the Anodic and Cathodic Dissolution of Gold by Varying the Surface Roughness. ChemElectroChem, 2021, 8, 1524-1530.	1.7	3

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19	Electrocatalytic oxidation of 2-propanol on PtxIr100-x bifunctional electrocatalysts â€“ A thin-film materials library study. Journal of Catalysis, 2021, 396, 387-394.	3.1	11
20	Primary Vs. Secondary Alcohols Electrooxidation: Mechanistic Insights. ECS Meeting Abstracts, 2021, MA2021-01, 1870-1870.	0.0	0
21	Online Stability Investigations of Platinum Electrodes in Nonaqueous Media. ECS Meeting Abstracts, 2021, MA2021-01, 1874-1874.	0.0	0
22	Implementation of an enclosed ionization interface for the analysis of liquid sample streams with direct analysis in real time mass spectrometry. Rapid Communications in Mass Spectrometry, 2021, 35, e9091.	0.7	5
23	The Crucial Role of Water in the Stability and Electrocatalytic Activity of Pt Electrodes. Journal of Physical Chemistry C, 2021, 125, 13254-13263.	1.5	6
24	Single-Atom Catalysts: A Perspective toward Application in Electrochemical Energy Conversion. Jacs Au, 2021, 1, 1086-1100.	3.6	43
25	Chemical Vapor Deposition of Hollow Graphitic Spheres for Improved Electrochemical Durability. ACS Applied Energy Materials, 2021, 4, 5840-5847.	2.5	9
26	Online Monitoring of Transition-Metal Dissolution from a High-Ni-Content Cathode Material. ACS Applied Materials & Interfaces, 2021, 13, 33075-33082.	4.0	43
27	The 2â€Propanol Fuel Cell: A Review from the Perspective of a Hydrogen Energy Economy. Energy Technology, 2021, 9, 2100164.	1.8	19
28	Different promoting roles of ruthenium for the oxidation of primary and secondary alcohols on PtRu electrocatalysts. Journal of Catalysis, 2021, 400, 166-172.	3.1	11
29	Impact of catalyst loading, ionomer content, and carbon support on the performance of direct isopropanol fuel cells. Journal of Power Sources Advances, 2021, 10, 100064.	2.6	7
30	Accessing In Situ Photocorrosion under Realistic Light Conditions: Photoelectrochemical Scanning Flow Cell Coupled to Online ICP-MS. ACS Measurement Science Au, 2021, 1, 74-81.	1.9	20
31	Model electrocatalysts for the oxidation of rechargeable electrofuels - carbon supported Pt nanoparticles prepared in UHV. Electrochimica Acta, 2021, 389, 138716.	2.6	8
32	Electroreductive 5â€Hydroxymethylfurfural Dimerization on Carbon Electrodes. ChemSusChem, 2021, 14, 5245-5253.	3.6	20
33	Structural Dynamics of Ultrathin Cobalt Oxide Nanoislands under Potential Control. Advanced Functional Materials, 2021, 31, 2009923.	7.8	26
34	Formation of lithiated gold and its use for the preparation of reference electrodes â€” an EQCM study. Journal of Solid State Electrochemistry, 2021, 25, 2849-2859.	1.2	8
35	Essentials of High Performance Water Electrolyzers â€“ From Catalyst Layer Materials to Electrode Engineering. Advanced Energy Materials, 2021, 11, 2101998.	10.2	92
36	Reduction of Oxide Layers on Au(111): The Interplay between Reduction Rate, Dissolution, and Restructuring. Journal of Physical Chemistry C, 2021, 125, 22698-22704.	1.5	11

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37	Electrochemical HMF Valorization to Fuel Precursors. ECS Meeting Abstracts, 2021, MA2021-02, 778-778.	0.0	0
38	Tuning Electrode-Electrolyte Interface for the Electrochemical Reduction of HMF. ECS Meeting Abstracts, 2021, MA2021-02, 781-781.	0.0	0
39	Engineering stable electrocatalysts by synergistic stabilization between carbide cores and Pt shells. Nature Materials, 2020, 19, 287-291.	13.3	120
40	Various CO₂-to-CO Electrolyzer Cell and Operation Mode Designs to avoid CO₂-Crossover from Cathode to Anode. Zeitschrift Fur Physikalische Chemie, 2020, 234, 1115-1131.	1.4	20
41	Facile one-pot synthesis of water-soluble fcc FePt3 alloy nanostructures. SN Applied Sciences, 2020, 2, 1.	1.5	2
42	Different Photostability of BiVO₄ in Near-pH-Neutral Electrolytes. ACS Applied Energy Materials, 2020, 3, 9523-9527.	2.5	41
43	Atomistic Insights into the Stability of Pt Single-Atom Electrocatalysts. Journal of the American Chemical Society, 2020, 142, 15496-15504.	6.6	75
44	Fabrication of a Robust PEM Water Electrolyzer Based on Nonâ€Noble Metal Cathode Catalyst: [Mo₃S₁₃]^{2â^'} Clusters Anchored to Nâ€Doped Carbon Nanotubes. Small, 2020, 16, e2003161.	5.2	50
45	Influence of Fuels and pH on the Dissolution Stability of Bifunctional PtRu/C Alloy Electrocatalysts. ACS Catalysis, 2020, 10, 10858-10870.	5.5	27
46	Cobalt Oxide-Supported Pt Electrocatalysts: Intimate Correlation between Particle Size, Electronic Metalâ€"Support Interaction and Stability. Journal of Physical Chemistry Letters, 2020, 11, 8365-8371.	2.1	21
47	Anisotropy of Pt nanoparticles on carbon- and oxide-support and their structural response to electrochemical oxidation probed by <i>in situ</i> techniques. Physical Chemistry Chemical Physics, 2020, 22, 22260-22270.	1.3	9
48	Insights into Liquid Product Formation during Carbon Dioxide Reduction on Copper and Oxide-Derived Copper from Quantitative Real-Time Measurements. ACS Catalysis, 2020, 10, 6735-6740.	5.5	36
49	Secondary Alcohols as Rechargeable Electrofuels: Electrooxidation of Isopropyl Alcohol at Pt Electrodes. ACS Catalysis, 2020, 10, 6831-6842.	5.5	32
50	On-line monitoring of dissolution processes in nonaqueous electrolytes â€" A case study with platinum. Electrochemistry Communications, 2020, 114, 106702.	2.3	17
51	Stable and Active Oxygen Reduction Catalysts with Reduced Noble Metal Loadings through Potential Triggered Support Passivation. ChemElectroChem, 2020, 7, 2404-2409.	1.7	4
52	The oxygen reduction reaction on palladium with low metal loadings: The effects of chlorides on the stability and activity towards hydrogen peroxide. Journal of Catalysis, 2020, 389, 400-408.	3.1	25
53	Electrochemical Oxidation of Isopropanol on Platinumâ€"Ruthenium Nanoparticles Studied with Real-Time Product and Dissolution Analytics. ACS Applied Materials & Interfaces, 2020, 12, 33670-33678.	4.0	21
54	A Crossâ€Linked Interconnecting Layer Enabling Reliable and Reproducible Solutionâ€Processing of Organic Tandem Solar Cells. Advanced Energy Materials, 2020, 10, 1903800.	10.2	21

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55	IrO2 coated TiO2 core-shell microparticles advance performance of low loading proton exchange membrane water electrolyzers. Applied Catalysis B: Environmental, 2020, 269, 118762.	10.8	98
56	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.	5.5	67
57	Transition Metalâ€"Carbon Bond Enthalpies as Descriptor for the Electrochemical Stability of Transition Metal Carbides in Electrocatalytic Applications. Journal of the Electrochemical Society, 2020, 167, 021501.	1.3	14
58	Oxygen Evolution Reaction on Tin Oxides Supported Iridium Catalysts: Do We Need Dopants?. ChemElectroChem, 2020, 7, 2330-2339.	1.7	48
59	Isolated Pd Sites as Selective Catalysts for Electrochemical and Direct Hydrogen Peroxide Synthesis. ACS Catalysis, 2020, 10, 5928-5938.	5.5	58
60	Ag₂Cu₂O₃ â€" a catalyst template material for selective electroreduction of CO to C₂₊ products. Energy and Environmental Science, 2020, 13, 2993-3006.	15.6	55
61	Dissolution of Pt and Its Temperature Dependence in Anhydrous Acetonitrile- and Methanol-Based Electrolytes. Journal of the Electrochemical Society, 2020, 167, 121507.	1.3	8
62	Effect of Ionic Liquid Modification on the ORR Performance and Degradation Mechanism of Trimetallic PtNiMo/C Catalysts. ACS Catalysis, 2019, 9, 8682-8692.	5.5	60
63	Dissolution of Platinum Single Crystals in Acidic Medium. ChemPhysChem, 2019, 20, 2997-3003.	1.0	42
64	Extension of the Rotating Disk Electrode Method to Thin Samples of Non-Disk Shape. Journal of the Electrochemical Society, 2019, 166, H791-H794.	1.3	5
65	Dissolution of BiVO₄ Photoanodes Revealed by Time-Resolved Measurements under Photoelectrochemical Conditions. Journal of Physical Chemistry C, 2019, 123, 23410-23418.	1.5	47
66	Monolayer black phosphorus by sequential wet-chemical surface oxidation. RSC Advances, 2019, 9, 3570-3576.	1.7	28
67	Titelbild: Electrochemical Realâ€Time Mass Spectrometry (ECâ€RTMS): Monitoring Electrochemical Reaction Products in Real Time (Angew. Chem. 22/2019). Angewandte Chemie, 2019, 131, 7219-7219.	1.6	0
68	Towards an efficient liquid organic hydrogen carrier fuel cell concept. Energy and Environmental Science, 2019, 12, 2305-2314.	15.6	73
69	Paramelaconiteâ€Enriched Copperâ€Based Material as an Efficient and Robust Catalyst for Electrochemical Carbon Dioxide Reduction. Advanced Energy Materials, 2019, 9, 1901228.	10.2	55
70	Electrooxidation of saturated C1-C3 primary alcohols on platinum: Potential-resolved product analysis with electrochemical real-time mass spectrometry (EC-RTMS). Electrochimica Acta, 2019, 315, 67-74.	2.6	6
71	Electrochemical Realâ€Time Mass Spectrometry (ECâ€RTMS): Monitoring Electrochemical Reaction Products in Real Time. Angewandte Chemie, 2019, 131, 7351-7355.	1.6	19
72	Electrochemical Realâ€Time Mass Spectrometry (ECâ€RTMS): Monitoring Electrochemical Reaction Products in Real Time. Angewandte Chemie - International Edition, 2019, 58, 7273-7277.	7.2	50

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73	The degradation of Pt/IrOx oxygen bifunctional catalysts. Electrochimica Acta, 2019, 308, 400-409.	2.6	26
74	Alkaline manganese electrochemistry studied by<i>in situ</i>and<i>operando</i>spectroscopic methods â€“ metal dissolution, oxide formation and oxygen evolution. Physical Chemistry Chemical Physics, 2019, 21, 10457-10469.	1.3	32
75	Towards maximized utilization of iridium for the acidic oxygen evolution reaction. Nano Research, 2019, 12, 2275-2280.	5.8	89
76	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.	1.3	72
77	Degradation of iridium oxides <i>via</i> oxygen evolution from the lattice: correlating atomic scale structure with reaction mechanisms. Energy and Environmental Science, 2019, 12, 3548-3555.	15.6	147
78	Electrochemical Onâ€line ICPâ€MS in Electrocatalysis Research. Chemical Record, 2019, 19, 2130-2142.	2.9	92
79	Atomic-scale insights into surface species of electrocatalysts in three dimensions. Nature Catalysis, 2018, 1, 300-305.	16.1	161
80	Atomically Defined Co₃O₄(111) Thin Films Prepared in Ultrahigh Vacuum: Stability under Electrochemical Conditions. Journal of Physical Chemistry C, 2018, 122, 7236-7248.	1.5	34
81	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.	2.6	22
82	Using Instability of a Non-stoichiometric Mixed Oxide Oxygen Evolution Catalyst As a Tool to Improve Its Electrocatalytic Performance. Electrocatalysis, 2018, 9, 139-145.	1.5	20
83	Unravelling Degradation Pathways of Oxideâ€Supported Pt Fuel Cell Nanocatalysts under In Situ Operating Conditions. Advanced Energy Materials, 2018, 8, 1701663.	10.2	62
84	The Electrochemical Dissolution of Noble Metals in Alkaline Media. Electrocatalysis, 2018, 9, 153-161.	1.5	82
85	Die gemeinsamen Zwischenprodukte von Sauerstoffentwicklung und AuflÃ¶sung wÃ€hrend der Wasserelektrolyse an Iridium. Angewandte Chemie, 2018, 130, 2514-2517.	1.6	37
86	The Common Intermediates of Oxygen Evolution and Dissolution Reactions during Water Electrolysis on Iridium. Angewandte Chemie - International Edition, 2018, 57, 2488-2491.	7.2	331
87	Nickel-molybdenum alloy catalysts for the hydrogen evolution reaction: Activity and stability revised. Electrochimica Acta, 2018, 259, 1154-1161.	2.6	116
88	The Achilles' heel of iron-based catalysts during oxygen reduction in an acidic medium. Energy and Environmental Science, 2018, 11, 3176-3182.	15.6	332
89	Influence of Hydrodynamic Flow Patterns on the Corrosion Behavior of Carbon Steel in a Neutral LiBr Solution. International Journal of Electrochemical Science, 2018, , 10050-10075.	0.5	8
90	Dissolution Stability: The Major Challenge in the Regenerative Fuel Cells Bifunctional Catalysis. Journal of the Electrochemical Society, 2018, 165, F1376-F1384.	1.3	33

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91	Ir-Ni Bimetallic OER Catalysts Prepared by Controlled Ni Electrodeposition on Irpoly and Ir(111). Surfaces, 2018, 1, 165-186.	1.0	17
92	A Perspective on Low-Temperature Water Electrolysis â€“ Challenges in Alkaline and Acidic Technology. International Journal of Electrochemical Science, 2018, 13, 1173-1226.	0.5	197
93	Carbon Monoxide as a Promoter of Atomically Dispersed Platinum Catalyst in Electrochemical Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2018, 140, 16198-16205.	6.6	74
94	Shape-Controlled Nanoparticles in Pore-Confined Space. Journal of the American Chemical Society, 2018, 140, 15684-15689.	6.6	48
95	Time-resolved analysis of dissolution phenomena in photoelectrochemistry â€“ A case study of WO3 photocorrosion. Electrochemistry Communications, 2018, 96, 53-56.	2.3	34
96	Cyclodextrin inhibits zinc corrosion by destabilizing point defect formation in the oxide layer. Beilstein Journal of Nanotechnology, 2018, 9, 936-944.	1.5	13
97	<i>In Situ</i> Stability Studies of Platinum Nanoparticles Supported on Rutheniumâˆ’Titanium Mixed Oxide (RTO) for Fuel Cell Cathodes. ACS Catalysis, 2018, 8, 9675-9683.	5.5	51
98	Atomically-defined model catalysts in ultrahigh vacuum and in liquid electrolytes: particle size-dependent CO adsorption on Pt nanoparticles on ordered Co₃O₄(111) films. Physical Chemistry Chemical Physics, 2018, 20, 23702-23716.	1.3	13
99	An alkaline water electrolyzer with nickel electrodes enables efficient high current densityÂoperation. International Journal of Hydrogen Energy, 2018, 43, 11932-11938.	3.8	66
100	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.	1.5	53
101	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.	5.5	82
102	Electrifying model catalysts for understanding electrocatalytic reactions in liquid electrolytes. Nature Materials, 2018, 17, 592-598.	13.3	89
103	The stability number as a metric for electrocatalyst stability benchmarking. Nature Catalysis, 2018, 1, 508-515.	16.1	533
104	Electrocatalytic synthesis of hydrogen peroxide on Au-Pd nanoparticles: From fundamentals to continuous production. Chemical Physics Letters, 2017, 683, 436-442.	1.2	112
105	Palladium electrodissolution from model surfaces and nanoparticles. Electrochimica Acta, 2017, 229, 467-477.	2.6	29
106	Growth of Porous Platinum Catalyst Structures on Tungsten Oxide Support Materials: A New Design for Electrodes. Crystal Growth and Design, 2017, 17, 1661-1668.	1.4	8
107	Stability and Activity of Nonâ€Nobleâ€Metalâ€Based Catalysts Toward the Hydrogen Evolution Reaction. Angewandte Chemie, 2017, 129, 9899-9903.	1.6	17
108	Balanced work function as a driver for facile hydrogen evolution reaction â€“ comprehension and experimental assessment of interfacial catalytic descriptor. Physical Chemistry Chemical Physics, 2017, 19, 17019-17027.	1.3	69

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109	Unraveling the Nature of Sites Active toward Hydrogen Peroxide Reduction in Feâ€Nâ€C Catalysts. Angewandte Chemie, 2017, 129, 8935-8938.	1.6	16
110	Unraveling the Nature of Sites Active toward Hydrogen Peroxide Reduction in Feâ€Nâ€C Catalysts. Angewandte Chemie - International Edition, 2017, 56, 8809-8812.	7.2	176
111	Stability and Activity of Nonâ€Nobleâ€Metalâ€Based Catalysts Toward the Hydrogen Evolution Reaction. Angewandte Chemie - International Edition, 2017, 56, 9767-9771.	7.2	118
112	Addressing stability challenges of using bimetallic electrocatalysts: the case of goldâ€“palladium nanoalloys. Catalysis Science and Technology, 2017, 7, 1848-1856.	2.1	35
113	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.	3.6	111
114	Accelerated fuel cell tests of anodic Pt/Ru catalyst via identical location TEM: New aspects of degradation behavior. International Journal of Hydrogen Energy, 2017, 42, 25359-25371.	3.8	36
115	The Space Confinement Approach Using Hollow Graphitic Spheres to Unveil Activity and Stability of Ptâ€Co Nanocatalysts for PEMFC. Advanced Energy Materials, 2017, 7, 1700835.	10.2	49
116	Goldâ€“Palladium Bimetallic Catalyst Stability: Consequences for Hydrogen Peroxide Selectivity. ACS Catalysis, 2017, 7, 5699-5705.	5.5	76
117	Stability limits of tin-based electrocatalyst supports. Scientific Reports, 2017, 7, 4595.	1.6	127
118	Experimental Methodologies to Understand Degradation of Nanostructured Electrocatalysts for PEM Fuel Cells: Advances and Opportunities. ChemElectroChem, 2016, 3, 1524-1536.	1.7	30
119	Activity and Stability of Electrochemically and Thermally Treated Iridium for the Oxygen Evolution Reaction. Journal of the Electrochemical Society, 2016, 163, F3132-F3138.	1.3	140
120	The Stability Challenge on the Pathway to Low and Ultraâ€Low Platinum Loading for Oxygen Reduction in Fuel Cells. ChemElectroChem, 2016, 3, 51-54.	1.7	59
121	Oxygen evolution activity and stability of iridium in acidic media. Part 1. â€“ Metallic iridium. Journal of Electroanalytical Chemistry, 2016, 773, 69-78.	1.9	159
122	Screening of material libraries for electrochemical CO2 reduction catalysts â€“ Improving selectivity of Cu by mixing with Co. Journal of Catalysis, 2016, 343, 248-256.	3.1	47
123	Minimizing Operando Demetallation of Fe-N-C Electrocatalysts in Acidic Medium. ACS Catalysis, 2016, 6, 3136-3146.	5.5	201
124	Effect of Polarisation Mimicking Cathodic Electrodeposition Coating on Industrially Relevant Metal Substrates with ZrO₂â€Based Conversion Coatings. ChemElectroChem, 2016, 3, 1415-1421.	1.7	3
125	High temperature stability study of carbon supported high surface area catalystsâ€"Expanding the boundaries of ex-situ diagnostics. Electrochimica Acta, 2016, 211, 744-753.	2.6	38
126	On the Origin of the Improved Ruthenium Stability in RuO₂â€“IrO₂Mixed Oxides. Journal of the Electrochemical Society, 2016, 163, F3099-F3104.	1.3	82

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127	Importance and Challenges of Electrochemical <i>in Situ</i> Liquid Cell Electron Microscopy for Energy Conversion Research. Accounts of Chemical Research, 2016, 49, 2015-2022.	7.6	185
128	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.	2.6	33
129	A Critical Review on Hydrogen Evolution Electrocatalysis: Reâ€exploring the Volcanoâ€relationship. Electroanalysis, 2016, 28, 2256-2269.	1.5	241
130	Platinum recycling going green via induced surface potential alteration enabling fast and efficient dissolution. Nature Communications, 2016, 7, 13164.	5.8	55
131	Structureâ€"Activityâ€"Stability Relationships for Space-Confined Pt_{<i>x</i>}Ni_{<i>y</i>} Nanoparticles in the Oxygen Reduction Reaction. ACS Catalysis, 2016, 6, 8058-8068.	5.5	56
132	Tuning selectivity of electrochemical reactions by atomically dispersed platinum catalyst. Nature Communications, 2016, 7, 10922.	5.8	683
133	Oxygen evolution activity and stability of iridium in acidic media. Part 2. â€" Electrochemically grown hydrous iridium oxide. Journal of Electroanalytical Chemistry, 2016, 774, 102-110.	1.9	209
134	Pt Sub-Monolayer on Au: System Stability and Insights into Platinum Electrochemical Dissolution. Journal of the Electrochemical Society, 2016, 163, H228-H233.	1.3	27
135	Positive Effect of Surface Doping with Au on the Stability of Pt-Based Electrocatalysts. ACS Catalysis, 2016, 6, 1630-1634.	5.5	90
136	Durability of platinum-based fuel cell electrocatalysts: Dissolution of bulk and nanoscale platinum. Nano Energy, 2016, 29, 275-298.	8.2	257
137	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.	2.2	999
138	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.	1.3	112
139	Dissolution of Platinum in the Operational Range of Fuel Cells. ChemElectroChem, 2015, 2, 1407-1407.	1.7	3
140	Stability of Feâ€Nâ€C Catalysts in Acidic Medium Studied by Operando Spectroscopy. Angewandte Chemie - International Edition, 2015, 54, 12753-12757.	7.2	321
141	General Method for the Synthesis of Hollow Mesoporous Carbon Spheres with Tunable Textural Properties. ACS Applied Materials & Interfaces, 2015, 7, 12914-12922.	4.0	87
142	MAXNET Energy â€" Focusing Research in Chemical Energy Conversion on the Electrocatlytic Oxygen Evolution. Green, 2015, 5, .	0.4	3
143	Effect of hydrogen carbonate and chloride on zinc corrosion investigated by a scanning flow cell system. Electrochimica Acta, 2015, 159, 198-209.	2.6	26
144	Stability of Dealloyed Porous Pt/Ni Nanoparticles. ACS Catalysis, 2015, 5, 5000-5007.	5.5	110

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145	The pH Dependence of Magnesium Dissolution and Hydrogen Evolution during Anodic Polarization. Journal of the Electrochemical Society, 2015, 162, C333-C339.	1.3	71
146	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.	1.5	36
147	Dissolution of Platinum in the Operational Range of Fuel Cells. ChemElectroChem, 2015, 2, 1471-1478.	1.7	152
148	Dissolution of Platinum in Presence of Chloride Traces. Electrochimica Acta, 2015, 179, 24-31.	2.6	66
149	Electrochemical characterization of direct electron uptake in electrical microbially influenced corrosion of iron by the lithoautotrophic SRB Desulfopila corrodens strain IS4. Electrochimica Acta, 2015, 167, 321-329.	2.6	101
150	Molecular Insight in Structure and Activity of Highly Efficient, Low-Ir Irâ€“Ni Oxide Catalysts for Electrochemical Water Splitting (OER). Journal of the American Chemical Society, 2015, 137, 13031-13040.	6.6	565
151	Numerical Simulation of an Electrochemical Flow Cell with V-Shape Channel Geometry. Journal of the Electrochemical Society, 2015, 162, H860-H866.	1.3	22
152	Activation of carbon-supported catalysts by ozonized acidic solutions for the direct implementation in (electro-)chemical reactors. Chemical Communications, 2015, 51, 1226-1229.	2.2	14
153	Selective microbial electrosynthesis of methane by a pure culture of a marine lithoautotrophic archaeon. Bioelectrochemistry, 2015, 102, 50-55.	2.4	157
154	Design criteria for stable Pt/C fuel cell catalysts. Beilstein Journal of Nanotechnology, 2014, 5, 44-67.	1.5	408
155	Stability of nanostructured iridium oxide electrocatalysts during oxygen evolution reaction in acidic environment. Electrochemistry Communications, 2014, 48, 81-85.	2.3	229
156	A Comparative Study on Gold and Platinum Dissolution in Acidic and Alkaline Media. Journal of the Electrochemical Society, 2014, 161, H822-H830.	1.3	239
157	Coupling of a scanning flow cell with online electrochemical mass spectrometry for screening of reaction selectivity. Review of Scientific Instruments, 2014, 85, 104101.	0.6	83
158	Investigating the Real Time Dissolution of Mg Using Online Analysis by ICP-MS. Journal of the Electrochemical Society, 2014, 161, C115-C119.	1.3	70
159	Oxygen Electrochemistry as a Cornerstone for Sustainable Energy Conversion. Angewandte Chemie - International Edition, 2014, 53, 102-121.	7.2	1,186
160	Effect of Temperature on Gold Dissolution in Acidic Media. Journal of the Electrochemical Society, 2014, 161, H501-H507.	1.3	32
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