

Matthias Arenz

List of Publications by Year in descending order

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168
papers

12,813
citations

38720

50
h-index

24232

110
g-index

208
all docs

208
docs citations

208
times ranked

10904
citing authors

#	ARTICLE	IF	CITATIONS
1	The gas diffusion electrode setup as a testing platform for evaluating fuel cell catalysts: A comparative RDE&GDE study. <i>Electrochemical Science Advances</i> , 2023, 3, .	1.2	6
2	Surfactant-free Ir nanoparticles synthesized in ethanol: Catalysts for the oxygen evolution reaction. <i>Materials Letters</i> , 2022, 308, 131209.	1.3	7
3	Benchmarking Fuel Cell Electrocatalysts Using Gas Diffusion Electrodes: Inter-lab Comparison and Best Practices. <i>ACS Energy Letters</i> , 2022, 7, 816-826.	8.8	58
4	Tracking the Catalyst Layer Depth-Dependent Electrochemical Degradation of a Bimodal Pt/C Fuel Cell Catalyst: A Combined <i>Operando</i> Small- and Wide-Angle X-ray Scattering Study. <i>ACS Catalysis</i> , 2022, 12, 2077-2085.	5.5	15
5	On the electro-oxidation of small organic molecules: Towards a fuel cell catalyst testing platform based on gas diffusion electrode setups. <i>Journal of Power Sources</i> , 2022, 522, 230979.	4.0	5
6	On the electrooxidation of glucose on gold: Towards an electrochemical glucaric acid production as value-added chemical. <i>Electrochimica Acta</i> , 2022, 410, 140023.	2.6	16
7	Electrochemical Reduction of CO ₂ on Au Electrocatalysts in a Zero-Gap, Half-Cell Gas Diffusion Electrode Setup: a Systematic Performance Evaluation and Comparison to an H-cell Setup**. <i>ChemElectroChem</i> , 2022, 9, .	1.7	17
8	(Digital Presentation) Small Angle X-Ray Scattering Studies Investigating the Degradation of Electrocatalysts. ECS Meeting Abstracts, 2022, MA2022-01, 1169-1169.	0.0	0
9	(Digital Presentation) Improved Nanocatalysts, Supported IrO _x and IrRuO _x , for Enhanced Oxygen Evolution Reaction. ECS Meeting Abstracts, 2022, MA2022-01, 2327-2327.	0.0	0
10	L-cysteine oxidation on Pt and Au rotating disk electrodes: Insights on mixed controlled kinetics. <i>Journal of Electroanalytical Chemistry</i> , 2021, 880, 114920.	1.9	3
11	Self-supported Pt-CoO networks combining high specific activity with high surface area for oxygen reduction. <i>Nature Materials</i> , 2021, 20, 208-213.	13.3	139
12	Commercial Spirits for Surfactant-Free Syntheses of Electro-Active Platinum Nanoparticles. <i>Sustainable Chemistry</i> , 2021, 2, 1-7.	2.2	8
13	The Gas Diffusion Electrode Setup as Straightforward Testing Device for Proton Exchange Membrane Water Electrolyzer Catalysts. <i>Jacs Au</i> , 2021, 1, 247-251.	3.6	50
14	Beyond Active Site Design: A Surfactant-Free Toolbox Approach for Optimized Supported Nanoparticle Catalysts. <i>ChemCatChem</i> , 2021, 13, 1692-1705.	1.8	23
15	Insights from <i>In Situ</i> Studies on the Early Stages of Platinum Nanoparticle Formation. <i>Journal of Physical Chemistry Letters</i> , 2021, 12, 3224-3231.	2.1	11
16	Operando SAXS study of a Pt/C fuel cell catalyst with an X-ray laboratory source. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 294004.	1.3	6
17	Surfactant-free synthesis of size controlled platinum nanoparticles: Insights from in situ studies. <i>Applied Surface Science</i> , 2021, 549, 149263.	3.1	18
18	Elucidating Pt-Based Nanocomposite Catalysts for the Oxygen Reduction Reaction in Rotating Disk Electrode and Gas Diffusion Electrode Measurements. <i>ACS Catalysis</i> , 2021, 11, 7584-7594.	5.5	11

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19	The Oxygen Reduction Reaction on Pt: Why Particle Size and Interparticle Distance Matter. ACS Catalysis, 2021, 11, 7144-7153.	5.5	49
20	Anion Dependent Particle Size Control of Platinum Nanoparticles Synthesized in Ethylene Glycol. Nanomaterials, 2021, 11, 2092.	1.9	6
21	Bayesian Optimization of High-Entropy Alloy Compositions for Electrocatalytic Oxygen Reduction**. Angewandte Chemie, 2021, 133, 24346-24354.	1.6	22
22	Surfactant-free colloidal strategies for highly dispersed and active supported IrO ₂ catalysts: Synthesis and performance evaluation for the oxygen evolution reaction. Journal of Catalysis, 2021, 401, 54-62.	3.1	14
23	Bayesian Optimization of High-Entropy Alloy Compositions for Electrocatalytic Oxygen Reduction**. Angewandte Chemie - International Edition, 2021, 60, 24144-24152.	7.2	61
24	Bifunctional Pt-IrO ₂ Catalysts for the Oxygen Evolution and Oxygen Reduction Reactions: Alloy Nanoparticles versus Nanocomposite Catalysts. ACS Catalysis, 2021, 11, 820-828.	5.5	50
25	Electrochemical Reduction of CO ₂ on Au Electrocatalysts Under Commercially Relevant Condition. ECS Meeting Abstracts, 2021, MA2021-02, 1727-1727.	0.0	0
26	Testing fuel cell catalysts under more realistic reaction conditions: accelerated stress tests in a gas diffusion electrode setup. JPhys Energy, 2020, 2, 024003.	2.3	29
27	Self-supported nanostructured iridium-based networks as highly active electrocatalysts for oxygen evolution in acidic media. Journal of Materials Chemistry A, 2020, 8, 1066-1071.	5.2	43
28	Structural Changes of Au(111) Single-Crystal Electrode Surface in Ionic Liquids. ChemElectroChem, 2020, 7, 501-508.	1.7	8
29	On the facile and accurate determination of the Pt content in standard carbon supported Pt fuel cell catalysts. Analytica Chimica Acta, 2020, 1101, 41-49.	2.6	3
30	Synthesis of Iridium Nanocatalysts for Water Oxidation in Acid: Effect of the Surfactant. ChemCatChem, 2020, 12, 1282-1287.	1.8	31
31	Carbon-Supported Platinum Electrocatalysts Probed in a Gas Diffusion Setup with Alkaline Environment: How Particle Size and Mesoscopic Environment Influence the Degradation Mechanism. ACS Catalysis, 2020, 10, 13040-13049.	5.5	18
32	Environment Matters: CO ₂ RR Electrocatalyst Performance Testing in a Gas-Fed Zero-Gap Electrolyzer. ACS Catalysis, 2020, 10, 13096-13108.	5.5	55
33	Teaching old precursors new tricks: Fast room temperature synthesis of surfactant-free colloidal platinum nanoparticles. Journal of Colloid and Interface Science, 2020, 577, 319-328.	5.0	20
34	Particle Size Effect on Platinum Dissolution: Practical Considerations for Fuel Cells. ACS Applied Materials & Interfaces, 2020, 12, 25718-25727.	4.0	48
35	Solvent-Dependent Growth and Stabilization Mechanisms of Surfactant-Free Colloidal Pt Nanoparticles. Chemistry - A European Journal, 2020, 26, 9012-9023.	1.7	26
36	UV-induced syntheses of surfactant-free precious metal nanoparticles in alkaline methanol and ethanol. Nanoscale Advances, 2020, 2, 2288-2292.	2.2	15

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37	Influence of Anion Chaotropicity on the SO ₂ Oxidation Reaction: When Spectator Species Determine the Reaction Pathway. <i>ChemElectroChem</i> , 2020, 7, 1843-1850.	1.7	8
38	Comparative study of cytotoxicity by platinum nanoparticles and ions in vitro systems based on fish cell lines. <i>Toxicology in Vitro</i> , 2020, 66, 104859.	1.1	9
39	(Invited) The Toolbox Concept for the Synthesis of Surfactant-Free Colloidal Nanoparticles as Electrocatalysts. <i>ECS Transactions</i> , 2020, 97, 443-455.	0.3	4
40	A New Approach to Probe the Degradation of Fuel Cell Catalysts under Realistic Conditions: Combining Tests in a Gas Diffusion Electrode Setup with Small Angle X-ray Scattering. <i>Journal of the Electrochemical Society</i> , 2020, 167, 134515.	1.3	29
41	The Dissolution Dilemma for Low Pt Loading Polymer Electrolyte Membrane Fuel Cell Catalysts. <i>Journal of the Electrochemical Society</i> , 2020, 167, 164501.	1.3	32
42	(Invited) The Tool-Box Concept for the Synthesis of Surfactant-Free Colloidal Nanoparticles As Electrocatalysts. <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 1140-1140.	0.0	0
43	Opportunities and Knowledge Gaps of SO ₂ Electrocatalytic Oxidation for H ₂ Electrochemical Generation. <i>ACS Catalysis</i> , 2019, 9, 8136-8143.	5.5	22
44	Monovalent Alkali Cations: Simple and Eco-Friendly Stabilizers for Surfactant-Free Precious Metal Nanoparticle Colloids. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 13680-13686.	3.2	29
45	Oxygen Reduction Reaction on Polycrystalline Platinum: On the Activity Enhancing Effect of Polyvinylidene Difluoride. <i>Surfaces</i> , 2019, 2, 69-77.	1.0	3
46	Controlled Synthesis of Surfactant-Free Water-Dispersible Colloidal Platinum Nanoparticles by the Co4Cat Process. <i>ChemSusChem</i> , 2019, 12, 1229-1239.	3.6	27
47	Accelerated Durability Test for High-Surface-Area Oxyhydroxide Nickel Supported on Raney Nickel as Catalyst for the Alkaline Oxygen Evolution Reaction. <i>ChemPhysChem</i> , 2019, 20, 3147-3153.	1.0	11
48	Electrochemical Synthesis of High-Value Chemicals: Detection of Key Reaction Intermediates and Products Combining Gas Chromatography-Mass Spectrometry and <i>in Situ</i> Infrared Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2019, 123, 12762-12772.	1.5	3
49	Sputtered Platinum Thin-films for Oxygen Reduction in Gas Diffusion Electrodes: A Model System for Studies under Realistic Reaction Conditions. <i>Surfaces</i> , 2019, 2, 336-348.	1.0	27
50	Examining the Structure Sensitivity of the Oxygen Evolution Reaction on Pt Single-Crystal Electrodes: A Combined Experimental and Theoretical Study. <i>ChemPhysChem</i> , 2019, 20, 3154-3162.	1.0	11
51	Enhanced Oxygen Reduction Reaction on Fe/N/C Catalyst in Acetate Buffer Electrolyte. <i>ACS Catalysis</i> , 2019, 9, 3082-3089.	5.5	32
52	Testing a Silver Nanowire Catalyst for the Selective CO ₂ Reduction in a Gas Diffusion Electrode Half-cell Setup Enabling High Mass Transport Conditions. <i>Chimia</i> , 2019, 73, 922.	0.3	18
53	Catalyst design criteria and fundamental limitations in the electrochemical synthesis of dimethyl carbonate. <i>Green Chemistry</i> , 2019, 21, 6200-6209.	4.6	6
54	Catalyst Development for Water/CO ₂ Co-electrolysis. <i>Chimia</i> , 2019, 73, 707.	0.3	5

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55	Ir nanoparticles with ultrahigh dispersion as oxygen evolution reaction (OER) catalysts: synthesis and activity benchmarking. <i>Catalysis Science and Technology</i> , 2019, 9, 6345-6356.	2.1	61
56	Mechanism of Electrochemical Lâ€cysteine Oxidation on Pt. <i>ChemElectroChem</i> , 2019, 6, 1009-1013.	1.7	7
57	Support-free nanostructured Pt Cu electrocatalyst for the oxygen reduction reaction prepared by alternating magnetron sputtering. <i>Journal of Power Sources</i> , 2019, 413, 432-440.	4.0	12
58	Electrochemically Generated Copper Carbonyl for Selective Dimethyl Carbonate Synthesis. <i>ACS Catalysis</i> , 2019, 9, 859-866.	5.5	15
59	Halideâ€induced Leaching of Pt Nanoparticles â€ Manipulation of Particle Size by Controlled Ostwald Ripening. <i>ChemNanoMat</i> , 2019, 5, 462-471.	1.5	17
60	PEMFC Catalyst Testing: From RDE to GDE Setup. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
61	The Interparticle Distance Effect on Transient Platinum Dissolution: Degradation at High and Low Loadings. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
62	Benchmarking high surface area electrocatalysts in a gas diffusion electrode: measurement of oxygen reduction activities under realistic conditions. <i>Energy and Environmental Science</i> , 2018, 11, 988-994.	15.6	147
63	Influence of the Electrode and Chaotropicity of the Electrolyte on the Oscillatory Behavior of the Electrocatalytic Oxidation of SO ₂ . <i>Journal of Physical Chemistry C</i> , 2018, 122, 1243-1247.	1.5	11
64	Electrochemical stability of subnanometer Pt clusters. <i>Electrochimica Acta</i> , 2018, 277, 211-217.	2.6	18
65	On the Preparation and Testing of Fuel Cell Catalysts Using the Thin Film Rotating Disk Electrode Method. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	20
66	Size effect studies in catalysis: a simple surfactant-free synthesis of sub 3Ânm Pd nanocatalysts supported on carbon. <i>RSC Advances</i> , 2018, 8, 33794-33797.	1.7	7
67	Spatially Localized Synthesis and Structural Characterization of Platinum Nanocrystals Obtained Using UV Light. <i>ACS Omega</i> , 2018, 3, 10351-10356.	1.6	13
68	[Mo 3 S 13] 2âˆ’ Cluster Decorated Sulfurâ€doped Reduced Graphene Oxide as Noble Metalâ€Free Catalyst for Hydrogen Evolution Reaction in Polymer Electrolyte Membrane Electrolyzers. <i>ChemElectroChem</i> , 2018, 5, 2672-2680.	1.7	15
69	Colloids for Catalysts: A Concept for the Preparation of Superior Catalysts of Industrial Relevance. <i>Angewandte Chemie</i> , 2018, 130, 12518-12521.	1.6	12
70	Colloids for Catalysts: A Concept for the Preparation of Superior Catalysts of Industrial Relevance. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 12338-12341.	7.2	53
71	Kinetics, Assembling, and Conformation Control of Lâ€cysteine Adsorption on Pt Investigated by in situ FTIR Spectroscopy and QCMâ€D. <i>ChemPhysChem</i> , 2018, 19, 2340-2348.	1.0	13
72	Investigating Particle Size Effects in Catalysis by Applying a Size-Controlled and Surfactant-Free Synthesis of Colloidal Nanoparticles in Alkaline Ethylene Glycol: Case Study of the Oxygen Reduction Reaction on Pt. <i>ACS Catalysis</i> , 2018, 8, 6627-6635.	5.5	119

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73	NanoElectrocatalysis: From Basic Research to Applications in Energy Conversion. <i>Chimia</i> , 2018, 72, 276-285.	0.3	2
74	Enhanced Oxygen Reduction Activity by Selective Anion Adsorption on Non-Precious-Metal Catalysts. <i>ACS Catalysis</i> , 2018, 8, 7104-7112.	5.5	53
75	Particle Size Effect Vs. Particle Proximity Effect: Systematic Study on ORR Activity of High Surface Area Pt/C Catalysts for Polymer Electrolyte Membrane Fuel Cells. <i>ECS Meeting Abstracts</i> , 2018, , .	0.0	0
76	Nanoparticles in a box: a concept to isolate, store and re-use colloidal surfactant-free precious metal nanoparticles. <i>Journal of Materials Chemistry A</i> , 2017, 5, 6140-6145.	5.2	37
77	UV-Induced Synthesis and Stabilization of Surfactant-Free Colloidal Pt Nanoparticles with Controlled Particle Size in Ethylene Glycol. <i>ChemNanoMat</i> , 2017, 3, 89-93.	1.5	30
78	pH matters: The influence of the catalyst ink on the oxygen reduction activity determined in thin film rotating disk electrode measurements. <i>Journal of Power Sources</i> , 2017, 353, 19-27.	4.0	51
79	Accessing the Inaccessible: Analyzing the Oxygen Reduction Reaction in the Diffusion Limit. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 38176-38180.	4.0	21
80	Design and Application of External Reference Electrode for Kinetic Studies at Elevated Temperatures and Pressures. <i>Journal of the Electrochemical Society</i> , 2017, 164, F821-F824.	1.3	1
81	Single Graphene Layer on Pt(111) Creates Confined Electrochemical Environment via Selective Ion Transport. <i>Angewandte Chemie</i> , 2017, 129, 13063-13067.	1.6	1
82	Single Graphene Layer on Pt(111) Creates Confined Electrochemical Environment via Selective Ion Transport. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 12883-12887.	7.2	32
83	Tetrahexahedral Pt Nanoparticles: Comparing the Oxygen Reduction Reaction under Transient vs Steady-State Conditions. <i>ACS Catalysis</i> , 2017, 7, 1-6.	5.5	25
84	Synthesis Mechanism and Influence of Light on Unprotected Platinum Nanoparticles Synthesis at Room Temperature. <i>ChemNanoMat</i> , 2016, 2, 104-107.	1.5	15
85	In-Situ FTIR Spectroscopy: Probing the Electrochemical Interface during the Oxygen Reduction Reaction on a Commercial Platinum High-Surface-Area Catalyst. <i>ChemCatChem</i> , 2016, 8, 1125-1131.	1.8	19
86	Evaluation of temperature and electrolyte concentration dependent Oxygen solubility and diffusivity in phosphoric acid. <i>Electrochimica Acta</i> , 2016, 209, 399-406.	2.6	18
87	Fuel cell catalyst degradation: Identical location electron microscopy and related methods. <i>Nano Energy</i> , 2016, 29, 299-313.	8.2	62
88	On the oxygen reduction reaction in phosphoric acid electrolyte: Evidence of significantly increased inhibition at steady state conditions. <i>Electrochimica Acta</i> , 2016, 204, 78-83.	2.6	21
89	The colloidal tool-box approach for fuel cell catalysts: utilizing graphitized carbon supports. <i>Electrochimica Acta</i> , 2016, 197, 221-227.	2.6	3
90	The colloidal tool-box approach for fuel cell catalysts: Systematic study of perfluorosulfonate-ionomer impregnation and Pt loading. <i>Catalysis Today</i> , 2016, 262, 82-89.	2.2	23

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91	Oxygen Reduction Reaction on Pt Overlayers Deposited onto a Gold Film: Ligand, Strain, and Ensemble Effect. <i>ACS Catalysis</i> , 2016, 6, 671-676.	5.5	79
92	On the structural composition and stability of Fe-N-C catalysts prepared by an intermediate acid leaching. <i>Journal of Solid State Electrochemistry</i> , 2016, 20, 969-981.	1.2	39
93	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.	1.3	112
94	Gold nanoparticles assembled with dithiocarbamate-anchored molecular wires. <i>Scientific Reports</i> , 2015, 5, 15273.	1.6	11
95	Equilibrium coverage of OH ad in correlation with platinum catalyzed fuel cell reactions in HClO ₄ . <i>Electrochemistry Communications</i> , 2015, 53, 41-44.	2.3	21
96	On the influence of hydronium and hydroxide ion diffusion on the hydrogen and oxygen evolution reactions in aqueous media. <i>Electrochimica Acta</i> , 2015, 158, 13-17.	2.6	16
97	1-Naphthylamine functionalized Pt nanoparticles: electrochemical activity and redox chemistry occurring on one surface. <i>New Journal of Chemistry</i> , 2015, 39, 2557-2564.	1.4	12
98	On the influence of hydronium and hydroxide ion diffusion on the hydrogen and oxygen evolution reactions in aqueous media. <i>Electrochimica Acta</i> , 2015, 159, 66-70.	2.6	12
99	Electrochemical Stability and Postmortem Studies of Pt/SiC Catalysts for Polymer Electrolyte Membrane Fuel Cells. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 6153-6161.	4.0	25
100	Surface Chemistry of "Unprotected" Nanoparticles: A Spectroscopic Investigation on Colloidal Particles. <i>Journal of Physical Chemistry C</i> , 2015, 119, 17655-17661.	1.5	64
101	Gas diffusion electrode setup for catalyst testing in concentrated phosphoric acid at elevated temperatures. <i>Review of Scientific Instruments</i> , 2015, 86, 024102.	0.6	33
102	Structural disordering of de-alloyed Pt bimetallic nanocatalysts: the effect on oxygen reduction reaction activity and stability. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 28044-28053.	1.3	14
103	From single crystal model catalysts to systematic studies of supported nanoparticles. <i>Surface Science</i> , 2015, 631, 278-284.	0.8	23
104	Design and test of a flexible electrochemical setup for measurements in aqueous electrolyte solutions at elevated temperature and pressure. <i>Review of Scientific Instruments</i> , 2014, 85, 085105.	0.6	19
105	Investigating the activity enhancement on Pt _x Co _{1-x} alloys induced by a combined strain and ligand effect. <i>Journal of Power Sources</i> , 2014, 245, 908-914.	4.0	27
106	Stabilizing Catalytically Active Nanoparticles by Ligand Linking: Toward Three-Dimensional Networks with High Catalytic Surface Area. <i>Langmuir</i> , 2014, 30, 5564-5573.	1.6	25
107	Pt _x Co _{1-x} alloy NPs prepared by colloidal tool-box synthesis: The effect of de-alloying on the oxygen reduction reaction activity. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 9143-9148.	3.8	7
108	Core-shell TiO ₂ @C: towards alternative supports as replacement for high surface area carbon for PEMFC catalysts. <i>Electrochimica Acta</i> , 2014, 139, 21-28.	2.6	39

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109	Comparative degradation study of carbon supported proton exchange membrane fuel cell electrocatalysts – The influence of the platinum to carbon ratio on the degradation rate. <i>Journal of Power Sources</i> , 2014, 261, 14-22.	4.0	163
110	The particle proximity effect: from model to high surface area fuel cell catalysts. <i>RSC Advances</i> , 2014, 4, 14971.	1.7	70
111	Activity inhibition and its mitigation in high temperature proton exchange membrane fuel cells: The role of phosphoric acid, ammonium trifluoromethanesulfonate, and polyvinylidene difluoride. <i>Journal of Power Sources</i> , 2014, 272, 1072-1077.	4.0	15
112	The effect of particle proximity on the oxygen reduction rate of size-selected platinum clusters. <i>Nature Materials</i> , 2013, 12, 919-924.	13.3	327
113	Investigating the corrosion of high surface area carbons during start/stop fuel cell conditions: A Raman study. <i>Electrochimica Acta</i> , 2013, 114, 455-461.	2.6	65
114	On the influence of the Pt to carbon ratio on the degradation of high surface area carbon supported PEM fuel cell electrocatalysts. <i>Electrochemistry Communications</i> , 2013, 34, 153-156.	2.3	57
115	Pt based PEMFC catalysts prepared from colloidal particle suspensions – a toolbox for model studies. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 3602.	1.3	64
116	Probing Degradation by IL-TEM: The Influence of Stress Test Conditions on the Degradation Mechanism. <i>Journal of the Electrochemical Society</i> , 2013, 160, F608-F615.	1.3	96
117	Design, development, and demonstration of a fully LabVIEW controlled <i>in situ</i> electrochemical Fourier transform infrared setup combined with a wall-jet electrode to investigate the electrochemical interface of nanoparticulate electrocatalysts under reaction conditions. <i>Review of Scientific Instruments</i> , 2013, 84, 074103.	0.6	10
118	Comparative IL-TEM Study Concerning the Degradation of Carbon Supported Pt-Based Electrocatalysts. <i>Journal of the Electrochemical Society</i> , 2012, 159, B677-B682.	1.3	46
119	Comparative DEMS study on the electrochemical oxidation of carbon blacks. <i>Journal of Power Sources</i> , 2012, 217, 392-399.	4.0	50
120	Establishing the potential dependent equilibrium oxide coverage on platinum in alkaline solution and its influence on the oxygen reduction. <i>Journal of Power Sources</i> , 2012, 217, 262-267.	4.0	20
121	Identical-location TEM investigations of Pt/C electrocatalyst degradation at elevated temperatures. <i>Journal of Electroanalytical Chemistry</i> , 2011, 662, 355-360.	1.9	98
122	The Particle Size Effect on the Oxygen Reduction Reaction Activity of Pt Catalysts: Influence of Electrolyte and Relation to Single Crystal Models. <i>Journal of the American Chemical Society</i> , 2011, 133, 17428-17433.	6.6	461
123	IL-TEM investigations on the degradation mechanism of Pt/C electrocatalysts with different carbon supports. <i>Energy and Environmental Science</i> , 2011, 4, 234-238.	15.6	124
124	Comparative Study of the Degradation of Different Carbon Supported Pt Fuel Cell Catalysts. <i>ECS Transactions</i> , 2011, 41, 811-816.	0.3	2
125	A DEMS study on the electrochemical oxidation of a high surface area carbon black. <i>Electrochemistry Communications</i> , 2011, 13, 1473-1473.	2.3	48
126	Investigation of the Oxygen Reduction Activity on Silver – A Rotating Disc Electrode Study. <i>Fuel Cells</i> , 2010, 10, 575-581.	1.5	99

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127	Electrochemically induced nanocluster migration. <i>Electrochimica Acta</i> , 2010, 56, 810-816.	2.6	59
128	AuPt core-shell nanocatalysts with bulk Pt activity. <i>Electrochemistry Communications</i> , 2010, 12, 1487-1489.	2.3	50
129	Temperature Dependent CO Oxidation Mechanisms on Size-Selected Clusters. <i>Journal of Physical Chemistry C</i> , 2010, 114, 1651-1654.	1.5	76
130	Size-selected clusters as heterogeneous model catalysts under applied reaction conditions. <i>Physical Chemistry Chemical Physics</i> , 2010, 12, 10288.	1.3	81
131	Influence of the Electrolyte on the Particle Size Effect of the Oxygen Reduction Reaction on Pt Nanoparticles. <i>ECS Transactions</i> , 2009, 25, 455-462.	0.3	4
132	Stability of Pt Alloy High Surface Area Catalysts. <i>ECS Transactions</i> , 2009, 25, 555-563.	0.3	1
133	Adsorbate-Induced Surface Segregation for Core-Shell Nanocatalysts. <i>Angewandte Chemie - International Edition</i> , 2009, 48, 3529-3531.	7.2	295
134	Log on for new catalysts. <i>Nature Chemistry</i> , 2009, 1, 518-519.	6.6	62
135	The influence of electrochemical annealing in CO saturated solution on the catalytic activity of Pt nanoparticles. <i>Electrochimica Acta</i> , 2009, 54, 5018-5022.	2.6	27
136	Degradation of Carbon-Supported Pt Bimetallic Nanoparticles by Surface Segregation. <i>Journal of the American Chemical Society</i> , 2009, 131, 16348-16349.	6.6	182
137	Non-destructive transmission electron microscopy study of catalyst degradation under electrochemical treatment. <i>Journal of Power Sources</i> , 2008, 185, 734-739.	4.0	150
138	Fuel cell catalyst degradation on the nanoscale. <i>Electrochemistry Communications</i> , 2008, 10, 1144-1147.	2.3	309
139	Measurement of oxygen reduction activities via the rotating disc electrode method: From Pt model surfaces to carbon-supported high surface area catalysts. <i>Electrochimica Acta</i> , 2008, 53, 3181-3188.	2.6	888
140	Dual pulsed-beam controlled mole fraction studies of the catalytic oxidation of CO on supported Pd nanocatalysts. <i>Journal of Catalysis</i> , 2008, 255, 234-240.	3.1	27
141	Analysis of the Impact of Individual Glass Constituents on Electrocatalysis on Pt Electrodes in Alkaline Solution. <i>Journal of the Electrochemical Society</i> , 2008, 155, P78.	1.3	63
142	Micromechanical sensor for studying heats of surface reactions, adsorption, and cluster deposition processes. <i>Review of Scientific Instruments</i> , 2007, 78, 054101.	0.6	12
143	Trends in electrocatalysis on extended and nanoscale Pt-bimetallic alloy surfaces. <i>Nature Materials</i> , 2007, 6, 241-247.	13.3	2,902
144	Cluster Chemistry: Size-Dependent Reactivity Induced by Reverse Spill-Over. <i>Journal of the American Chemical Society</i> , 2007, 129, 9635-9639.	6.6	52

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145	Chapter 1 Size effects in the chemistry of small clusters. <i>Chemical Physics of Solid Surfaces</i> , 2007, , 1-51.	0.3	15
146	Factors in gold nanocatalysis: oxidation of CO in the non-scalable size regime. <i>Topics in Catalysis</i> , 2007, 44, 145-158.	1.3	190
147	The polymerization of acetylene on supported metal clusters. <i>Low Temperature Physics</i> , 2006, 32, 1097-1103.	0.2	10
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