

# Jonathan Quinson

## List of Publications by Year in descending order

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69  
papers

1,536  
citations

279487

23  
h-index

344852

36  
g-index

87  
all docs

87  
docs citations

87  
times ranked

1435  
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	Simple Setup Miniaturization with Multiple Benefits for Green Chemistry in Nanoparticle Synthesis. <i>ACS Omega</i> , 2022, 7, 4714-4721.	1.6	6
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	Surfactant-free syntheses and pair distribution function analysis of osmium nanoparticles. <i>Beilstein Journal of Nanotechnology</i> , 2022, 13, 230-235.	1.5	5
7	Iridium and IrOx nanoparticles: an overview and review of syntheses and applications. <i>Advances in Colloid and Interface Science</i> , 2022, 303, 102643.	7.0	21
8	Colloidal surfactant-free syntheses of precious metal nanoparticles for electrocatalysis. <i>Current Opinion in Electrochemistry</i> , 2022, 34, 100977.	2.5	10
9	Breaking with the Principles of Coreduction to Form Stoichiometric Intermetallic PdCu Nanoparticles. <i>Small Methods</i> , 2022, 6, e2200420.	4.6	5
10	Electrochemical Reduction of CO <sub>2</sub> on Au Electrocatalysts in a Zero-Cap, Half-Cell Gas Diffusion Electrode Setup: a Systematic Performance Evaluation and Comparison to an H <sub>2</sub> Cell Setup**. <i>ChemElectroChem</i> , 2022, 9, .	1.7	17
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	Surfactant-free colloidal strategies for highly dispersed and active supported IrO <sub>2</sub> catalysts: Synthesis and performance evaluation for the oxygen evolution reaction. Journal of Catalysis, 2021, 401, 54-62.	3.1	14
22	Bifunctional Pt-IrO <sub>2</sub> Catalysts for the Oxygen Evolution and Oxygen Reduction Reactions: Alloy Nanoparticles versus Nanocomposite Catalysts. ACS Catalysis, 2021, 11, 820-828.	5.5	50
23	Surfactant-Free Precious Metal Colloidal Nanoparticles for Catalysis. Frontiers in Nanotechnology, 2021, 3, .	2.4	14
24	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
25	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
26	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
27	Synthesis of Iridium Nanocatalysts for Water Oxidation in Acid: Effect of the Surfactant. ChemCatChem, 2020, 12, 1282-1287.	1.8	31
28	From platinum atoms in molecules to colloidal nanoparticles: A review on reduction, nucleation and growth mechanisms. Advances in Colloid and Interface Science, 2020, 286, 102300.	7.0	57
29	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
30	Toward Overcoming the Challenges in the Comparison of Different Pd Nanocatalysts: Case Study of the Ethanol Oxidation Reaction. Inorganics, 2020, 8, 59.	1.2	8
31	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
32	Particle Size Effect on Platinum Dissolution: Practical Considerations for Fuel Cells. ACS Applied Materials & Interfaces, 2020, 12, 25718-25727.	4.0	48
33	Solvent-Dependent Growth and Stabilization Mechanisms of Surfactant-Free Colloidal Pt Nanoparticles. Chemistry - A European Journal, 2020, 26, 9012-9023.	1.7	26
34	UV-induced syntheses of surfactant-free precious metal nanoparticles in alkaline methanol and ethanol. Nanoscale Advances, 2020, 2, 2288-2292.	2.2	15
35	Janus Structured Multiwalled Carbon Nanotube Forests for Simple Asymmetric Surface Functionalization and Patterning at the Nanoscale. ACS Applied Nano Materials, 2020, 3, 7554-7562.	2.4	2
36	(Invited) The Toolbox Concept for the Synthesis of Surfactant-Free Colloidal Nanoparticles as Electrocatalysts. ECS Transactions, 2020, 97, 443-455.	0.3	4

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37	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
38	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
39	(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
40	Towards 3D self-assembled rolled multiwall carbon nanotube structures by spontaneous peel off. <i>Beilstein Journal of Nanotechnology</i> , 2020, 11, 1865-1872.	1.5	0
41	Carbon nanotube columns for flow systems: influence of synthesis parameters. <i>Nanoscale Advances</i> , 2020, 2, 5874-5882.	2.2	2
42	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
43	Electrolyte Effects on the Electrocatalytic Performance of Iridium-Based Nanoparticles for Oxygen Evolution in Rotating Disc Electrodes. <i>ChemPhysChem</i> , 2019, 20, 2956-2963.	1.0	44
44	Controlled Synthesis of Surfactant-Free Water-Dispersible Colloidal Platinum Nanoparticles by the Co4Cat Process. <i>ChemSusChem</i> , 2019, 12, 1229-1239.	3.6	27
45	Catalyst Development for Water/CO <sub>2</sub> Co-electrolysis. <i>Chimia</i> , 2019, 73, 707.	0.3	5
46	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
47	Electrochemical stability of subnanometer Pt clusters. <i>Electrochimica Acta</i> , 2018, 277, 211-217.	2.6	18
48	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
49	Degradation of Metal Clusters and Nanoparticles Under Electrochemical Control. , 2018, , 434-441.		2
50	Size effect studies in catalysis: a simple surfactant-free synthesis of sub 3Ånm Pd nanocatalysts supported on carbon. <i>RSC Advances</i> , 2018, 8, 33794-33797.	1.7	7
51	Spatially Localized Synthesis and Structural Characterization of Platinum Nanocrystals Obtained Using UV Light. <i>ACS Omega</i> , 2018, 3, 10351-10356.	1.6	13
52	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
53	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
54	Application of new nanoparticle structures as catalysts: general discussion. <i>Faraday Discussions</i> , 2018, 208, 575-593.	1.6	1

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55	Control of catalytic nanoparticle synthesis: general discussion. Faraday Discussions, 2018, 208, 471-495.	1.6	3
56	The challenges of characterising nanoparticulate catalysts: general discussion. Faraday Discussions, 2018, 208, 339-394.	1.6	5
57	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. ACS Catalysis, 2018, 8, 6627-6635.	5.5	119
58	Surfactant-Free Preparation of Ir Based Oer Catalysts in Low Boiling Point Solvents and Their Catalytic Evaluation. ECS Meeting Abstracts, 2018, , .	0.0	0
59	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. ECS Meeting Abstracts, 2018, , .	0.0	0
60	Nanoparticles in a box: a concept to isolate, store and re-use colloidal surfactant-free precious metal nanoparticles. Journal of Materials Chemistry A, 2017, 5, 6140-6145.	5.2	37
61	UVâ€nduced Synthesis and Stabilization of Surfactantâ€Free Colloidal Pt Nanoparticles with Controlled Particle Size in Ethylene Glycol. ChemNanoMat, 2017, 3, 89-93.	1.5	30
62	pH matters: The influence of the catalyst ink on the oxygen reduction activity determined in thin film rotating disk electrode measurements. Journal of Power Sources, 2017, 353, 19-27.	4.0	51
63	H <sub>2</sub> -Driven biocatalytic hydrogenation in continuous flow using enzyme-modified carbon nanotube columns. Chemical Communications, 2017, 53, 9839-9841.	2.2	48
64	Green and facile approach for enhancing the inherent magnetic properties of carbon nanotubes for water treatment applications. PLoS ONE, 2017, 12, e0180636.	1.1	24
65	Synchrotron-Based Infrared Microanalysis of Biological Redox Processes under Electrochemical Control. Analytical Chemistry, 2016, 88, 6666-6671.	3.2	19
66	Comparison of carbon materials as electrodes for enzyme electrocatalysis: hydrogenase as a case study. Faraday Discussions, 2014, 172, 473-496.	1.6	28
67	Carbon electrode interfaces for synthesis, sensing and electrocatalysis: general discussion. Faraday Discussions, 2014, 172, 497-520.	1.6	1
68	Immobilization of Magnetic Nanoparticles onto Conductive Surfaces Modified by Diazonium Chemistry. Langmuir, 2012, 28, 12671-12680.	1.6	11
69	Osmium and OsOx nanoparticles: an overview of syntheses and applications. Open Research Europe, 0, 2, 39.	2.0	0