

Mehtap Oezaslan

List of Publications by Year in descending order

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172443

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docs citations

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times ranked

8181
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanoporous Copper Ribbons Prepared by Chemical Dealloying of a Melt-Spun ZnCu Alloy. <i>Journal of Physical Chemistry C</i> , 2022, 126, 212-226.	3.1	9
2	Highly Durable Pt-Based Core-Shell Catalysts with Metallic and Oxidized Co Species for Boosting the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , 2022, 12, 6394-6408.	11.2	30
3	How to Impede Hydrogen Evolution on Carbon Based Materials?. <i>ECS Meeting Abstracts</i> , 2022, MA2022-01, 1481-1481.	0.0	0
4	Self-supported Pt-CoO networks combining high specific activity with high surface area for oxygen reduction. <i>Nature Materials</i> , 2021, 20, 208-213.	27.5	139
5	Tuning of Pt-Co nanoparticle motifs for enhancing the HOR performance in alkaline media. <i>Journal of Materials Chemistry A</i> , 2021, 9, 15415-15431.	10.3	19
6	A Unified Research Data Infrastructure for Catalysis Research – Challenges and Concepts. <i>ChemCatChem</i> , 2021, 13, 3223-3236.	3.7	45
7	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.	4.6	11
8	Surfactant-free synthesis of size controlled platinum nanoparticles: Insights from in situ studies. <i>Applied Surface Science</i> , 2021, 549, 149263.	6.1	18
9	Quantitative 3D Characterization of Nanoporous Gold Nanoparticles by Transmission Electron Microscopy. <i>Microscopy and Microanalysis</i> , 2021, 27, 678-686.	0.4	3
10	The Oxygen Reduction Reaction on Pt: Why Particle Size and Interparticle Distance Matter. <i>ACS Catalysis</i> , 2021, 11, 7144-7153.	11.2	49
11	Insights from Operando and Identical Location (IL) Techniques on the Activation of Electrocatalysts for the Conversion of CO ₂ : A Mini-Review. <i>Chimia</i> , 2021, 75, 733.	0.6	4
12	Teaching old precursors new tricks: Fast room temperature synthesis of surfactant-free colloidal platinum nanoparticles. <i>Journal of Colloid and Interface Science</i> , 2020, 577, 319-328.	9.4	20
13	Solvent-Dependent Growth and Stabilization Mechanisms of Surfactant-Free Colloidal Pt Nanoparticles. <i>Chemistry - A European Journal</i> , 2020, 26, 9012-9023.	3.3	26
14	Fundamental Aspects of Contamination during the Hydrogen Evolution/Oxidation Reaction in Alkaline Media. <i>Journal of the Electrochemical Society</i> , 2020, 167, 024506.	2.9	6
15	CO ₂ electrolysis – Complementary operando XRD, XAS and Raman spectroscopy study on the stability of Cu ₂ O foam catalysts. <i>Journal of Catalysis</i> , 2020, 389, 592-603.	6.2	42
16	Dual Metastability in Electroless Plating: Complex Inertness Enabling the Deposition of Composition-Tunable Platinum Copper Alloy Nanostructures. <i>Chemistry - A European Journal</i> , 2020, 26, 3030-3033.	3.3	6
17	The Dissolution Dilemma for Low Pt Loading Polymer Electrolyte Membrane Fuel Cell Catalysts. <i>Journal of the Electrochemical Society</i> , 2020, 167, 164501.	2.9	32
18	(Invited) Towards Solving the Long Standing Mystery of the Chemical State of Co in Pt _x Co _{1-x} to Boost HOR and ORR. <i>ECS Meeting Abstracts</i> , 2020, MA2020-02, 2300-2300.	0.0	0

#	ARTICLE	IF	CITATIONS
19	Iron Contamination and Local Distribution within a 50 Cm Single-Channel Proton Exchange Membrane Water Electrolysis Cell. ECS Meeting Abstracts, 2020, MA2020-02, 2456-2456.	0.0	0
20	Effects of Capping Agents on the Oxygen Reduction Reaction Activity and Shape Stability of Pt Nanocubes. ChemPhysChem, 2019, 20, 3010-3023.	2.1	53
21	Controlled Synthesis of Surfactant-Free Water-Dispersible Colloidal Platinum Nanoparticles by the Co4Cat Process. ChemSusChem, 2019, 12, 1229-1239.	6.8	27
22	The role of polyvinylpyrrolidone (PVP) as a capping and structure-directing agent in the formation of Pt nanocubes. Nanoscale Advances, 2019, 1, 3095-3106.	4.6	175
23	Ir nanoparticles with ultrahigh dispersion as oxygen evolution reaction (OER) catalysts: synthesis and activity benchmarking. Catalysis Science and Technology, 2019, 9, 6345-6356.	4.1	61
24	Effect of Monovalent Cations on the HOR/HER Activity for Pt in Alkaline Environment. Journal of the Electrochemical Society, 2019, 166, F66-F73.	2.9	50
25	Halide-Induced Leaching of Pt Nanoparticles – Manipulation of Particle Size by Controlled Ostwald Ripening. ChemNanoMat, 2019, 5, 462-471.	2.8	17
26	Contamination of Metal Impurities during Hydrogen Evolution/Oxidation Reaction. ECS Meeting Abstracts, 2019, , .	0.0	0
27	Comprehensive Operando Electrochemical XAS Study on Nanoporous Cu Oxide Foams for CO ₂ Reduction Reaction. ECS Meeting Abstracts, 2019, , .	0.0	0
28	Novel Pt-Co Catalyst Concept to Boost the Oxygen Reduction Reaction for Acidic and Alkaline Polymer Electrolyte Fuel Cells. ECS Meeting Abstracts, 2019, , .	0.0	0
29	Hydrogen Oxidation Reaction on Pt and Pt Alloys and the Role of Cations in Alkaline Media. ECS Meeting Abstracts, 2019, , .	0.0	0
30	Contamination of Metal Impurities during Hydrogen Evolution/Oxidation Reaction. ECS Transactions, 2019, 92, 703-714.	0.5	0
31	TEM, FTIR and Electrochemistry Study: Desorption of PVP from Pt Nanocubes. Zeitschrift Fur Physikalische Chemie, 2018, 232, 1319-1333.	2.8	15
32	Dealloying on the Atomic Scale. , 2018, , 32-43.		1
33	Fundamental Insights in Degradation Mechanisms of Pt/C Nanoparticles for the ORR. ECS Transactions, 2018, 86, 433-445.	0.5	13
34	Ligament Evolution in Nanoporous Cu Films Prepared by Dealloying. Journal of Physical Chemistry C, 2018, 122, 26378-26384.	3.1	9
35	Nucleation-Controlled Solution Deposition of Silver Nanoplate Architectures for Facile Derivatization and Catalytic Applications. Advanced Materials, 2018, 30, e1805179.	21.0	23
36	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.	11.2	119

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37	Fundamental Insights in Degradation Mechanisms of Pt/C Nanoparticles for the ORR. ECS Meeting Abstracts, 2018, , .	0.0	0
38	Operando XAS Studies: Electro-Reduction of CO ₂ on Nanoporous Cu Foams. ECS Meeting Abstracts, 2018, , .	0.0	0
39	Shape-Controlled Pt Nanoparticles for the Electro-Reduction of Oxygen. ECS Meeting Abstracts, 2018, , .	0.0	0
40	Initial Zinc Electrodeposition on Copper Studied By in-Situ AFM. ECS Meeting Abstracts, 2018, , .	0.0	0
41	Carbon Supported Pt-Co Alloy Nanoparticles As HOR and ORR Catalyst for PEM Fuel Cells. ECS Meeting Abstracts, 2018, , .	0.0	0
42	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.	10.3	37
43	Electrochemical Cleaning of Polyvinylpyrrolidone-capped Pt Nanocubes for the Oxygen Reduction Reaction. Electrochimica Acta, 2017, 241, 544-552.	5.2	40
44	German Catalysis Meeting â€“ 50 Years and as Young as Ever. ChemCatChem, 2017, 9, 2018-2020.	3.7	0
45	Structural Analysis and Electrochemical Properties of Bimetallic Palladiumâ€“Platinum Aerogels Prepared by a Twoâ€“Step Gelation Process. ChemCatChem, 2017, 9, 798-808.	3.7	20
46	Preparation and Characterization of Nanoporous Copper Films by Chemical Dealloying. ECS Transactions, 2017, 80, 541-550.	0.5	1
47	Homogeneity and elemental distribution in self-assembled bimetallic Pdâ€“Pt aerogels prepared by a spontaneous one-step gelation process. Physical Chemistry Chemical Physics, 2016, 18, 20640-20650.	2.8	22
48	Frontispiece: Alloying Behavior of Self-Assembled Noble Metal Nanoparticles. Chemistry - A European Journal, 2016, 22, .	3.3	1
49	Alloying Behavior of Selfâ€“Assembled Noble Metal Nanoparticles. Chemistry - A European Journal, 2016, 22, 13446-13450.	3.3	25
50	Electrocatalytic hydrogen peroxide formation on mesoporous non-metal nitrogen-doped carbon catalyst. Journal of Energy Chemistry, 2016, 25, 251-257.	12.9	107
51	Weimar 2015: Catalysing Tomorrowâ€™s Solutions. ChemCatChem, 2015, 7, 1794-1796.	3.7	2
52	Electroless plating of ultrathin palladium films: self-initiated deposition and application in microreactor fabrication. Materials Research Express, 2015, 2, 105010.	1.6	15
53	Noble Metal Aerogelsâ€™ Synthesis, Characterization, and Application as Electrocatalysts. Accounts of Chemical Research, 2015, 48, 154-162.	15.6	313
54	High-resolution and large-area nanoparticle arrays using EUV interference lithography. Nanoscale, 2015, 7, 7386-7393.	5.6	51

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55	Pt-Based Core-Shell Catalyst Architectures for Oxygen Fuel Cell Electrodes. Journal of Physical Chemistry Letters, 2013, 4, 3273-3291.	4.6	346
56	Controlling Catalytic Selectivities during CO ₂ Electroreduction on Thin Cu Metal Overlayers. Journal of Physical Chemistry Letters, 2013, 4, 2410-2413.	4.6	168
57	Electroless synthesis of nanostructured nickel and nickel-boron tubes and their performance as unsupported ethanol electrooxidation catalysts. Journal of Power Sources, 2013, 222, 243-252.	7.8	82
58	German Catalysis, Celebrated in Weimar. ChemCatChem, 2013, 5, 1297-1298.	3.7	2
59	Core-Shell Fine Structure and Size-Dependent Morphology of Dealloyed Pt Bimetallic Nanoparticle Fuel Cell Electrocatalysts. ECS Transactions, 2013, 50, 1633-1641.	0.5	2
60	Oxygen Electroreduction on PtCo ₃ , PtCo and Pt ₃ Co Alloy Nanoparticles for Alkaline and Acidic PEM Fuel Cells. Journal of the Electrochemical Society, 2012, 159, B394-B405.	2.9	148
61	PtCu ₃ , PtCu and Pt ₃ Cu Alloy Nanoparticle Electrocatalysts for Oxygen Reduction Reaction in Alkaline and Acidic Media. Journal of the Electrochemical Society, 2012, 159, B444-B454.	2.9	215
62	Electrocatalytic Oxygen Evolution Reaction (OER) on Ru, Ir, and Pt Catalysts: A Comparative Study of Nanoparticles and Bulk Materials. ACS Catalysis, 2012, 2, 1765-1772.	11.2	2,019
63	Size-Dependent Morphology of Dealloyed Bimetallic Catalysts: Linking the Nano to the Macro Scale. Journal of the American Chemical Society, 2012, 134, 514-524.	13.7	340
64	Formation and Analysis of Core-Shell Fine Structures in Pt Bimetallic Nanoparticle Fuel Cell Electrocatalysts. Journal of Physical Chemistry C, 2012, 116, 19073-19083.	3.1	105
65	Core-Shell Fine Structure and Size-Dependent Morphology of Dealloyed Pt Bimetallic Nanoparticle Fuel Cell Electrocatalysts. ECS Meeting Abstracts, 2012, , .	0.0	0
66	Mesoporous Nitrogen Doped Carbon Supported Platinum PEM Fuel Cell Electrocatalyst Made From Ionic Liquids. ChemCatChem, 2012, 4, 479-483.	3.7	56
67	In Situ Observation of the Thermally Induced Growth of Platinum Nanoparticle Catalysts Using High-Temperature X-ray Diffraction. ChemPhysChem, 2012, 13, 828-834.	2.1	19
68	Activity, Structure and Degradation of Dealloyed PtNi ₃ Nanoparticle Electrocatalyst for the Oxygen Reduction Reaction in PEMFC. Journal of the Electrochemical Society, 2011, 159, B24-B33.	2.9	94
69	Oxygen Electroreduction on Pt _x Co _{1-x} and Pt _x Cu _{1-x} Alloy Nanoparticles for Basic and Acidic PEM Fuel Cell. ECS Transactions, 2011, 41, 1659-1668.	0.5	5
70	In Situ Observation of Bimetallic Alloy Nanoparticle Formation and Growth Using High-Temperature XRD. Chemistry of Materials, 2011, 23, 2159-2165.	6.7	118
71	Stability and Degradation of Dealloyed PtCu ₃ , PtCo ₃ and PtNi ₃ Nanoparticle PEM Fuel Cell Electrocatalysts. ECS Meeting Abstracts, 2011, , .	0.0	0
72	Activity, Stability, and Degradation Mechanisms of Dealloyed PtCu ₃ and PtCo ₃ Nanoparticle Fuel Cell Catalysts. ChemCatChem, 2011, 3, 1805-1813.	3.7	61

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73	Multiple activation of ion track etched polycarbonate for the electroless synthesis of metal nanotubes. Applied Physics A: Materials Science and Processing, 2011, 105, 847-854.	2.3	37
74	Activity of dealloyed PtCo ₃ and PtCu ₃ nanoparticle electrocatalyst for oxygen reduction reaction in polymer electrolyte membrane fuel cell. Journal of Power Sources, 2011, 196, 5240-5249.	7.8	227
75	Activity and Structure of Dealloyed PtNi ₃ Nanoparticle Electrocatalyst for Oxygen Reduction Reaction in PEMFC. ECS Transactions, 2011, 41, 1079-1088.	0.5	16
76	In-situ High Temperature X-ray Diffraction Study of PtCu ₃ Alloy Electrocatalyst for PEMFC. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2010, 636, 2111-2111.	1.2	5
77	Structure-Activity Relationship of Dealloyed PtCo ₃ and PtCu ₃ Nanoparticle Electrocatalyst for Oxygen Reduction Reaction in PEMFC. ECS Transactions, 2010, 33, 333-341.	0.5	18
78	Activity, stability and degradation of multi walled carbon nanotube (MWCNT) supported Pt fuel cell electrocatalysts. Physical Chemistry Chemical Physics, 2010, 12, 15251.	2.8	158
79	NanopartikelÄre bimetallische Kern-Schale-Katalysatoren fÅ¼r Brennstoffzellen. Chemie-Ingenieur-Technik, 2008, 80, 1267-1267.	0.8	3
80	Direct determination of selenium in sub-milligram amounts of human sperm nuclei by electrothermal atomic absorption spectrometry. Microchemical Journal, 2007, 85, 239-243.	4.5	7