Iwona A Rutkowska

List of Publications by Year
in descending order

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65 papers	1,213 citations	516561 16 h-index	377752 34 g-index
66 all docs	66 docs citations	66 times ranked	1950 citing authors

#	Article	IF	Citations
1	Metal oxide photoanodes for solar hydrogen production. Journal of Materials Chemistry, 2008, 18, 2298.	6.7	460
2	Electrocatalytic oxidation of small organic molecules in acid medium: Enhancement of activity of noble metal nanoparticles and their alloys by supporting or modifying them with metal oxides. Electrochimica Acta, 2013, 110, 474-483.	2.6	99
3	Hexagonal nanorods of tungsten trioxide: Synthesis, structure, electrochemical properties and activity as supporting material in electrocatalysis. Applied Surface Science, 2011, 257, 8223-8229.	3.1	58
4	Toward Pt-Free Anion-Exchange Membrane Fuel Cells: Feâ€“Sn Carbon Nitrideâ€“Graphene Coreâ€“Shell Electrocatalysts for the Oxygen Reduction Reaction. Chemistry of Materials, 2018, 30, 2651-2659.	3.2	44
5	Enhanced photoelectrochemical CO2-reduction system based on mixed Cu2O â€“ nonstoichiometric TiO2 photocathode. Catalysis Today, 2018, 300, 145-151.	2.2	44
6	Effective charge propagation and storage in hybrid films of tungsten oxide and poly(3,4-ethylenedioxythiophene). Journal of Solid State Electrochemistry, 2010, 14, 2049-2056.	1.2	37
7	Evaluation of reduced-graphene-oxide-supported gold nanoparticles as catalytic system for electroreduction of oxygen in alkaline electrolyte. Electrochimica Acta, 2017, 233, 113-122.	2.6	35
8	Elucidation of role of graphene in catalytic designs for electroreduction of oxygen. Current Opinion in Electrochemistry, 2018, 9, 257-264.	2.5	35
9	Admixing palladium nanoparticles with tungsten oxide nanorods toward more efficient electrocatalytic oxidation of formic acid. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2013, 439, 200-206.	2.3	29
10	Electrochemical characterization of Prussian blue type nickel hexacyanoferrate redox mediator for potential application as charge relay in dye-sensitized solar cells. Journal of Solid State Electrochemistry, 2011, 15, 2545-2552.	1.2	26
11	Fe^{III}₄₈â€Containing 96â€Tungstoâ€16â€Phosphate: Synthesis, Structure, Magnetism and Electrochemistry. Chemistry - A European Journal, 2020, 26, 15821-15824.	1.7	25
12	Reduction of carbon dioxide at copper(I) oxide photocathode activated and stabilized by over-coating with oligoaniline. Electrochimica Acta, 2018, 265, 400-410.	2.6	23
13	Discrete, Cationic Palladium(II)â€Oxo Clusters via fâ€Metal Ion Incorporation and their Macrocyclic Hostâ€Guest Interactions with Sulfonatocalixarenes. Angewandte Chemie - International Edition, 2022, 61, .	7.2	20
14	Nanocomposite Semiâ€Solid Redox Ionic Liquid Electrolytes with Enhanced Chargeâ€Transport Capabilities for Dyeâ€Sensitized Solar Cells. ChemSusChem, 2015, 8, 2560-2568.	3.6	18
15	Elucidation of activity of copper and copper oxide nanomaterials for electrocatalytic and photoelectrochemical reduction of carbon dioxide. Current Opinion in Electrochemistry, 2020, 23, 131-138.	2.5	18
16	15-Copper(<scp>ii</scp>)-containing 36-tungsto-4-silicates(<scp>iv</scp>) [Cu₁₅O₂(OH)₁₀X(A-Î±-SiW₉O₃₄)₄]^{25â^'}(X Dalton Transactions, 2018, 47, 12439-12448.	1.6	17
17	Photoelectrochemical reduction of CO2: Stabilization and enhancement of activity of copper(I) oxide semiconductor by over-coating with tungsten carbide and carbide-derived carbons. Electrochimica Acta, 2020, 341, 136054.	2.6	16
18	Enhancement of oxygen reduction at Co-porphyrin catalyst by supporting onto hybrid multi-layered film of polypyrrole and polyoxometalate-modified gold nanoparticles. Journal of Solid State Electrochemistry, 2016, 20, 1199-1208.	1.2	15

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19	Activation of Reduced-Graphene-Oxide Supported Pt Nanoparticles by Aligning with WO₃-Nanowires toward Oxygen Reduction in Acid Medium: Diagnosis with Rotating-Ring-Disk Voltammetry and Double-Potential-Step Chronocoulometry. Journal of the Electrochemical Society, 2018, 165, J3384-J3391.	1.3	13
20	Electrocatalytic and Photoelectrochemical Reduction of Carbon Dioxide at Hierarchical Hybrid Films of Copper(I) Oxide Decorated with Tungsten(VI) Oxide Nanowires. Journal of the Electrochemical Society, 2019, 166, H3271-H3278.	1.3	13
21	Correlation between Precursor Properties and Performance in the Oxygen Reduction Reaction of Pt and Co â€œCore-shellâ€•Carbon Nitride-Based Electrocatalysts. Electrocatalysis, 2020, 11, 143-159.	1.5	13
22	Electrocatalytic oxidation of ethanol in acid medium: Enhancement of activity of vulcan-supported Platinum-based nanoparticles upon immobilization within nanostructured zirconia matrices. Functional Materials Letters, 2014, 07, 1440005.	0.7	12
23	Fabrication of Nanostructured Palladium Within Tridentate Schiff-Base-Ligand Coordination Architecture: Enhancement of Electrocatalytic Activity Toward CO2 Electroreduction. Electrocatalysis, 2014, 5, 229-234.	1.5	12
24	Enhancement of Oxidation of Formic Acid in Acid Medium on Zirconia-Supported Phosphotungstate-Decorated Noble Metal (Pd, Pt) Nanoparticles. Australian Journal of Chemistry, 2016, 69, 394.	0.5	12
25	Enhancement of Activity and Development of Low Pt Content Electrocatalysts for Oxygen Reduction Reaction in Acid Media. Molecules, 2021, 26, 5147.	1.7	11
26	A formalism to compare electrocatalysts for the oxygen reduction reaction by cyclic voltammetry with the thin-film rotating ring-disk electrode measurements. Current Opinion in Electrochemistry, 2022, 31, 100839.	2.5	11
27	Electrocatalytic effects during redox reactions of arsenic at platinum nanoparticles in acid medium: Possibility of preconcentration, electroactive film formation, and detection of As(III) and As(V). Electrochimica Acta, 2019, 319, 499-510.	2.6	10
28	Critical Reviewâ€”Electrocatalytic Sensors for Arsenic Oxo Species. Journal of the Electrochemical Society, 2020, 167, 037565.	1.3	10
29	Integration of vanadium-mixed addenda Dawson heteropolytungstate within poly(3,4-ethylenedioxythiophene) and poly(2,2â€²-bithiophene) films by electrodeposition from the nonionic micellar aqueous medium. Electrochimica Acta, 2011, 56, 3605-3615.	2.6	9
30	Low-Noble-Metal-Loading Hybrid Catalytic System for Oxygen Reduction Utilizing Reduced-Graphene-Oxide-Supported Platinum Aligned with Carbon-Nanotube-Supported Iridium. Catalysts, 2020, 10, 689.	1.6	9
31	Heteropolytungstate-assisted fabrication and deposition of catalytic silver nanoparticles on different reduced graphene oxide supports: Electroreduction of oxygen in alkaline electrolyte. Journal of Electroanalytical Chemistry, 2020, 875, 114694.	1.9	8
32	Photoelectrochemical Reduction of CO₂ at Poly(4â€Vinylpyridine)â€Stabilized Copper(I) Oxide Semiconductor: Feasibility of Interfacial Decoration with Palladium Cocatalyst. Solar Rrl, 2021, 5, 2000705.	3.1	7
33	Prussian-blue-modified reduced-graphene-oxide as active support for Pt nanoparticles during oxygen electroreduction in acid medium. Journal of Electroanalytical Chemistry, 2020, 875, 114347.	1.9	6
34	Assembly of crosslinked oxo-cyanoruthenate and zirconium oxide bilayers: Application in electrocatalytic films based on organically modified silica with templated pores. Electrochimica Acta, 2014, 122, 197-203.	2.6	5
35	Strategies for Electrocatalytic Reduction and Photoelectrochemical Conversion of Carbon Dioxide to Fuels and Utility Chemicals. Electrochemical Society Interface, 2020, 29, 67-72.	0.3	5
36	Stabilization and activation of Pd nanoparticles for efficient CO2-reduction: Importance of their generation within supramolecular network of tridentate Schiff-base ligands with N,N coordination sites. Electrochimica Acta, 2021, 388, 138550.	2.6	5

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37	Enhancement of oxidation of dimethyl ether through application of zirconia matrix for immobilization of noble metal catalytic nanoparticles. Journal of Solid State Electrochemistry, 2020, 24, 3173-3183.	1.2	4
38	Visible-light-driven CO2reduction on dye-sensitized NiO photocathodes decorated with palladium nanoparticles. RSC Advances, 2020, 10, 31680-31690.	1.7	4
39	Activation of bimetallic PtFe nanoparticles with zeolite-type cesium salts of vanadium-substituted polyoxometallates toward electroreduction of oxygen at low Pt loadings for fuel cells. Journal of Solid State Electrochemistry, 2022, 26, 3-16.	1.2	4
40	Discrete, Cationic Palladium(II)â€Oxo Clusters viaÂfâ€Metal Ion Incorporation and their Macrocyclic Hostâ€Guest Interactions with Sulfonatocalixarenes. Angewandte Chemie, 0, , .	1.6	4
41	Future of interfacial electrochemistry: from structure-function relationships to better understanding of charge transfer reactions and (photo)electrocatalytic reactivity. Journal of Solid State Electrochemistry, 2020, 24, 2115-2116.	1.2	2
42	Foreword to the memorial issue for Professor Roberto Marassi. Journal of Solid State Electrochemistry, 2022, 26, 1-2.	1.2	2
43	Enhancement of Activity of Copper Sites Toward Electroreduction of Carbon Dioxide through Hierarchical Deposition of Metal Oxide Cocatalysts. ECS Transactions, 2021, 104, 23-35.	0.3	1
44	(Invited) Hybrid Mixed-Metal-Oxide-Based Catalytic Systems for Efficient Electroreduction of Carbon Dioxide. ECS Meeting Abstracts, 2020, MA2020-02, 3204-3204.	0.0	1
45	Toward Effective CO₂ Reduction in an Acid Medium: Electrocatalysis at Cu₂O-Derived Polycrystalline Cu Sites Immobilized within the Network of WO₃ Nanowires. ACS Measurement Science Au, 2022, 2, 553-567.	1.9	1
46	Electrocatalytic and Protective Properties of Ruthenium-Derivatized Bacterial Biofilm on Electrodes and Photoelectrodes. ECS Meeting Abstracts, 2021, MA2021-01, 1907-1907.	0.0	0
47	(Invited) Enhancement of Oxidation of Dimethyl Ether through Applicationof Metal-Oxide-Supported Noble Metal Catalytic Nanoparticles: Comparison to Behavior of Other Simple Organic Fuels. ECS Meeting Abstracts, 2021, MA2021-01, 1890-1890.	0.0	0
48	(Invited) Chronoculometric Approach to Diagnosis of Oxygen Reduction at Low Pt-Content Electrocatalysts. ECS Meeting Abstracts, 2021, MA2021-01, 1899-1899.	0.0	0
49	(Invited) Photoelectrochemical Reduction of CO2 at Poly(4-vinylpyridine)-Stabilized Copper(I) Oxide Semiconductor Decorated with Palladium Cocatalyst. ECS Meeting Abstracts, 2021, MA2021-01, 1284-1284.	0.0	0
50	(Invited) Interplay between Surface/Porosimetric, Chemical and Electrochemical Characterization of â€œCore-Shellâ€•High-Pt ORR Electrocatalysts. ECS Meeting Abstracts, 2021, MA2021-01, 958-958.	0.0	0
51	(Invited) Reduction of Carbon Dioxide and Activation of Nitrogen at Heme Type Porphyrin-Complexes of Iron Existing in Enzymes. ECS Meeting Abstracts, 2021, MA2021-02, 1548-1548.	0.0	0
52	Enhancement of Activity of Copper Sites Toward Electroreduction of Carbon Dioxide through Hierarchical Deposition of Metal Oxide Cocatalysts. ECS Meeting Abstracts, 2021, MA2021-02, 1316-1316.	0.0	0
53	Toward High-Performance and Durable Hierarchical â€œCore-Shellâ€•Carbon Nitride Electrocatalysts for the Oxygen Reduction Reaction. ECS Meeting Abstracts, 2021, MA2021-02, 1143-1143.	0.0	0
54	(Invited) Electrocatalytic Reduction of Highly Inert Redox Probes: Arsenates, Nitrates, Chlorates, As Well As Carbon Dioxide and Nitrogen in Acid Medium. ECS Meeting Abstracts, 2021, MA2021-02, 1537-1537.	0.0	0

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55	Hybrid Electrocatalysts Composed of PtSn, Ru or PtRu Nanoparticles for Low-Temperature Oxidation of Dimethyl Ether Fuel. ECS Transactions, 2022, 108, 17-28.	0.3	0
56	(Keynote) A General Electrochemical Formalism for Vanadium Redox Flow Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 2005-2005.	0.0	0
57	Enhancement of Activity Low-Pt-Content O₂-Reduction Catalysts through Formation of Hybrid Systems with Sub-Stoichiometric Cerium Oxide Nanostructures. ECS Meeting Abstracts, 2022, MA2022-01, 2069-2069.	0.0	0
58	(Invited) Oxygen Reduction at Low-Pt-Content-Catalysts in Acid Media: Development of Systems and Electroanalytical Diagnostic Methodology. ECS Meeting Abstracts, 2022, MA2022-01, 2061-2061.	0.0	0
59	(Invited) Charge Propagation in Highly Concentrated Iodine/Iodide Solutions As Potential Electrolytes for Redox Flow Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 2001-2001.	0.0	0
60	(Invited) Development and Characterization of Polyoxometallate-Based Systems for Aqueous Redox Flow Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 1999-1999.	0.0	0
61	(Invited) Bacterial Biofilms As Active Components of Electrocatalytic and Photoelectrochemical Systems for Reduction of Carbon Dioxide. ECS Meeting Abstracts, 2022, MA2022-01, 1574-1574.	0.0	0
62	A Formalism Adopting Thin-Film Rotating Ring-Disk Electrode Studies to Compare Electrocatalysts for the Oxygen Reduction Reaction (ORR). ECS Meeting Abstracts, 2022, MA2022-01, 2108-2108.	0.0	0
63	Hybrid Electrocatalysts Composed of PtSn, Ru or PtRu Nanoparticles for Low-Temperature Oxidation of Dimethyl Ether Fuel. ECS Meeting Abstracts, 2022, MA2022-01, 1470-1470.	0.0	0
64	Application of Mixed-Metal-Oxides As Active Supports for Dispersed Metal Centers: Enhancement of Electrocatalytic Reduction of Carbon Dioxide. ECS Meeting Abstracts, 2022, MA2022-01, 2085-2085.	0.0	0
65	(Invited) Correlation between the Porosimetric Features, Morphology, â€œEx-Situâ€•and â€œin-Situâ€• electrochemical Performance of Hierarchical â€œCore-Shellâ€•Carbon Nitride Pt-Alloy ORR Electrocatalysts. ECS Meeting Abstracts, 2022, MA2022-01, 2062-2062.	0.0	0