Aleksandar R Zeradjanin

List of Publications by Year
in descending order

48 papers	4,673 citations	159525 30 h-index	182361 51 g-index
53 all docs	53 docs citations	53 times ranked	5983 citing authors

#	Article	IF	Citations
1	Oxygen Electrochemistry as a Cornerstone for Sustainable Energy Conversion. Angewandte Chemie - International Edition, 2014, 53, 102-121.	7.2	1,186
2	Dissolution of Noble Metals during Oxygen Evolution in Acidic Media. ChemCatChem, 2014, 6, 2219-2223.	1.8	394
3	Towards a comprehensive understanding of platinum dissolution in acidic media. Chemical Science, 2014, 5, 631-638.	3.7	337
4	A Critical Review on Hydrogen Evolution Electrocatalysis: Reâ€exploring the Volcanoâ€relationship. Electroanalysis, 2016, 28, 2256-2269.	1.5	241
5	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
6	Stability of nanostructured iridium oxide electrocatalysts during oxygen evolution reaction in acidic environment. Electrochemistry Communications, 2014, 48, 81-85.	2.3	229
7	Dissolution of Platinum in the Operational Range of Fuel Cells. ChemElectroChem, 2015, 2, 1471-1478.	1.7	152
8	Gold dissolution: towards understanding of noble metal corrosion. RSC Advances, 2013, 3, 16516.	1.7	142
9	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
10	Rational design of the electrode morphology for oxygen evolution â€" enhancing the performance for catalytic water oxidation. RSC Advances, 2014, 4, 9579.	1.7	117
11	On the faradaic selectivity and the role of surface inhomogeneity during the chlorine evolution reaction on ternary Tiâ€"Ruâ€"Ir mixed metal oxide electrocatalysts. Physical Chemistry Chemical Physics, 2014, 16, 13741-13747.	1.3	97
12	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
13	Temperature-Dependent Dissolution of Polycrystalline Platinum in Sulfuric Acid Electrolyte. Electrocatalysis, 2014, 5, 235-240.	1.5	81
14	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
15	Microstructural impact of anodic coatings on the electrochemical chlorine evolution reaction. Physical Chemistry Chemical Physics, 2012, 14, 7392.	1.3	70
16	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
17	Is a major breakthrough in the oxygen electrocatalysis possible?. Current Opinion in Electrochemistry, 2018, 9, 214-223.	2.5	66
18	Visualization of Chlorine Evolution at Dimensionally Stable Anodes by Means of Scanning Electrochemical Microscopy. Analytical Chemistry, 2011, 83, 7645-7650.	3.2	57

#	Article	IF	Citations
19	Platinum recycling going green via induced surface potential alteration enabling fast and efficient dissolution. Nature Communications, 2016, 7, 13164.	5.8	55
20	The impact of dissolved reactive gases on platinum dissolution in acidic media. Electrochemistry Communications, 2014, 40, 49-53.	2.3	54
21	Role of Water in the Chlorine Evolution Reaction at RuO₂â€Based Electrodesâ€"Understanding Electrocatalysis as a Resonance Phenomenon. ChemSusChem, 2012, 5, 1897-1904.	3.6	53
22	Evaluation of the Catalytic Performance of Gasâ€Evolving Electrodes using Local Electrochemical Noise Measurements. ChemSusChem, 2012, 5, 1905-1911.	3.6	51
23	Utilization of the catalyst layer of dimensionally stable anodesâ€"Interplay of morphology and active surface area. Electrochimica Acta, 2012, 82, 408-414.	2.6	49
24	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
25	The Effect of Iron Impurities on Transition Metal Catalysts for the Oxygen Evolution Reaction in Alkaline Environment: Activity Mediators or Active Sites?. Catalysis Letters, 2021, 151, 1843-1856.	1.4	46
26	Activity and Stability of Oxides During Oxygen Evolution Reactionâ€â€â€From Mechanistic Controversies Toward Relevant Electrocatalytic Descriptors. Frontiers in Energy Research, 2021, 8, .	1.2	45
27	What is the trigger for the hydrogen evolution reaction? â€" towards electrocatalysis beyond the Sabatier principle. Physical Chemistry Chemical Physics, 2020, 22, 8768-8780.	1.3	41
28	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
29	Application of SECM in tracing of hydrogen peroxide at multicomponent non-noble electrocatalyst films for the oxygen reduction reaction. Catalysis Today, 2013, 202, 55-62.	2.2	33
30	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
31	Effect of Temperature on Gold Dissolution in Acidic Media. Journal of the Electrochemical Society, 2014, 161, H501-H507.	1.3	32
32	Frequent Pitfalls in the Characterization of Electrodes Designed for Electrochemical Energy Conversion and Storage. ChemSusChem, 2018, 11, 1278-1284.	3.6	30
33	How to minimise destabilising effect of gas bubbles on water splitting electrocatalysts?. Current Opinion in Electrochemistry, 2021, 30, 100797.	2.5	24
34	Extracting the kinetic parameters of the hydrogen evolution reaction at Pt in acidic media by means of dynamic multi-frequency analysis. Electrochimica Acta, 2019, 308, 328-336.	2.6	21
35	Electrochemical characteristics of rechargeable polyaniline/lead dioxide cell. Journal of Power Sources, 2012, 217, 193-198.	4.0	20
36	Evaluation of kinetic constants on porous, non-noble catalyst layers for oxygen reductionâ€"A comparative study between SECM and hydrodynamic methods. Catalysis Today, 2016, 262, 74-81.	2.2	20

#	Article	IF	Citations
37	Stability and Activity of Nonâ€Nobleâ€Metalâ€Based Catalysts Toward the Hydrogen Evolution Reaction. Angewandte Chemie, 2017, 129, 9899-9903.	1.6	17
38	Utilization of the catalyst layer of dimensionally stable anodes. Part 2: Impact of spatial current distribution on electrocatalytic performance. Journal of Electroanalytical Chemistry, 2018, 828, 63-70.	1.9	14
39	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
40	Cyclodextrin inhibits zinc corrosion by destabilizing point defect formation in the oxide layer. Beilstein Journal of Nanotechnology, 2018, 9, 936-944.	1.5	13
41	Sustainable generation of hydrogen using chemicals with regional oversupply â€" Feasibility of the electrolysis in acido-alkaline reactor. International Journal of Hydrogen Energy, 2014, 39, 16275-16281.	3.8	9
42	Scanning Electrochemical Microscopy for Investigation of Multicomponent Bioelectrocatalytic Films. ECS Transactions, 2011, 35, 33-44.	0.3	8
43	Expanding the frontiers of hydrogen evolution electrocatalysisâ€"searching for the origins of electrocatalytic activity in the anomalies of the conventional model. Electrochimica Acta, 2021, 388, 138583.	2.6	8
44	Electrocatalysis Beyond 2020: How to Tune the Preexponential Frequency Factor. ChemElectroChem, 2022, 9, .	1.7	5
45	Perspective on experimental evaluation of adsorption energies at solid/liquid interfaces. Journal of Solid State Electrochemistry, 2021, 25, 33-42.	1.2	4
46	Dissolution of Platinum in the Operational Range of Fuel Cells. ChemElectroChem, 2015, 2, 1407-1407.	1.7	3
47	Impact of the spatial distribution of morphological pattern on the efficiency of electrocatalytic gas evolving reactions. Journal of the Serbian Chemical Society, 2014, 79, 325-330.	0.4	2
48	Electrocatalysis Beyond 2020: How to Tune the Preexponential Frequency Factor. ChemElectroChem, 0, , .	1.7	0