

# Vojislav R Stamenkovic

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

107 papers	27,580 citations	64 h-index	120 g-index
120 ext. papers	30,933 ext. citations	13.2 avg, IF	6.93 L-index

#	Paper	IF	Citations
107	Employing the Dynamics of the Electrochemical Interface in Aqueous Zinc-Ion Battery Cathodes. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2102135	15.6	9
106	Dynamically Stable Active Sites from Surface Evolution of Perovskite Materials during the Oxygen Evolution Reaction. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 2741-2750	16.4	58
105	Atomic-scale Imaging of PGM-free Catalyst Active Sites by 30 keV 4D-STEM. <i>Microscopy and Microanalysis</i> , <b>2021</b> , 27, 2976-2977	0.5	
104	Improved Rate for the Oxygen Reduction Reaction in a Sulfuric Acid Electrolyte using a Pt(111) Surface Modified with Melamine. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 3369-3376	9.5	12
103	Dynamic stability of active sites in hydr(oxy)oxides for the oxygen evolution reaction. <i>Nature Energy</i> , <b>2020</b> , 5, 222-230	62.3	241
102	Selective electrocatalysis imparted by metal-insulator transition for durability enhancement of automotive fuel cells. <i>Nature Catalysis</i> , <b>2020</b> , 3, 639-648	36.5	32
101	Detection of protons using the rotating ring disk electrode method during electrochemical oxidation of battery electrolytes. <i>Electrochemistry Communications</i> , <b>2020</b> , 120, 106785	5.1	1
100	Unusual Reduction of Graphene Oxide by Titanium Dioxide Electrons Produced by Ionizing Radiation: Reaction Products and Mechanism. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 5425-5435	3.8	2
99	Electrokinetic Analysis of Poorly Conductive Electrocatalytic Materials. <i>ACS Catalysis</i> , <b>2020</b> , 10, 4990-4996	36.1	21
98	Ultrafine Pt cluster and RuO <sub>2</sub> heterojunction anode catalysts designed for ultra-low Pt-loading anion exchange membrane fuel cells. <i>Nanoscale Horizons</i> , <b>2020</b> , 5, 316-324	10.8	22
97	Eliminating dissolution of platinum-based electrocatalysts at the atomic scale. <i>Nature Materials</i> , <b>2020</b> , 19, 1207-1214	27	57
96	Past, present, and future of lead-acid batteries. <i>Science</i> , <b>2020</b> , 369, 923-924	33.3	38
95	Turning Catalysts on by Light-Induced Stress: When Red Means Go. <i>ChemElectroChem</i> , <b>2019</b> , 6, 3264-3267	7.3	2
94	Impact of Catalyst Ink Dispersing Methodology on Fuel Cell Performance Using in-Situ X-ray Scattering. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 6417-6427	6.1	65
93	Facet-dependent active sites of a single Cu <sub>2</sub> O particle photocatalyst for CO <sub>2</sub> reduction to methanol. <i>Nature Energy</i> , <b>2019</b> , 4, 957-968	62.3	170
92	Hydrogen evolution reaction on copper: Promoting water dissociation by tuning the surface oxophilicity. <i>Electrochemistry Communications</i> , <b>2019</b> , 100, 30-33	5.1	52
91	Electrocatalytic transformation of HF impurity to H <sub>2</sub> and LiF in lithium-ion batteries. <i>Nature Catalysis</i> , <b>2018</b> , 1, 255-262	36.5	83

90	Dynamics of electrochemical Pt dissolution at atomic and molecular levels. <i>Journal of Electroanalytical Chemistry</i> , <b>2018</b> , 819, 123-129	4.1	51
89	Real-Time Monitoring of Cation Dissolution/Deintercalation Kinetics from Transition-Metal Oxides in Organic Environments. <i>Journal of Physical Chemistry Letters</i> , <b>2018</b> , 9, 4935-4940	6.4	11
88	Role of structural hydroxyl groups in enhancing performance of electrochemically-synthesized bilayer V <sub>2</sub> O <sub>5</sub> . <i>Nano Energy</i> , <b>2018</b> , 53, 449-457	17.1	17
87	Binary Transition-Metal Oxide Hollow Nanoparticles for Oxygen Evolution Reaction. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 24715-24724	9.5	47
86	Mechanism of Zn Insertion into Nanostructured MnO <sub>2</sub> : A Nonaqueous Rechargeable Zn Metal Battery. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 4874-4884	9.6	171
85	Best Practices and Testing Protocols for Benchmarking ORR Activities of Fuel Cell Electrocatalysts Using Rotating Disk Electrode. <i>Electrocatalysis</i> , <b>2017</b> , 8, 366-374	2.7	83
84	High-Performance RhP Electrocatalyst for Efficient Water Splitting. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 5494-5502	16.4	267
83	Control of Architecture in Rhombic Dodecahedral Pt-Ni Nanoframe Electrocatalysts. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 11678-11681	16.4	140
82	Balancing activity, stability and conductivity of nanoporous core-shell iridium/iridium oxide oxygen evolution catalysts. <i>Nature Communications</i> , <b>2017</b> , 8, 1449	17.4	168
81	Double layer effects in electrocatalysis: The oxygen reduction reaction and ethanol oxidation reaction on Au(1 1 1), Pt(1 1 1) and Ir(1 1 1) in alkaline media containing Na and Li cations. <i>Catalysis Today</i> , <b>2016</b> , 262, 41-47	5.3	61
80	Energy and fuels from electrochemical interfaces. <i>Nature Materials</i> , <b>2016</b> , 16, 57-69	27	1064
79	Tuning the Reversibility of Mg Anodes via Controlled Surface Passivation by H <sub>2</sub> O/Cl <sup>-</sup> in Organic Electrolytes. <i>Chemistry of Materials</i> , <b>2016</b> , 28, 8268-8277	9.6	94
78	Superoxide (Electro)Chemistry on Well-Defined Surfaces in Organic Environments. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 15909-15914	3.8	23
77	Relationships between Atomic Level Surface Structure and Stability/Activity of Platinum Surface Atoms in Aqueous Environments. <i>ACS Catalysis</i> , <b>2016</b> , 6, 2536-2544	13.1	146
76	Design of active and stable Co-Mo-S <sub>x</sub> chalcogels as pH-universal catalysts for the hydrogen evolution reaction. <i>Nature Materials</i> , <b>2016</b> , 15, 197-203	27	683
75	Progress in the Development of Oxygen Reduction Reaction Catalysts for Low-Temperature Fuel Cells. <i>Annual Review of Chemical and Biomolecular Engineering</i> , <b>2016</b> , 7, 509-32	8.9	41
74	Recent advances in the design of tailored nanomaterials for efficient oxygen reduction reaction. <i>Nano Energy</i> , <b>2016</b> , 29, 149-165	17.1	162
73	Design principles for hydrogen evolution reaction catalyst materials. <i>Nano Energy</i> , <b>2016</b> , 29, 29-36	17.1	437

72	Shaping electrocatalysis through tailored nanomaterials. <i>Nano Today</i> , <b>2016</b> , 11, 587-600	17.9	114
71	Surface spectators and their role in relationships between activity and selectivity of the oxygen reduction reaction in acid environments. <i>Electrochemistry Communications</i> , <b>2015</b> , 60, 30-33	5.1	20
70	Nanostructured Layered Cathode for Rechargeable Mg-Ion Batteries. <i>ACS Nano</i> , <b>2015</b> , 9, 8194-205	16.7	144
69	Water as a Promoter and Catalyst for Dioxxygen Electrochemistry in Aqueous and Organic Media. <i>ACS Catalysis</i> , <b>2015</b> , 5, 6600-6607	13.1	92
68	When Small is Big: The Role of Impurities in Electrocatalysis. <i>Topics in Catalysis</i> , <b>2015</b> , 58, 1174-1180	2.3	23
67	Surface faceting and elemental diffusion behaviour at atomic scale for alloy nanoparticles during in situ annealing. <i>Nature Communications</i> , <b>2015</b> , 6, 8925	17.4	132
66	Atomic Structure of Pt <sub>3</sub> Ni Nanoframe Electrocatalysts by in Situ X-ray Absorption Spectroscopy. <i>Journal of the American Chemical Society</i> , <b>2015</b> , 137, 15817-24	16.4	163
65	Highly crystalline multimetallic nanoframes with three-dimensional electrocatalytic surfaces. <i>Science</i> , <b>2014</b> , 343, 1339-43	33.3	1989
64	Using Surface Segregation To Design Stable Ru-Ir Oxides for the Oxygen Evolution Reaction in Acidic Environments. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 14240-14245	3.6	37
63	Undecylprodigiosin conjugated monodisperse gold nanoparticles efficiently cause apoptosis in colon cancer cells in vitro. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 3271-3281	7.3	7
62	Functional links between Pt single crystal morphology and nanoparticles with different size and shape: the oxygen reduction reaction case. <i>Energy and Environmental Science</i> , <b>2014</b> , 7, 4061-4069	35.4	176
61	Multimetallic core/interlayer/shell nanostructures as advanced electrocatalysts. <i>Nano Letters</i> , <b>2014</b> , 14, 6361-7	11.5	127
60	Activity-Stability Trends for the Oxygen Evolution Reaction on Monometallic Oxides in Acidic Environments. <i>Journal of Physical Chemistry Letters</i> , <b>2014</b> , 5, 2474-8	6.4	416
59	Functional links between stability and reactivity of strontium ruthenate single crystals during oxygen evolution. <i>Nature Communications</i> , <b>2014</b> , 5, 4191	17.4	208
58	Using surface segregation to design stable Ru-Ir oxides for the oxygen evolution reaction in acidic environments. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 14016-21	16.4	260
57	Activity-stability relationship in the surface electrochemistry of the oxygen evolution reaction. <i>Faraday Discussions</i> , <b>2014</b> , 176, 125-33	3.6	65
56	FePt and CoPt Nanowires as Efficient Catalysts for the Oxygen Reduction Reaction. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 3549-3552	3.6	59
55	Role of preferential weak hybridization between the surface-state of a metal and the oxygen atom in the chemical adsorption mechanism. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 19019-23	3.6	6

54	FePt and CoPt nanowires as efficient catalysts for the oxygen reduction reaction. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 3465-8	16.4	361
53	Improving the hydrogen oxidation reaction rate by promotion of hydroxyl adsorption. <i>Nature Chemistry</i> , <b>2013</b> , 5, 300-6	17.6	675
52	Role of Transition Metal in Fast Oxidation Reaction on the Pt <sub>3</sub> TM (111) (TM = Ni, Co) Surfaces. <i>Advanced Energy Materials</i> , <b>2013</b> , 3, 1257-1261	21.8	32
51	Thin Film Approach to Single Crystalline Electrochemistry. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 23790-23796	3.8	21
50	Single crystalline thin films as a novel class of electrocatalysts. <i>Journal of the Serbian Chemical Society</i> , <b>2013</b> , 78, 1689-1702	0.9	1
49	Electrocatalysis of the HER in acid and alkaline media. <i>Journal of the Serbian Chemical Society</i> , <b>2013</b> , 78, 2007-2015	0.9	103
48	Mesostructured thin films as electrocatalysts with tunable composition and surface morphology. <i>Nature Materials</i> , <b>2012</b> , 11, 1051-8	27	286
47	Nanostructured bilayered vanadium oxide electrodes for rechargeable sodium-ion batteries. <i>ACS Nano</i> , <b>2012</b> , 6, 530-8	16.7	279
46	Cross-linked Heterogeneous Nanoparticles as Bifunctional Probe. <i>Chemistry of Materials</i> , <b>2012</b> , 24, 2423-2425	16.25	16
45	Surfactant Removal for Colloidal Nanoparticles from Solution Synthesis: The Effect on Catalytic Performance. <i>ACS Catalysis</i> , <b>2012</b> , 2, 1358-1362	13.1	361
44	Rational Development of Ternary Alloy Electrocatalysts. <i>Journal of Physical Chemistry Letters</i> , <b>2012</b> , 3, 1668-73	6.4	116
43	Advanced Platinum Alloy Electrocatalysts for the Oxygen Reduction Reaction. <i>ACS Catalysis</i> , <b>2012</b> , 2, 891-898	13.1	352
42	Trends in activity for the water electrolyser reactions on 3d M(Ni,Co,Fe,Mn) hydr(oxy)oxide catalysts. <i>Nature Materials</i> , <b>2012</b> , 11, 550-7	27	1910
41	Unique Electrochemical Adsorption Properties of Pt-Skin Surfaces. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 3193-3196	31.96	88
40	Unique electrochemical adsorption properties of Pt-skin surfaces. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 3139-42	16.4	221
39	Synthesis of Pt <sub>3</sub> Sn Alloy Nanoparticles and Their Catalysis for Electro-Oxidation of CO and Methanol. <i>ACS Catalysis</i> , <b>2011</b> , 1, 1719-1723	13.1	87
38	Enhancing hydrogen evolution activity in water splitting by tailoring Li <sup>+</sup> -Ni(OH) <sub>2</sub> /Pt interfaces. <i>Science</i> , <b>2011</b> , 334, 1256-60	33.3	1808
37	Multimetallic Au/FePt <sub>3</sub> nanoparticles as highly durable electrocatalyst. <i>Nano Letters</i> , <b>2011</b> , 11, 919-26	11.5	400

36	Design and synthesis of bimetallic electrocatalyst with multilayered Pt-skin surfaces. <i>Journal of the American Chemical Society</i> , <b>2011</b> , 133, 14396-403	16.4	489
35	Surfactant-induced postsynthetic modulation of Pd nanoparticle crystallinity. <i>Nano Letters</i> , <b>2011</b> , 11, 1614-7	11.5	87
34	Synthesis of Homogeneous Pt-Bimetallic Nanoparticles as Highly Efficient Electrocatalysts. <i>ACS Catalysis</i> , <b>2011</b> , 1, 1355-1359	13.1	111
33	Platinum-alloy nanostructured thin film catalysts for the oxygen reduction reaction. <i>Electrochimica Acta</i> , <b>2011</b> , 56, 8695-8699	6.7	94
32	Correlation Between Surface Chemistry and Electrocatalytic Properties of Monodisperse Pt <sub>x</sub> Ni <sub>1-x</sub> Nanoparticles. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 147-152	15.6	204
31	Tailoring the Selectivity and Stability of Chemically Modified Platinum Nanocatalysts To Design Highly Durable Anodes for PEM Fuel Cells. <i>Angewandte Chemie</i> , <b>2011</b> , 123, 5582-5586	3.6	10
30	Tailoring the selectivity and stability of chemically modified platinum nanocatalysts to design highly durable anodes for PEM fuel cells. <i>Angewandte Chemie - International Edition</i> , <b>2011</b> , 50, 5468-72	16.4	58
29	Enhanced electrocatalysis of the oxygen reduction reaction based on patterning of platinum surfaces with cyanide. <i>Nature Chemistry</i> , <b>2010</b> , 2, 880-5	17.6	243
28	Selective catalysts for the hydrogen oxidation and oxygen reduction reactions by patterning of platinum with calix[4]arene molecules. <i>Nature Materials</i> , <b>2010</b> , 9, 998-1003	27	125
27	Three Phase Interfaces at Electrified Metal/Solid Electrolyte Systems 1. Study of the Pt(hkl)/Nafion Interface. <i>Journal of Physical Chemistry C</i> , <b>2010</b> , 114, 8414-8422	3.8	143
26	Monodisperse Pt(3)Co nanoparticles as electrocatalyst: the effects of particle size and pretreatment on electrocatalytic reduction of oxygen. <i>Physical Chemistry Chemical Physics</i> , <b>2010</b> , 12, 6933-9	3.6	114
25	Rational synthesis of heterostructured nanoparticles with morphology control. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 6524-9	16.4	134
24	On the importance of correcting for the uncompensated Ohmic resistance in model experiments of the Oxygen Reduction Reaction. <i>Journal of Electroanalytical Chemistry</i> , <b>2010</b> , 647, 29-34	4.1	155
23	Oxygen reduction reaction at three-phase interfaces. <i>ChemPhysChem</i> , <b>2010</b> , 11, 2825-33	3.2	125
22	Catalysis at Bimetallic Electrochemical Interfaces <b>2010</b> , 51-73		1
21	Fine Tuning of Activity for Nanoscale Catalysts. <i>ECS Transactions</i> , <b>2009</b> , 16, 1151-1160	1	
20	Temperature-induced ordering of metal/adsorbate structures at electrochemical interfaces. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 7654-61	16.4	22
19	Monodisperse Pt <sub>3</sub> Co Nanoparticles as a Catalyst for the Oxygen Reduction Reaction: Size-Dependent Activity. <i>Journal of Physical Chemistry C</i> , <b>2009</b> , 113, 19365-19368	3.8	175

18	From ultra-high vacuum to the electrochemical interface: x-ray scattering studies of model electrocatalysts. <i>Faraday Discussions</i> , <b>2008</b> , 140, 41-58; discussion 93-112	3.6	22
17	Unique activity of platinum adislands in the CO electrooxidation reaction. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 15332-9	16.4	135
16	Segregation and stability at Pt <sub>3</sub> Ni(111) surfaces and Pt <sub>75</sub> Ni <sub>25</sub> nanoparticles. <i>Electrochimica Acta</i> , <b>2008</b> , 53, 6076-6080	6.7	53
15	Relationship between the Surface Coverage of Spectator Species and the Rate of Electrocatalytic Reactions. <i>Journal of Physical Chemistry C</i> , <b>2007</b> , 111, 18672-18678	3.8	52
14	Improved oxygen reduction activity on Pt <sub>3</sub> Ni(111) via increased surface site availability. <i>Science</i> , <b>2007</b> , 315, 493-7	33.3	3460
13	Trends in electrocatalysis on extended and nanoscale Pt-bimetallic alloy surfaces. <i>Nature Materials</i> , <b>2007</b> , 6, 241-7	27	2553
12	Changing the activity of electrocatalysts for oxygen reduction by tuning the surface electronic structure. <i>Angewandte Chemie - International Edition</i> , <b>2006</b> , 45, 2897-901	16.4	1451
11	Effect of surface composition on electronic structure, stability, and electrocatalytic properties of Pt-transition metal alloys: Pt-skin versus Pt-skeleton surfaces. <i>Journal of the American Chemical Society</i> , <b>2006</b> , 128, 8813-9	16.4	799
10	Activation energies for oxygen reduction on platinum alloys: theory and experiment. <i>Journal of Physical Chemistry B</i> , <b>2005</b> , 109, 1198-203	3.4	160
9	The effect of the particle size on the kinetics of CO electrooxidation on high surface area Pt catalysts. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 6819-29	16.4	463
8	A study of electronic structures of Pt <sub>3</sub> M (M=Ti,V,Cr,Fe,Co,Ni) polycrystalline alloys with valence-band photoemission spectroscopy. <i>Journal of Chemical Physics</i> , <b>2005</b> , 123, 204717	3.9	91
7	Electronic structure of Pd thin films on Re(0001) studied by high-resolution core-level and valence-band photoemission. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	44
6	A photoemission study of Pd ultrathin films on Pt (111). <i>Journal of Chemical Physics</i> , <b>2005</b> , 122, 184712	3.9	13
5	Surface chemistry on bimetallic alloy surfaces: adsorption of anions and oxidation of CO on Pt <sub>3</sub> Sn(111). <i>Journal of the American Chemical Society</i> , <b>2003</b> , 125, 2736-45	16.4	111
4	Structure and stereochemistry of electrochemically synthesized poly-(l-naphthylamine) from neutral aceto- nitrile solution. <i>Journal of the Serbian Chemical Society</i> , <b>2002</b> , 67, 867-877	0.9	33
3	Surface processes and electrocatalysis on the Pt(hkl)/Bi-solution interface. <i>Physical Chemistry Chemical Physics</i> , <b>2001</b> , 3, 3879-3890	3.6	26
2	Structural modifications of Cu(II) 12-tungstophosphoric acid salt studied by IR and Raman spectroscopy. <i>Journal of the Serbian Chemical Society</i> , <b>2000</b> , 65, 407-415	0.9	2
1	Electrochemistry at Well-Characterized Bimetallic Surfaces		245-269

