

# Vladimir Komanicky

## List of Publications by Year in descending order

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89  
docs citations

89  
times ranked

2940  
citing authors

#	ARTICLE	IF	CITATIONS
1	Design and Synthesis of Bimetallic Electrocatalyst with Multilayered Pt-Skin Surfaces. Journal of the American Chemical Society, 2011, 133, 14396-14403.	13.7	541
2	Unique Activity of Platinum Adislands in the CO Electrooxidation Reaction. Journal of the American Chemical Society, 2008, 130, 15332-15339.	13.7	142
3	Effects of Li <sup>+</sup> , K <sup>+</sup> , and Ba <sup>2+</sup> Cations on the ORR at Model and High Surface Area Pt and Au Surfaces in Alkaline Solutions. Journal of Physical Chemistry Letters, 2011, 2, 2733-2736.	4.6	142
4	Stability and Dissolution of Platinum Surfaces in Perchloric Acid. Journal of the Electrochemical Society, 2006, 153, B446.	2.9	141
5	Shape-Dependent Activity of Platinum Array Catalyst. Journal of the American Chemical Society, 2009, 131, 5732-5733.	13.7	134
6	Investigation of Oxygen Reduction Reaction Kinetics at (111) $\hat{\sim}$ (100) Nanofaceted Platinum Surfaces in Acidic Media. Journal of Physical Chemistry B, 2005, 109, 23550-23557.	2.6	51
7	Evaluation of hydrogen evolution reaction activity of molybdenum nitride thin films on their nitrogen content. Electrochimica Acta, 2019, 315, 9-16.	5.2	45
8	X-ray Crystal Truncation Rod Studies of Surface Oxidation and Reduction on Pt(111). Journal of Physical Chemistry C, 2016, 120, 16174-16178.	3.1	43
9	Shape of Platinum Nanoparticles Supported on SrTiO <sub>3</sub> : $\hat{\sim}$ Experiment and Theory. Journal of Physical Chemistry C, 2007, 111, 14782-14789.	3.1	42
10	Surface X-Ray Speckles: Coherent Surface Diffraction from Au(001). Physical Review Letters, 2009, 103, 165501.	7.8	41
11	Nanofaceted Platinum Surfaces: $\hat{\sim}$ A New Model System for Nanoparticle Catalysts. Journal of Physical Chemistry B, 2005, 109, 23543-23549.	2.6	26
12	Layering and Ordering in Electrochemical Double Layers. Journal of Physical Chemistry Letters, 2018, 9, 1265-1271.	4.6	26
13	In Situ Synchrotron X-ray Spectroscopy of Ruthenium Nanoparticles Modified with Selenium for an Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2007, 111, 16889-16894.	3.1	24
14	Resonance anomalous surface X-ray scattering. Radiation Physics and Chemistry, 2006, 75, 1651-1660.	2.8	19
15	CO-Induced Lifting of Au(001) Surface Reconstruction. Journal of Physical Chemistry C, 2008, 112, 2231-2234.	3.1	18
16	Electrosorbed carbon monoxide monolayers on Pt(111). Electrochimica Acta, 2007, 52, 5749-5758.	5.2	17
17	Polarization-dependent resonant anomalous surface X-ray scattering of CO/Pt(111). Europhysics Letters, 2006, 74, 1032-1038.	2.0	16
18	Ptychographic x-ray imaging of surfaces on crystal truncation rod. Applied Physics Letters, 2015, 106, .	3.3	16

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19	Addition of molybdenum into amorphous glass-coated microwires usable as temperature sensors in biomedical applications. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 377-383.	1.8	16
20	Persistent oscillations of x-ray speckles: Pt (001) step flow. <i>Applied Physics Letters</i> , 2011, 99, 121910.	3.3	15
21	Spin polarization in Cu <sub>2</sub> MnSn Heusler alloy produced by melt-spinning. <i>Intermetallics</i> , 2017, 85, 139-143.	3.9	15
22	Characterization of off-axis MgB <sub>2</sub> epitaxial thin films for planar junctions. <i>Applied Physics Letters</i> , 2005, 87, 242506.	3.3	14
23	High-density electrosorbed carbon monoxide monolayers on Pt(111) under atmospheric pressure. <i>Physical Review B</i> , 2007, 75, .	3.2	14
24	Fabrication and characterization of platinum nanoparticle arrays of controlled size, shape and orientation. <i>Electrochimica Acta</i> , 2010, 55, 7934-7938.	5.2	14
25	Influence of the reduced dimensionality on the thermodynamical and electrical properties of photosensitive BiOX (X=Cl, Br, and I) semiconductors. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	14
26	Electrochemically Induced Strain Evolution in Pt-Ni Alloy Nanoparticles Observed by Bragg Coherent Diffraction Imaging. <i>Nano Letters</i> , 2021, 21, 5945-5951.	9.1	14
27	Fabrication and Properties of Gold Single-Crystal Ultramicroelectrodes. <i>Angewandte Chemie - International Edition</i> , 2001, 40, 563-566.	13.8	13
28	Dynamics of the Au (001) surface in electrolytes: <i>In situ</i> coherent x-ray scattering. <i>Physical Review B</i> , 2012, 86, .	3.2	13
29	Study of electrode surface dynamics using coherent surface X-ray scattering. <i>Electrochimica Acta</i> , 2012, 82, 570-575.	5.2	13
30	Surface patterning of GeAsSe thin films by electric charge accumulation. <i>Thin Solid Films</i> , 2016, 616, 86-94.	1.8	13
31	Complex optimization of arc melting synthesis for bulk Cr <sub>2</sub> AlC MAX-phase. <i>Ceramics International</i> , 2021, 47, 7745-7752.	4.8	13
32	Charge-induced equilibrium dynamics and structure at the Ag(001)-electrolyte interface. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 16682-16687.	2.8	12
33	Noninvasive diagnostic methods for diabetes mellitus from tear fluid. <i>RSC Advances</i> , 2019, 9, 18050-18059.	3.6	12
34	Fabrication of gold and platinum single crystal ultramicroelectrodes. <i>Electrochimica Acta</i> , 2004, 49, 1185-1194.	5.2	11
35	Influence of hydrostatic pressure on superconducting properties of niobium thin film. <i>Thin Solid Films</i> , 2014, 556, 470-474.	1.8	11
36	Screening of electrocatalysts for hydrogen evolution reaction using bipolar electrodes fabricated by composition gradient magnetron sputtering. <i>Journal of Electroanalytical Chemistry</i> , 2019, 854, 113562.	3.8	11

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37	Fluorescent Profiling of Venom-Selected Cobra Species. <i>Spectroscopy Letters</i> , 2014, 47, 1-5.	1.0	10
38	Enhancing catalytic activity of rhodium towards methanol electro-oxidation in both acidic and alkaline media by alloying with iron. <i>Electrochimica Acta</i> , 2020, 330, 135178.	5.2	10
39	Enhanced Superconductivity in Nanosized Tips of Scanning Tunnelling Microscope. <i>Acta Physica Polonica A</i> , 2010, 118, 1038-1039.	0.5	10
40	Structural and Magnetic Characterization of Fe <sup>2+</sup> Mn <sup>2+</sup> Al <sup>3+</sup> Ni Pseudo-Heusler Alloy. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-3.	2.1	9
41	Study of dependence of electron beam induced surface relief formation on Ge-As-Se thin films on the film elemental composition. <i>Journal of Non-Crystalline Solids</i> , 2017, 456, 7-11.	3.1	9
42	Fabrication of meso- and nano-scale structures on surfaces of chalcogenide semiconductors by surface hydrodynamic interference patterning. <i>Materials Research Express</i> , 2015, 2, 105201.	1.6	8
43	Coherent x-ray scattering experiments of Pt(001) surface dynamics near a roughening transition. <i>Physical Review B</i> , 2012, 86, .	3.2	7
44	Study of the Internal Compositions of Binary Alloy Pd-Rh Nanoparticles by Using Bragg Coherent Diffraction Imaging. <i>Journal of the Korean Physical Society</i> , 2019, 75, 528-533.	0.7	7
45	A detailed study of gold single crystal growth in a silica gel. <i>Journal of Crystal Growth</i> , 2006, 290, 615-620.	1.5	6
46	Magnetic and thermodynamic properties of $\langle \text{mml:math} \text{Cu} \text{mml:math} \rangle$ single crystals. <i>Physical Review B</i> , 2017, 95, .	3.2	6
47	Tear fluid biomarkers in major depressive disorder: Potential of spectral methods in biomarker discovery. <i>Journal of Psychiatric Research</i> , 2021, 138, 75-82.	3.1	6
48	IrRe-IrOx electrocatalysts derived from electrochemically oxidized IrRe thin films for efficient acidic oxygen evolution reaction. <i>Electrochimica Acta</i> , 2021, 398, 139248.	5.2	6
49	Monitoring of Heart Ischemia in Blood Serum. <i>Spectral Analysis Review</i> , 2016, 04, 11-22.	0.2	6
50	Fabrication of an annealable platinum (111) single crystal ultramicroelectrode. <i>Journal of Electroanalytical Chemistry</i> , 2003, 556, 109-115.	3.8	5
51	Fabrication and AFM Investigation of the Temperature-Dependent Surface Morphology of Au (100) Single Crystal Ultramicroelectrodes. <i>Analytical Chemistry</i> , 2003, 75, 4534-4540.	6.5	5
52	Spectral study of modified natural clinoptilolite with pharmacologically active escin and horse chestnut extract. <i>Spectroscopy Letters</i> , 2016, 49, 63-72.	1.0	5
53	Stern layers on RuO <sub>2</sub> (100) and (110) in electrolyte: Surface X-ray scattering studies. <i>Journal of Electroanalytical Chemistry</i> , 2020, 875, 114228.	3.8	5
54	In Situ Coherent X-ray Scattering and Scanning Tunneling Microscopy Studies of Hexagonally Reconstructed Au(001) in Electrolytes. <i>ECS Transactions</i> , 2011, 35, 71-81.	0.5	4

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55	Epitaxial oxide bilayer on Pt (001) nanofacets. Journal of Chemical Physics, 2012, 136, 044704.	3.0	4
56	The Spectrofluorometric Monitoring of Water Purification by Natural Alternatives. Spectroscopy Letters, 2012, 45, 447-451.	1.0	4
57	Electron-beam induced surface relief shape inversion in amorphous Ge <sub>4</sub> As <sub>4</sub> Se <sub>92</sub> thin films. Thin Solid Films, 2014, 571, 175-179.	1.8	4
58	Effect of Current Annealing on Domain Wall Dynamics in Bistable FeCoMoB Microwires. Solid State Phenomena, 0, 233-234, 281-284.	0.3	4
59	Evaluation of sensitivity of Ge <sub>9</sub> As <sub>9</sub> Se <sub>82</sub> and Ge <sub>16</sub> As <sub>24</sub> Se <sub>60</sub> thin films to irradiation with electron beam. Journal of Non-Crystalline Solids, 2019, 505, 37-42.	3.1	4
60	In-situ to ex-situ in-plane structure evolution of stern layers on Pt(111) surface: Surface X-ray scattering studies. Journal of Electroanalytical Chemistry, 2020, 875, 114495.	3.8	4
61	Structural dependence of hydrogen evolution reaction on transition metal catalysts sputtered at different temperatures in alkaline media. International Journal of Hydrogen Energy, 2022, 47, 26987-26999.	7.1	4
62	Stability and Dissolution of the Platinum Single Crystal Surfaces in Perchloric Acid. ECS Transactions, 2006, 1, 167-184.	0.5	3
63	In-situ Synchrotron X-ray Spectroscopy of Ruthenium Nanoparticles Modified with Selenium for Oxygen Reduction Reaction. ECS Transactions, 2006, 3, 161-170.	0.5	3
64	Electrocatalytic activity of surface oxides on platinum nanofacets and surfaces. Electrochimica Acta, 2013, 109, 440-446.	5.2	3
65	Study of Niobium Thin Films under Pressure. Acta Physica Polonica A, 2014, 126, 346-347.	0.5	3
66	Analysis of Bowel Diseases from Blood Serum by Autofluorescence and Atomic Force Microscopy Techniques. Open Chemistry, 2018, 16, 238-245.	1.9	3
67	Controlling the Transverse Magneto-Optical Kerr Effect in Cr/NiFe Bilayer Thin Films by Changing the Thicknesses of the Cr Layer. Nanomaterials, 2020, 10, 256.	4.1	3
68	Local Magnetometry of Cu <sub>0.064</sub> TiSe <sub>2</sub> . Acta Physica Polonica A, 2014, 126, 370-371.	0.5	2
69	New Approaches in Monitoring Venom of Genus <i>Dendroaspis</i> . Spectroscopy Letters, 2015, 48, 462-472.	1.0	2
70	Autofluorescence of Breast Cancer Proteins. Current Metabolomics, 2018, 6, .	0.5	2
71	Turning Catalysts on by Light-Induced Stress: When Red Means Go. ChemElectroChem, 2019, 6, 3264-3267.	3.4	2
72	Fabrication of combinatorial material libraries by flow cell electrodeposition technique. Materials Letters, 2020, 281, 128594.	2.6	2

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73	Magnetic and Structural Characterization of Nickel and Iron Based Heusler Ribbons Ni <sub>2</sub> FeZ (Z=Co, In), Tj ETQq1 1 0,784314 10,5 BT /Over	0,5	1
74	Study of synergistic effects and compositional dependence of hydrogen evolution reaction on MoxNiy alloy thin films in alkaline media. Molecular Catalysis, 2022, 528, 112481.	2.0	2
75	Fabrication of platinum nano-array model catalysts. , 2006, 6340, 274.		1
76	Specific Heat Study of Superconductivity in Cu <sub>1-x</sub> TiSe <sub>2</sub> . Acta Physica Polonica A, 2014, 126, 322-323.	0.5	1
77	Application of Superconductor/Photosemiconductor Contact Structures in Electronics. Acta Physica Polonica A, 2014, 126, 362-363.	0.5	1
78	Growth of arrays of oriented epitaxial platinum nanoparticles with controlled size and shape by natural colloidal lithography. Nanoscale Research Letters, 2014, 9, 336.	5.7	1
79	Study of Stability of Ultrathin Pt Films on Titanium Nitride, Highly Oriented Pyrolytic Graphite and Sigradur G Glassy Carbon Substrates: The Role of Substrate Type and Catalyst Loading on the Degradation Mechanism. Journal of the Electrochemical Society, 2016, 163, H840-H847.	2.9	1
80	Deoxyribonucleic acid and chromatin imaging of endometriosis and endometrial carcinoma using atomic force microscopy. Spectroscopy Letters, 2019, 52, 510-519.	1.0	1
81	Growth of Pt-Ni Nanoparticles of Different Composition using Electrodeposition and Characterization of Their Magnetic Properties. Acta Physica Polonica A, 2017, 131, 839-841.	0.5	1
82	Anizotropy of Photoconductivity in BiOCl (X=Cl, Br, I) Single Crystals. Acta Physica Polonica A, 2014, 126, 274-275.	0.5	0
83	Thermopower and Surface Magnetic Characterization of Ni Thin Layers. Acta Physica Polonica A, 2014, 126, 204-205.	0.5	0
84	Interaction of Molecular Oxygen with a Hexagonally Reconstructed Au(001) Surface. Journal of Physical Chemistry C, 2016, 120, 23001-23008.	3.1	0
85	Superconductivity of Niobium Thin Films in the BiOCl/Nb Heterostructures. Acta Physica Polonica A, 2017, 131, 1030-1032.	0.5	0