Olga Kasian

List of Publications by Year
in descending order

66	5,269	117453 34	118652 62
papers	citations	h-index	g-index

67	67	67	6075
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	A bilayer conducting polymer structure for planar perovskite solar cells with over 1,400â€‰hours operational stability at elevated temperatures. Nature Energy, 2022, 7, 144-152.	19.8	123
2	<i>Operando</i> Structureâ€“Activityâ€“Stability Relationship of Iridium Oxides during the Oxygen Evolution Reaction. ACS Catalysis, 2022, 12, 5174-5184.	5.5	40
3	Controlled Doping of Electrocatalysts through Engineering Impurities. Advanced Materials, 2022, 34, e2203030.	11.1	12
4	Stabilization of an iridium oxygen evolution catalyst by titanium oxides. JPhys Energy, 2021, 3, 034006.	2.3	19
5	Tuning the Anodic and Cathodic Dissolution of Gold by Varying the Surface Roughness. ChemElectroChem, 2021, 8, 1524-1530.	1.7	3
6	Fused Filament Fabricationâ€Based Additive Manufacturing of Commercially Pure Titanium. Advanced Engineering Materials, 2021, 23, 2100380.	1.6	13
7	Direct Imaging of Dopant and Impurity Distributions in 2D MoS₂. Advanced Materials, 2020, 32, e1907235.	11.1	26
8	Atomicâ€Scale Mapping of Impurities in Partially Reduced Hollow TiO₂ Nanowires. Angewandte Chemie - International Edition, 2020, 59, 5651-5655.	7.2	42
9	Probing catalytic surfaces by correlative scanning photoemission electron microscopy and atom probe tomography. Journal of Materials Chemistry A, 2020, 8, 388-400.	5.2	19
10	Defect Segregation and Its Effect on the Photoelectrochemical Properties of Ti-Doped Hematite Photoanodes for Solar Water Splitting. Chemistry of Materials, 2020, 32, 1031-1040.	3.2	23
11	Synthesis and Doping Strategies to Improve the Photoelectrochemical Water Oxidation Activity of BiVO₄ Photoanodes. Zeitschrift Fur Physikalische Chemie, 2020, 234, 655-682.	1.4	6
12	Different Photostability of BiVO₄ in Near-pH-Neutral Electrolytes. ACS Applied Energy Materials, 2020, 3, 9523-9527.	2.5	41
13	Improved Hydrogen Oxidation Reaction Activity and Stability of Buried Metal-Oxide Electrocatalyst Interfaces. Chemistry of Materials, 2020, 32, 7716-7724.	3.2	38
14	Lattice Oxygen Exchange in Rutile IrO₂ during the Oxygen Evolution Reaction. Journal of Physical Chemistry Letters, 2020, 11, 5008-5014.	2.1	81
15	Solute hydrogen and deuterium observed at the near atomic scale in high-strength steel. Acta Materialia, 2020, 188, 108-120.	3.8	64
16	Insight into the Mechanisms of High Activity and Stability of Iridium Supported on Antimony-Doped Tin Oxide Aerogel for Anodes of Proton Exchange Membrane Water Electrolyzers. ACS Catalysis, 2020, 10, 2508-2516.	5.5	67
17	Formation of a 2D Meta-stable Oxide by Differential Oxidation of AgCu Alloys. ACS Applied Materials & Interfaces, 2020, 12, 23595-23605.	4.0	9
18	Tuning Fundamental Properties of Ir-Based Materials to Enhance Their Electrocatalytic Performance in the Oxygen Evolution Reaction. ECS Meeting Abstracts, 2020, MA2020-01, 1557-1557.	0.0	0

#	Article	IF	Citations
19	Atomic-Scale View into the Degradation of Ir-Ru Alloys during Anodic Oxygen Evolution. ECS Meeting Abstracts, 2020, MA2020-01, 1520-1520.	0.0	0
20	New Frontiers in Electrocatalyst Characterization â€“ Three Dimensional Atomic-Scale Insights By Atom Probe Tomography. ECS Meeting Abstracts, 2020, MA2020-01, 2561-2561.	0.0	0
21	Improving Stability and Kinetics of Alkaline HOR Catalysts â€“ Towards Reduced System Cost. ECS Meeting Abstracts, 2020, MA2020-01, 1686-1686.	0.0	0
22	(Invited) From Atomic-Scale Understanding to Design of Advanced Electrocatalyst Materials. ECS Meeting Abstracts, 2020, MA2020-02, 3154-3154.	0.0	0
23	An Integrated Workflow To Investigate Electrocatalytic Surfaces By Correlative X-ray Photoemission Spectroscopy, Scanning Photoemission Electron Microscopy and Atom Probe Tomography. Microscopy and Microanalysis, 2019, 25, 306-307.	0.2	1
24	Extension of the Rotating Disk Electrode Method to Thin Samples of Non-Disk Shape. Journal of the Electrochemical Society, 2019, 166, H791-H794.	1.3	5
25	Dissolution of BiVO₄ Photoanodes Revealed by Time-Resolved Measurements under Photoelectrochemical Conditions. Journal of Physical Chemistry C, 2019, 123, 23410-23418.	1.5	47
26	Enhanced Photoelectrochemical Water Oxidation Performance by Fluorine Incorporation in BiVO₄ and Mo:BiVO₄ Thin Film Photoanodes. ACS Applied Materials & Interfaces, 2019, 11, 16430-16442.	4.0	52
27	Alkaline manganese electrochemistry studied by<i>in situ</i>and<i>operando</i>spectroscopic methods â€“ metal dissolution, oxide formation and oxygen evolution. Physical Chemistry Chemical Physics, 2019, 21, 10457-10469.	1.3	32
28	Degradation of iridium oxides <i>via</i> oxygen evolution from the lattice: correlating atomic scale structure with reaction mechanisms. Energy and Environmental Science, 2019, 12, 3548-3555.	15.6	147
29	Electrochemical Onâ€line ICPâ€MS in Electrocatalysis Research. Chemical Record, 2019, 19, 2130-2142.	2.9	92
30	Atomic-scale insights into surface species of electrocatalysts in three dimensions. Nature Catalysis, 2018, 1, 300-305.	16.1	161
31	Atomically Defined Co₃O₄(111) Thin Films Prepared in Ultrahigh Vacuum: Stability under Electrochemical Conditions. Journal of Physical Chemistry C, 2018, 122, 7236-7248.	1.5	34
32	Using Instability of a Non-stoichiometric Mixed Oxide Oxygen Evolution Catalyst As a Tool to Improve Its Electrocatalytic Performance. Electrocatalysis, 2018, 9, 139-145.	1.5	20
33	The Electrochemical Dissolution of Noble Metals in Alkaline Media. Electrocatalysis, 2018, 9, 153-161.	1.5	82
34	Die gemeinsamen Zwischenprodukte von Sauerstoffentwicklung und AuflÃ¶sung wÃ¤hrend der Wasserelektrolyse an Iridium. Angewandte Chemie, 2018, 130, 2514-2517.	1.6	37
35	The Common Intermediates of Oxygen Evolution and Dissolution Reactions during Water Electrolysis on Iridium. Angewandte Chemie - International Edition, 2018, 57, 2488-2491.	7.2	331
36	Nickel-molybdenum alloy catalysts for the hydrogen evolution reaction: Activity and stability revised. Electrochimica Acta, 2018, 259, 1154-1161.	2.6	116

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37	Why Tinâ€Doping Enhances the Efficiency of Hematite Photoanodes for Water Splittingâ€"The Full Picture. Advanced Functional Materials, 2018, 28, 1804472.	7.8	53
38	An alkaline water electrolyzer with nickel electrodes enables efficient high current densityÂoperation. International Journal of Hydrogen Energy, 2018, 43, 11932-11938.	3.8	66
39	Impact of Palladium Loading and Interparticle Distance on the Selectivity for the Oxygen Reduction Reaction toward Hydrogen Peroxide. Journal of Physical Chemistry C, 2018, 122, 15878-15885.	1.5	53
40	Superior solar-to-hydrogen energy conversion efficiency by visible light-driven hydrogen production <i>via</i> highly reduced Ti²⁺/Ti³⁺ states in a blue titanium dioxide photocatalyst. Catalysis Science and Technology, 2018, 8, 4657-4664.	2.1	30
41	Melamine-functionalized graphene oxide: Synthesis, characterization and considering as pseudocapacitor electrode material with intermixed POAP polymer. Applied Surface Science, 2018, 459, 874-883.	3.1	50
42	Electrifying model catalysts for understanding electrocatalytic reactions in liquid electrolytes. Nature Materials, 2018, 17, 592-598.	13.3	89
43	The stability number as a metric for electrocatalyst stability benchmarking. Nature Catalysis, 2018, 1, 508-515.	16.1	533
44	Electrocatalytic synthesis of hydrogen peroxide on Au-Pd nanoparticles: From fundamentals to continuous production. Chemical Physics Letters, 2017, 683, 436-442.	1.2	112
45	Stability and Activity of Nonâ€Nobleâ€Metalâ€Based Catalysts Toward the Hydrogen Evolution Reaction. Angewandte Chemie, 2017, 129, 9899-9903.	1.6	17
46	Unraveling the Nature of Sites Active toward Hydrogen Peroxide Reduction in Feâ€Nâ€C Catalysts. Angewandte Chemie, 2017, 129, 8935-8938.	1.6	16
47	Unraveling the Nature of Sites Active toward Hydrogen Peroxide Reduction in Feâ€Nâ€C Catalysts. Angewandte Chemie - International Edition, 2017, 56, 8809-8812.	7.2	176
48	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
49	Catalyst Stability Benchmarking for the Oxygen Evolution Reaction: The Importance of Backing Electrode Material and Dissolution in Accelerated Aging Studies. ChemSusChem, 2017, 10, 4140-4143.	3.6	111
50	State of the Surface of Antibacterial Copper in Phosphate Buffered Saline. Journal of the Electrochemical Society, 2017, 164, H734-H742.	1.3	14
51	Stability limits of tin-based electrocatalyst supports. Scientific Reports, 2017, 7, 4595.	1.6	127
52	Individual Detection and Electrochemically Assisted Identification of Adsorbed Nanoparticles by Using Surface Plasmon Microscopy. Angewandte Chemie - International Edition, 2016, 55, 7247-7251.	7.2	43
53	Activity and Stability of Electrochemically and Thermally Treated Iridium for the Oxygen Evolution Reaction. Journal of the Electrochemical Society, 2016, 163, F3132-F3138.	1.3	140
54	Oxygen evolution activity and stability of iridium in acidic media. Part 1. â€" Metallic iridium. Journal of Electroanalytical Chemistry, 2016, 773, 69-78.	1.9	159

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55	Minimizing Operando Demetallation of Fe-N-C Electrocatalysts in Acidic Medium. ACS Catalysis, 2016, 6, 3136-3146.	5.5	201
56	On the Origin of the Improved Ruthenium Stability in RuO₂â€“IrO₂Mixed Oxides. Journal of the Electrochemical Society, 2016, 163, F3099-F3104.	1.3	82
57	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
58	Oxygen evolution activity and stability of iridium in acidic media. Part 2. â€“ Electrochemically grown hydrous iridium oxide. Journal of Electroanalytical Chemistry, 2016, 774, 102-110.	1.9	209
59	Oxygen and hydrogen evolution reactions on Ru, RuO 2 , Ir, and IrO 2 thin film electrodes in acidic and alkaline electrolytes: A comparative study on activity and stability. Catalysis Today, 2016, 262, 170-180.	2.2	999
60	Anodic oxidation of Cr3+ ions in a chromium electroplating bath on Pt and composite TiO x /PtO y. Russian Journal of Electrochemistry, 2013, 49, 1165-1170.	0.3	2
61	Electrochemical properties of EbonexÂ®/Pt anodes. Russian Journal of Electrochemistry, 2013, 49, 557-562.	0.3	2
62	Electrochemical properties of heat-treated platinized titanium. Protection of Metals and Physical Chemistry of Surfaces, 2013, 49, 559-566.	0.3	5
63	Physicochemical properties and electrochemical behavior of Ebonex/Pt-based materials. Protection of Metals and Physical Chemistry of Surfaces, 2013, 49, 705-711.	0.3	1
64	Electrochemical properties of thermally treated platinized EbonexÂ® with low content of Pt. Electrochimica Acta, 2013, 109, 630-637.	2.6	29
65	Oxidation of Cr3+-Ions at the Composite TiOkhcy/PtOu Electrode. ECS Transactions, 2013, 45, 13-18.	0.3	8
66	Anodic Decomposition of Complexing Agents in Electrolytes Based on Cr(III) Salts at Composite Ð¢Ñ–ÐžÑ…/ÐtÐžÑƒ Electrodes. Chemistry and Chemical Technology, 2012, 6, 241-244.	0.2	7