Kotaro Sasaki

List of Publications by Year
in descending order

74 papers	6,553 citations	94433 37 h-index	79698 73 g-index
77 all docs	77 docs citations	77 times ranked	8247 citing authors

#	Article	IF	Citations
1	Hydrogenâ€Evolution Catalysts Based on Nonâ€Noble Metal Nickelâ€"Molybdenum Nitride Nanosheets. Angewandte Chemie - International Edition, 2012, 51, 6131-6135.	13.8	1,174
2	Mixed-Metal Pt Monolayer Electrocatalysts for Enhanced Oxygen Reduction Kinetics. Journal of the American Chemical Society, 2005, 127, 12480-12481.	13.7	556
3	Coreâ€Protected Platinum Monolayer Shell Highâ€Stability Electrocatalysts for Fuelâ€Cell Cathodes. Angewandte Chemie - International Edition, 2010, 49, 8602-8607.	13.8	554
4	Highly stable Pt monolayer on PdAu nanoparticle electrocatalysts for the oxygen reduction reaction. Nature Communications, 2012, 3, 1115.	12.8	377
5	Biomass-derived electrocatalytic composites for hydrogen evolution. Energy and Environmental Science, 2013, 6, 1818.	30.8	343
6	Nitride Stabilized PtNi Coreâ€"Shell Nanocatalyst for high Oxygen Reduction Activity. Nano Letters, 2012, 12, 6266-6271.	9.1	213
7	Bimetallic and Ternary Alloys for Improved Oxygen Reduction Catalysis. Topics in Catalysis, 2007, 46, 276-284.	2.8	202
8	Bimetallic IrNi core platinum monolayer shell electrocatalysts for the oxygen reduction reaction. Energy and Environmental Science, 2012, 5, 5297-5304.	30.8	156
9	Coreâ€"Shell Structuring of Pure Metallic Aerogels towards Highly Efficient Platinum Utilization for the Oxygen Reduction Reaction. Angewandte Chemie - International Edition, 2018, 57, 2963-2966.	13.8	154
10	Tuning the Catalytic Activity of Ru@Pt Coreâ€"Shell Nanoparticles for the Oxygen Reduction Reaction by Varying the Shell Thickness. Journal of Physical Chemistry C, 2013, 117, 1748-1753.	3.1	140
11	Gold-promoted structurally ordered intermetallic palladium cobalt nanoparticles for the oxygen reduction reaction. Nature Communications, 2014, 5, 5185.	12.8	134
12	Role of Surface Steps of Pt Nanoparticles on the Electrochemical Activity for Oxygen Reduction. Journal of Physical Chemistry Letters, 2010, 1, 1316-1320.	4.6	121
13	Enhancement of the oxygen reduction on nitride stabilized pt-M (M=Fe, Co, and Ni) coreâ€"shell nanoparticle electrocatalysts. Nano Energy, 2015, 13, 442-449.	16.0	104
14	Tungsten Carbideâ€"Nitride on Graphene Nanoplatelets as a Durable Hydrogen Evolution Electrocatalyst. ChemSusChem, 2014, 7, 2414-2418.	6.8	101
15	Synchrotron-Based In Situ Characterization of Carbon-Supported Platinum and Platinum Monolayer Electrocatalysts. ACS Catalysis, 2016, 6, 69-76.	11.2	100
16	High-Performance Nitrogen-Doped Intermetallic PtNi Catalyst for the Oxygen Reduction Reaction. ACS Catalysis, 2020, 10, 10637-10645.	11.2	98
17	Catalytic Activity of Platinum Monolayer on Iridium and Rhenium Alloy Nanoparticles for the Oxygen Reduction Reaction. ACS Catalysis, 2012, 2, 817-824.	11.2	94
18	Increasing Pt oxygen reduction reaction activity and durability with a carbon-doped TiO2 nanocoating catalyst support. Journal of Materials Chemistry, 2012, 22, 16824.	6.7	91

#	Article	IF	Citations
19	Coreâ€“shell, hollow-structured iridiumâ€“nickel nitride nanoparticles for the hydrogen evolution reaction. Journal of Materials Chemistry A, 2014, 2, 591-594.	10.3	83
20	Increasing Stability and Activity of Coreâ€“Shell Catalysts by Preferential Segregation of Oxide on Edges and Vertexes: Oxygen Reduction on Tiâ€“Au@Pt/C. Journal of the American Chemical Society, 2016, 138, 9294-9300.	13.7	83
21	Pt monolayer on Au-stabilized PdNi coreâ€“shell nanoparticles for oxygen reduction reaction. Electrochimica Acta, 2013, 110, 267-272.	5.2	70
22	An Efficient Bifunctional Air Electrode for Reversible Protonic Ceramic Electrochemical Cells. Advanced Functional Materials, 2021, 31, 2105386.	14.9	66
23	Advanced Pt-Based Coreâ€“Shell Electrocatalysts for Fuel Cell Cathodes. Accounts of Chemical Research, 2022, 55, 1226-1236.	15.6	65
24	Surface restructuring of a perovskite-type air electrode for reversible protonic ceramic electrochemical cells. Nature Communications, 2022, 13, 2207.	12.8	65
25	An efficient and durable anode for ammonia protonic ceramic fuel cells. Energy and Environmental Science, 2022, 15, 287-295.	30.8	64
26	Tuning electrocatalytic activity of Pt monolayer shell by bimetallic Ir-M (M=Fe, Co, Ni or Cu) cores for the oxygen reduction reaction. Nano Energy, 2016, 29, 261-267.	16.0	61
27	Carbon-Supported IrNi Coreâ€“Shell Nanoparticles: Synthesis, Characterization, and Catalytic Activity. Journal of Physical Chemistry C, 2011, 115, 9894-9902.	3.1	58
28	Gram-Scale-Synthesized Pd₂Co-Supported Pt Monolayer Electrocatalysts for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2010, 114, 8950-8957.	3.1	54
29	Rhombohedral Ordered Intermetallic Nanocatalyst Boosts the Oxygen Reduction Reaction. ACS Catalysis, 2021, 11, 184-192.	11.2	51
30	Dissolution and Stabilization of Platinum in Oxygen Cathodes. , 2009, , 7-27.		50
31	In Situ Probing of the Active Site Geometry of Ultrathin Nanowires for the Oxygen Reduction Reaction. Journal of the American Chemical Society, 2015, 137, 12597-12609.	13.7	46
32	Oxygen Reduction Kinetics on Pt Monolayer Shell Highly Affected by the Structure of Bimetallic AuNi Cores. Chemistry of Materials, 2016, 28, 5274-5281.	6.7	46
33	Janus structured Ptâ€“FeNC nanoparticles as a catalyst for the oxygen reduction reaction. Chemical Communications, 2017, 53, 1660-1663.	4.1	46
34	Modification of BiVO₄/WO₃ composite photoelectrodes with Al₂O₃<i>via</i> chemical vapor deposition for highly efficient oxidative H₂O₂ production from H₂O. Sustainable Energy and Fuels, 2018, 2, 1621-1629.	4.9	44
35	Platinum Supported on NbRu_{<i>y</i>}O_{<i>z</i>} as Electrocatalyst for Ethanol Oxidation in Acid and Alkaline Fuel Cells. Journal of Physical Chemistry C, 2011, 115, 3043-3056.	3.1	43
36	Biomass-derived high-performance tungsten-based electrocatalysts on graphene for hydrogen evolution. Journal of Materials Chemistry A, 2015, 3, 18572-18577.	10.3	43

#	Article	IF	Citations
37	Determination of Hydrogen Oxidation Reaction Mechanism Based on Ptâˆ’H_{ad}Energetics in Alkaline Electrolyte. Journal of the Electrochemical Society, 2018, 165, J3355-J3362.	2.9	38
38	Enhancing ORR Performance of Bimetallic PdAg Electrocatalysts by Designing Interactions between Pd and Ag. ACS Applied Energy Materials, 2020, 3, 2342-2349.	5.1	36
39	Designing high performance Pt monolayer coreâ€“shell electrocatalysts for fuel cells. Current Opinion in Electrochemistry, 2020, 21, 368-375.	4.8	35
40	Determination of Single- and Multi-Component Nanoparticle Sizes by X-ray Absorption Spectroscopy. Journal of the Electrochemical Society, 2018, 165, J3222-J3230.	2.9	34
41	Pt Monolayer Shell on Nitrided Alloy Coreâ€"A Path to Highly Stable Oxygen Reduction Catalyst. Catalysts, 2015, 5, 1321-1332.	3.5	33
42	Nanoparticle size evaluation of catalysts by EXAFS: Advantages and limitations. Materials Protection, 2016, 57, 101-109.	0.9	33
43	Platinum Monolayer on IrFe Coreâ€“Shell Nanoparticle Electrocatalysts for the Oxygen Reduction Reaction. Electrocatalysis, 2011, 2, 134-140.	3.0	31
44	Enhancing Oxygen Reduction Performance of Pt Monolayer Catalysts by Pd(111) Nanosheets on WNi Substrates. ACS Catalysis, 2020, 10, 4290-4298.	11.2	30
45	Enhancing Electrocatalytic Performance of Bifunctional Cobaltâ€“Manganeseâ€Oxynitride Nanocatalysts on Graphene. ChemSusChem, 2017, 10, 68-73.	6.8	28
46	Twinning Enhances Efficiencies of Metallic Catalysts toward Electrolytic Water Splitting. Advanced Energy Materials, 2021, 11, 2101827.	19.5	24
47	Surface Regulating of a Doubleâ€Perovskite Electrode for Protonic Ceramic Fuel Cells to Enhance Oxygen Reduction Activity and Contaminants Poisoning Tolerance. Advanced Energy Materials, 2022, 12, .	19.5	24
48	Correlating the electrocatalytic stability of platinum monolayer catalysts with their structural evolution in the oxygen reduction reaction. Journal of Materials Chemistry A, 2018, 6, 20725-20736.	10.3	22
49	Structure and dynamics of the molten alkali-chloride salts from an X-ray, simulation, and rate theory perspective. Physical Chemistry Chemical Physics, 2020, 22, 22900-22917.	2.8	22
50	Investigating corrosion behavior of Ni and Ni-20Cr in molten ZnCl2. Corrosion Science, 2021, 179, 109105.	6.6	22
51	High Pressure Nitrogen-Infused Ultrastable Fuel Cell Catalyst for Oxygen Reduction Reaction. ACS Catalysis, 2021, 11, 5525-5531.	11.2	22
52	Revealing 3D Morphological and Chemical Evolution Mechanisms of Metals in Molten Salt by Multimodal Microscopy. ACS Applied Materials & Interfaces, 2020, 12, 17321-17333.	8.0	20
53	Platinum submonolayer-monolayer electrocatalysis: An electrochemical and X-ray absorption spectroscopy study. Research on Chemical Intermediates, 2006, 32, 543-559.	2.7	19
54	A Cu₂Oâ€derived Polymeric Carbon Nitride Heterostructured Catalyst for the Electrochemical Reduction of Carbon Dioxide to Ethylene. ChemSusChem, 2021, 14, 3190-3197.	6.8	18

#	Article	IF	Citations
55	Enhanced Oxygen Reduction Activity of IrCu Core Platinum Monolayer Shell Nano-electrocatalysts. Topics in Catalysis, 2013, 56, 1059-1064.	2.8	17
56	Enhancement of oxygen reduction reaction activities by Pt nanoclusters decorated on ordered mesoporous porphyrinic carbons. Journal of Materials Chemistry A, 2016, 4, 5869-5876.	10.3	17
57	Modulation of the coordination environment enhances the electrocatalytic efficiency of Mo single atoms toward water splitting. Journal of Materials Chemistry A, 2022, 10, 8784-8797.	10.3	17
58	Au-Doped Stable L1₀ Structured Platinum Cobalt Ordered Intermetallic Nanoparticle Catalysts for Enhanced Electrocatalysis. ACS Applied Energy Materials, 2018, 1, 3771-3777.	5.1	16
59	Determining oxidation states of transition metals in molten salt corrosion using electron energy loss spectroscopy. Scripta Materialia, 2021, 197, 113790.	5.2	15
60	One-Step Facile Synthesis of High-Activity Nitrogen-Doped PtNiN Oxygen Reduction Catalyst. ACS Applied Energy Materials, 2022, 5, 5245-5255.	5.1	11
61	Evaluation of Oxygen Reduction Activity by the Thin-Film Rotating Disk Electrode Methodology: the Effects of Potentiodynamic Parameters. Electrocatalysis, 2016, 7, 305-316.	3.0	9
62	Highly Dispersed Carbon Supported PdNiMo Core with Pt Monolayer Shell Electrocatalysts for Oxygen Reduction Reaction. Journal of the Electrochemical Society, 2018, 165, J3295-J3300.	2.9	8
63	EDTA-Ce(III) Modified Pt Vulcan XC-72 Catalyst Synthesis for Methanol Oxidation in Acid Solution. Electrocatalysis, 2014, 5, 50-61.	3.0	7
64	Kernâ€Schaleâ€Strukturierung rein metallischer Aerogele fÃ¼r eine hocheffiziente Nutzung von Platin fÃ¼r die Sauerstoffreduktion. Angewandte Chemie, 2018, 130, 3014-3018.	2.0	7
65	Cerium oxide as a promoter for the electro-oxidation reaction of ethanol: in situ XAFS characterization of the Pt nanoparticles supported on CeO₂ nanoparticles and nanorods. Physical Chemistry Chemical Physics, 2015, 17, 32251-32256.	2.8	6
66	Quantitative Nanoscale 3D Imaging of Intergranular Corrosion of 304ÂStainless Steel Using Hard X-Ray Nanoprobe. Journal of the Electrochemical Society, 2019, 166, C3320-C3325.	2.9	6
67	<i>In Situ</i> X-ray Absorption Spectroscopy of PtNi-Nanowire/Vulcan XC-72R under Oxygen Reduction Reaction in Alkaline Media. ACS Omega, 2021, 6, 17203-17216.	3.5	5
68	Nitrogen-Doped PtNi Catalysts on Polybenzimidazole-Functionalized Carbon Support for the Oxygen Reduction Reaction in Polymer Electrolyte Membrane Fuel Cells. ACS Applied Materials & Interfaces, 2022, 14, 26814-26823.	8.0	5
69	Twinning Enhances Efficiencies of Metallic Catalysts toward Electrolytic Water Splitting (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T	19.5	3
70	H₂O₂ production on a carbon cathode loaded with a nickel carbonate catalyst and on an oxide photoanode without an external bias. RSC Advances, 2021, 11, 11224-11232.	3.6	2
71	X-Ray Absorption Spectroscopic Characterization of Nanomaterial Catalysts in Electrochemistry and Fuel Cells. , 2016, , 315-365.		2
72	Yttrium-based Double Perovskite Nanorods for Electrocatalysis. ACS Applied Materials & Interfaces, 2022, 14, 30914-30926.	8.0	2

#	Article	IF	Citations
73	Design of efficient Pt-based electrocatalysts through characterization by X-ray absorption spectroscopy. Frontiers in Energy, 2017, 11, 236-244.	2.3	1
74	(Invite) Insights in Measuring Particle Size of Multiatomic Nanoparticles By XAS. ECS Meeting Abstracts, 2018, , .	0.0	0