Tatsuya Shinagawa

List of Publications by Year
in descending order

40 papers	4,259 citations	218677 26 h-index	276875 41 g-index
45 all docs	45 docs citations	45 times ranked	6613 citing authors

#	Article	IF	Citations
1	Gas Crossover Regulation by Porosityâ€Controlled Glass Sheet Achieves Pure Hydrogen Production by Buffered Water Electrolysis at Neutral pH. ChemSusChem, 2022, 15, e202102294.	6.8	13
2	High current density microkinetic and electronic structure analysis of CO2 reduction using Co and Fe complexes on gas diffusion electrode. Chem Catalysis, 2022, 2, 1143-1162.	6.1	11
3	(Digital Presentation) Nickel-Iron Electrocatalysts Modified with Group 11 Metals Achieving 1 A cm^{âˆ'2} of Oxygen Evolution in Buffered Near-Neutral pH Electrolyte. ECS Meeting Abstracts, 2022, MA2022-01, 1557-1557.	0.0	0
4	Recent advances in understanding oxygen evolution reaction mechanisms over iridium oxide. Inorganic Chemistry Frontiers, 2021, 8, 2900-2917.	6.0	75
5	Determination and perturbation of the electronic potentials of solid catalysts for innovative catalysis. Chemical Science, 2021, 12, 540-545.	7.4	7
6	Delivering the Full Potential of Oxygen Evolving Electrocatalyst by Conditioning Electrolytes at Nearâ€Neutral pH. ChemSusChem, 2021, 14, 1554-1564.	6.8	20
7	Operando Elucidation on the Working State of Immobilized Fluorinated Iron Porphyrin for Selective Aqueous Electroreduction of CO₂ to CO. ACS Catalysis, 2021, 11, 6499-6509.	11.2	27
8	Microkinetic assessment of electrocatalytic oxygen evolution reaction over iridium oxide in unbuffered conditions. Journal of Catalysis, 2020, 391, 435-445.	6.2	52
9	Water Electrolysis in Saturated Phosphate Buffer at Neutral pH. ChemSusChem, 2020, 13, 5921-5933.	6.8	29
10	Switching of Kinetically Relevant Reactants for the Aqueous Cathodic Process Determined by Massâ€transport Coupled with Protolysis. ChemCatChem, 2019, 11, 5961-5968.	3.7	10
11	Volcano Trend in Electrocatalytic CO₂ Reduction Activity over Atomically Dispersed Metal Sites on Nitrogen-Doped Carbon. ACS Catalysis, 2019, 9, 10426-10439.	11.2	142
12	Oxidative-Coupling-Assisted Methane Aromatization: A Simulation Study. Industrial & Engineering Chemistry Research, 2019, 58, 22884-22892.	3.7	8
13	Electrocatalytic Reduction of Nitrogen: From Haber-Bosch to Ammonia Artificial Leaf. CheM, 2019, 5, 263-283.	11.7	339
14	Microfabricated electrodes unravel the role of interfaces in multicomponent copper-based CO2 reduction catalysts. Nature Communications, 2018, 9, 1477.	12.8	60
15	Sulfur-Modified Copper Catalysts for the Electrochemical Reduction of Carbon Dioxide to Formate. ACS Catalysis, 2018, 8, 837-844.	11.2	209
16	Origin of the Selective Electroreduction of Carbon Dioxide to Formate by Chalcogen Modified Copper. Journal of Physical Chemistry Letters, 2018, 9, 7153-7159.	4.6	57
17	Contribution of electrolyte in nanoscale electrolysis of pure and buffered water by particulate photocatalysis. Sustainable Energy and Fuels, 2018, 2, 2044-2052.	4.9	18
18	An Oxygenâ€Insensitive Hydrogen Evolution Catalyst Coated by a Molybdenumâ€Based Layer for Overall Water Splitting. Angewandte Chemie - International Edition, 2017, 56, 5780-5784.	13.8	106

#	Article	IF	Citations
19	An Oxygenâ€Insensitive Hydrogen Evolution Catalyst Coated by a Molybdenumâ€Based Layer for Overall Water Splitting. Angewandte Chemie, 2017, 129, 5874-5878.	2.0	13
20	Boosting the Performance of the Nickel Anode in the Oxygen Evolution Reaction by Simple Electrochemical Activation. Angewandte Chemie - International Edition, 2017, 56, 5061-5065.	13.8	63
21	Boosting the Performance of the Nickel Anode in the Oxygen Evolution Reaction by Simple Electrochemical Activation. Angewandte Chemie, 2017, 129, 5143-5147.	2.0	19
22	Towards Versatile and Sustainable Hydrogen Production through Electrocatalytic Water Splitting: Electrolyte Engineering. ChemSusChem, 2017, 10, 1318-1336.	6.8	154
23	Electrolyte Engineering towards Efficient Water Splitting at Mild pH. ChemSusChem, 2017, 10, 4155-4162.	6.8	51
24	Exclusive Hydrogen Generation by Electrocatalysts Coated with an Amorphous Chromium-Based Layer Achieving Efficient Overall Water Splitting. ACS Sustainable Chemistry and Engineering, 2017, 5, 8079-8088.	6.7	44
25	Electrolyte Engineering towards Efficient Water Splitting at Mild pH. ChemSusChem, 2017, 10, 4122-4122.	6.8	4
26	Photophysics and electrochemistry relevant to photocatalytic water splitting involved at solidâ€“electrolyte interfaces. Journal of Energy Chemistry, 2017, 26, 259-269.	12.9	20
27	Enhanced Kinetics of Hole Transfer and Electrocatalysis during Photocatalytic Oxygen Evolution by Cocatalyst Tuning. ACS Catalysis, 2016, 6, 4117-4126.	11.2	48
28	New Insight into the Hydrogen Evolution Reaction under Buffered Near-Neutral pH Conditions: Enthalpy and Entropy of Activation. Journal of Physical Chemistry C, 2016, 120, 24187-24196.	3.1	41
29	A miniature solar device for overall water splitting consisting of series-connected spherical silicon solar cells. Scientific Reports, 2016, 6, 24633.	3.3	25
30	Generation of Transparent Oxygen Evolution Electrode Consisting of Regularly Ordered Nanoparticles from Self-Assembly Cobalt Phthalocyanine as a Template. ACS Applied Materials & Interfaces, 2016, 8, 32376-32384.	8.0	12
31	Temperature Dependence of Electrocatalytic and Photocatalytic Oxygen Evolution Reaction Rates Using NiFe Oxide. ACS Catalysis, 2016, 6, 1713-1722.	11.2	145
32	Electrolyte Engineering toward Efficient Hydrogen Production Electrocatalysis with Oxygen-Crossover Regulation under Densely Buffered Near-Neutral pH Conditions. Journal of Physical Chemistry C, 2016, 120, 1785-1794.	3.1	31
33	Insight on Tafel slopes from a microkinetic analysis of aqueous electrocatalysis for energy conversion. Scientific Reports, 2015, 5, 13801.	3.3	2,017
34	Identification of intrinsic catalytic activity for electrochemical reduction of water molecules to generate hydrogen. Physical Chemistry Chemical Physics, 2015, 17, 15111-15114.	2.8	30
35	Impact of solute concentration on the electrocatalytic conversion of dissolved gases in buffered solutions. Journal of Power Sources, 2015, 287, 465-471.	7.8	26
36	Electrocatalytic Hydrogen Evolution under Densely Buffered Neutral pH Conditions. Journal of Physical Chemistry C, 2015, 119, 20453-20458.	3.1	66

#	Article	IF	Citations
37	Low temperature catalytic reverse water gas shift reaction assisted by an electric field. Catalysis Today, 2014, 232, 27-32.	4.4	117
38	Mechanistic Switching by Hydronium Ion Activity for Hydrogen Evolution and Oxidation over Polycrystalline Platinum Disk and Platinum/Carbon Electrodes. ChemElectroChem, 2014, 1, 1497-1507.	3.4	46
39	Low temperature hydrogen production by catalytic steam reforming of methane in an electric field. International Journal of Hydrogen Energy, 2013, 38, 3003-3011.	7.1	53
40	Methane Conversion Assisted by Plasma or Electric Field. Journal of the Japan Petroleum Institute, 2013, 56, 11-21.	0.6	38