Sung-Fu Hung

List of Publications by Citations

60 papers	9,592 citations	37 h-index	65 g-index
65 ext. papers	12,460 ext. citations	16.5 avg, IF	6.5 L-index

#	Paper	IF	Citations
60	Electrocatalysis for the oxygen evolution reaction: recent development and future perspectives. *Chemical Society Reviews*, **2017**, 46, 337-365	58.5	3041
59	Atomically dispersed Ni(i) as the active site for electrochemical CO2 reduction. *Nature Energy*, **2018**, 3, 140-147	62.3	1046
58	Identification of catalytic sites for oxygen reduction and oxygen evolution in N-doped graphene materials: Development of highly efficient metal-free bifunctional electrocatalyst. *Science Advances* , **2016**, 2, e1501122	14.3	884
57	In Operando Identification of Geometrical-Site-Dependent Water Oxidation Activity of Spinel Co3O4. *Journal of the American Chemical Society*, **2016**, 138, 36-9	16.4	543
56	Copper atom-pair catalyst anchored on alloy nanowires for selective and efficient electrochemical reduction of CO. *Nature Chemistry*, **2019**, 11, 222-228	17.6	337
55	Metal-cluster-decorated TiO2 nanotube arrays: a composite heterostructure toward versatile photocatalytic and photoelectrochemical applications. *Small*, **2015**, 11, 554-67	11	209
54	Elucidating the Electrocatalytic CO Reduction Reaction over a Model Single-Atom Nickel Catalyst. *Angewandte Chemie - International Edition*, **2020**, 59, 798-803	16.4	187
53	One-dimensional hybrid nanostructures for heterogeneous photocatalysis and photoelectrocatalysis. *Small*, **2015**, 11, 2115-31	11	183
52	Enabling Direct H2O2 Production in Acidic Media through Rational Design of Transition Metal Single Atom Catalyst. *CheM*, **2020**, 6, 658-674	16.2	176
51	Breaking Long-Range Order in Iridium Oxide by Alkali Ion for Efficient Water Oxidation. *Journal of the American Chemical Society*, **2019**, 141, 3014-3023	16.4	172
50	Cooperative CO2-to-ethanol conversion via enriched intermediates at molecule–metal catalyst interfaces. *Nature Catalysis*, **2020**, 3, 75-82	36.5	164
49	Efficient electrically powered CO2-to-ethanol via suppression of deoxygenation. *Nature Energy*, **2020**, 5, 478-486	62.3	163
48	An Amorphous Nickel-Iron-Based Electrocatalyst with Unusual Local Structures for Ultrafast Oxygen Evolution Reaction. *Advanced Materials*, **2019**, 31, e1900883	24	161
47	In Situ Electrochemical Production of Ultrathin Nickel Nanosheets for Hydrogen Evolution Electrocatalysis. *CheM*, **2017**, 3, 122-133	16.2	150
46	Stable quantum dot photoelectrolysis cell for unassisted visible light solar water splitting. *ACS Nano*, **2014**, 8, 10403-13	16.7	147
45	Layered Structure Causes Bulk NiFe Layered Double Hydroxide Unstable in Alkaline Oxygen Evolution Reaction. *Advanced Materials*, **2019**, 31, e1903909	24	142
44	Identifying the electrocatalytic sites of nickel disulfide in alkaline hydrogen evolution reaction. *Nano Energy*, **2017**, 41, 148-153	17.1	133

43	Dynamic Evolution of Atomically Dispersed Cu Species for CO2 Photoreduction to Solar Fuels. *ACS Catalysis*, **2019**, 9, 4824-4833	13.1	128
42	An Earth-Abundant Catalyst-Based Seawater Photoelectrolysis System with 17.9% Solar-to-Hydrogen Efficiency. *Advanced Materials*, **2018**, 30, e1707261	24	110
41	Tuning chemical bonding of MnO2 through transition-metal doping for enhanced CO oxidation. *Journal of Catalysis*, **2016**, 341, 82-90	7.3	100
40	Amorphous versus Crystalline in Water Oxidation Catalysis: A Case Study of NiFe Alloy. *Nano Letters* , **2020**, 20, 4278-4285	11.5	99
39	In Situ Spectroscopic Identification of □O Bridging on Spinel CoO Water Oxidation Electrocatalyst. *Journal of Physical Chemistry Letters*, **2016**, 7, 4847-4853	6.4	99
38	Unraveling Geometrical Site Confinement in Highly Efficient Iron-Doped Electrocatalysts toward Oxygen Evolution Reaction. *Advanced Energy Materials*, **2018**, 8, 1701686	21.8	95
37	Coordination engineering of iridium nanocluster bifunctional electrocatalyst for highly efficient and pH-universal overall water splitting. *Nature Communications*, **2020**, 11, 4246	17.4	92
36	Spatially branched hierarchical ZnO nanorod-TiO2 nanotube array heterostructures for versatile photocatalytic and photoelectrocatalytic applications: towards intimate integration of 1D-1D hybrid nanostructures. *Nanoscale*, **2014**, 6, 14950-61	7.7	90
35	Facet engineering accelerates spillover hydrogenation on highly diluted metal nanocatalysts. *Nature Nanotechnology*, **2020**, 15, 848-853	28.7	90
34	Identification of the Electronic and Structural Dynamics of Catalytic Centers in Single-Fe-Atom Material. *CheM*, **2020**, 6, 3440-3454	16.2	79
33	Iridium Oxide-Assisted Plasmon-Induced Hot Carriers: Improvement on Kinetics and Thermodynamics of Hot Carriers. *Advanced Energy Materials*, **2016**, 6, 1501339	21.8	74
32	Efficient Methane Electrosynthesis Enabled by Tuning Local CO Availability. *Journal of the American Chemical Society*, **2020**, 142, 3525-3531	16.4	65
31	Heterojunction of Zinc Blende/Wurtzite in Zn1-xCdxS Solid Solution for Efficient Solar Hydrogen Generation: X-ray Absorption/Diffraction Approaches. *ACS Applied Materials & Interfaces*, **2015**, 7, 22558-69	9.5	63
30	Identification of Stabilizing High-Valent Active Sites by Operando High-Energy Resolution Fluorescence-Detected X-ray Absorption Spectroscopy for High-Efficiency Water Oxidation. *Journal of the American Chemical Society*, **2018**, 140, 17263-17270	16.4	62
29	Light-Induced In Situ Transformation of Metal Clusters to Metal Nanocrystals for Photocatalysis. *ACS Applied Materials & Interfaces*, **2015**, 7, 28105-9	9.5	47
28	CdS sensitized vertically aligned single crystal TiO2 nanorods on transparent conducting glass with improved solar cell efficiency and stability using ZnS passivation layer. *Journal of Power Sources*, **2013**, 233, 236-243	8.9	44
27	The synergistic effect of a well-defined Au@Pt core-shell nanostructure toward photocatalytic hydrogen generation: interface engineering to improve the Schottky barrier and hydrogen-evolved kinetics. *Chemical Communications*, **2016**, 52, 1567-70	5.8	43
26	Tuning the Electronic Spin State of Catalysts by Strain Control for Highly Efficient Water Electrolysis. *Small Methods*, **2018**, 2, 1800001	12.8	41

25	In Situ Spatially Coherent Identification of Phosphide-Based Catalysts: Crystallographic Latching for Highly Efficient Overall Water Electrolysis. *ACS Energy Letters*, **2019**, 4, 2813-2820	20.1	41
24	High-Rate and Efficient Ethylene Electrosynthesis Using a Catalyst/Promoter/Transport Layer. *ACS Energy Letters*, **2020**, 5, 2811-2818	20.1	39
23	Quantitatively Unraveling the Redox Shuttle of Spontaneous Oxidation/Electroreduction of CuO on Silver Nanowires Using in Situ X-ray Absorption Spectroscopy. *ACS Central Science*, **2019**, 5, 1998-2009	16.8	33
22	Promoting CO methanation via ligand-stabilized metal oxide clusters as hydrogen-donating motifs. *Nature Communications*, **2020**, 11, 6190	17.4	30
21	Low coordination number copper catalysts for electrochemical CO methanation in a membrane electrode assembly. *Nature Communications*, **2021**, 12, 2932	17.4	27
20	Elucidating the Electrocatalytic CO2 Reduction Reaction over a Model Single-Atom Nickel Catalyst. *Angewandte Chemie*, **2020**, 132, 808-813	3.6	22
19	Unraveling the Origin of Sulfur-Doped Fe-N-C Single-Atom Catalyst for Enhanced Oxygen Reduction Activity: Effect of Iron Spin-State Tuning. *Angewandte Chemie - International Edition*, **2021**, 60, 25404-25410	16.4	20
18	High Spin State Promotes Water Oxidation Catalysis at Neutral pH in Spinel Cobalt Oxide. *Industrial & Engineering Chemistry Research*, **2018**, 57, 1441-1445	3.9	19
17	In situ morphological transformation and investigation of electrocatalytic properties of cobalt oxide nanostructures toward oxygen evolution. *CrystEngComm*, **2016**, 18, 6008-6012	3.3	16
16	A metal-supported single-atom catalytic site enables carbon dioxide hydrogenation.. *Nature Communications*, **2022**, 13, 819	17.4	15
15	Unveiling the In Situ Generation of a Monovalent Fe(I) Site in the Single-Fe-Atom Catalyst for Electrochemical CO2 Reduction. *ACS Catalysis*, **2021**, 11, 7292-7301	13.1	14
14	Boride-derived oxygen-evolution catalysts. *Nature Communications*, **2021**, 12, 6089	17.4	11
13	Efficient electrosynthesis of n-propanol from carbon monoxide using a Ag□Ru□Cu catalyst. *Nature Energy*,	62.3	9
12	Ternary Alloys Enable Efficient Production of Methoxylated Chemicals via Selective Electrocatalytic Hydrogenation of Lignin Monomers. *Journal of the American Chemical Society*, **2021**, 143, 17226-17235	16.4	7
11	In-situ X-ray techniques for non-noble electrocatalysts. *Pure and Applied Chemistry*, **2020**, 92, 733-749	2.1	6
10	TiO2 Nanotubes: Metal-Cluster-Decorated TiO2 Nanotube Arrays: A Composite Heterostructure toward Versatile Photocatalytic and Photoelectrochemical Applications (Small 5/2015). *Small*, **2015**, 11, 553-553	11	5
9	Precise Tuning of Bimetallic Electronic Effect for Boosting Oxygen Reduction Catalysis. *Nano Letters*, **2021**, 21, 7753-7760	11.5	4
8	Electrochemical flow systems enable renewable energy industrial chain of CO2 reduction. *Pure and Applied Chemistry*, **2020**, 92, 1937-1951	2.1	3

7	Unraveling the Origin of Sulfur-doped Fe-N-C Single Atom Catalyst for Enhanced Oxygen Reduction Activity: Effect of Fe-spin State Tuning. *Angewandte Chemie*,	3.6	3
6	Electrocatalysts: Unraveling Geometrical Site Confinement in Highly Efficient Iron-Doped Electrocatalysts toward Oxygen Evolution Reaction (Adv. Energy Mater. 7/2018). *Advanced Energy Materials*, **2018**, 8, 1870032	21.8	2
5	Innentitelbild: Elucidating the Electrocatalytic CO2 Reduction Reaction over a Model Single-Atom Nickel Catalyst (Angew. Chem. 2/2020). *Angewandte Chemie*, **2020**, 132, 518-518	3.6	1
4	Operando X-ray absorption spectroscopic studies of the carbon dioxide reduction reaction in a modified flow cell. *Catalysis Science and Technology*,	5.5	0
3	Unveiling the Bonding Nature of C3 Intermediates in the CO2 Reduction Reaction through the Oxygen-Deficient Cu2O(110) Surface-A DFT Study. *Journal of Physical Chemistry C*, **2022**, 126, 5502-5512	3.8	0
2	Dual-Hole Excitons Activated Photoelectrolysis in Neutral Solution. *Small*, **2018**, 14, e1704047	11	
1	Nanomaterials: Dual-Hole Excitons Activated Photoelectrolysis in Neutral Solution (Small 14/2018). *Small*, **2018**, 14, 1870061	11	