Boon Siang Yeo

List of Publications by Year
in descending order

85 papers	11,211 citations	53794 45 h-index	64796 79 g-index
86 all docs	86 docs citations	86 times ranked	12402 citing authors

#	Article	IF	Citations
1	Mechanistic routes toward C₃ products in copper-catalysed CO₂ electroreduction. Catalysis Science and Technology, 2022, 12, 409-417.	4.1	24
2	Polaron Delocalization Dependence of the Conductivity and the Seebeck Coefficient in Doped Conjugated Polymers. Journal of Physical Chemistry B, 2022, 126, 2073-2085.	2.6	5
3	The Role of Undercoordinated Sites on Zinc Electrodes for CO₂ Reduction to CO. Advanced Functional Materials, 2022, 32, .	14.9	30
4	Production of C₃â€“C₆ Acetate Esters via CO Electroreduction in a Membrane Electrode Assembly Cell. Angewandte Chemie - International Edition, 2022, 61, .	13.8	12
5	Production of C₃â€“C₆ Acetate Esters via CO Electroreduction in a Membrane Electrode Assembly Cell. Angewandte Chemie, 2022, 134, .	2.0	3
6	Long-chain hydrocarbons by CO2 electroreduction using polarized nickel catalysts. Nature Catalysis, 2022, 5, 545-554.	34.4	107
7	How symmetry factors cause potential- and facet-dependent pathway shifts during CO2 reduction to CH4 on Cu electrodes. Applied Catalysis B: Environmental, 2021, 285, 119776.	20.2	28
8	Selectivity Map for the Late Stages of CO and CO₂ Reduction to C₂ Species on Copper Electrodes. Angewandte Chemie - International Edition, 2021, 60, 10784-10790.	13.8	30
9	Selectivity Map for the Late Stages of CO and CO 2 Reduction to C 2 Species on Copper Electrodes. Angewandte Chemie, 2021, 133, 10879-10885.	2.0	3
10	Mechanistic Insights into the Selective Electroreduction of Crotonaldehyde to Crotyl Alcohol and 1â€Butanol. ChemSusChem, 2021, 14, 2963-2971.	6.8	5
11	Toward Efficient Tandem Electroreduction of CO₂ to Methanol using Anodized Titanium. ACS Catalysis, 2021, 11, 8467-8475.	11.2	13
12	Electrochemical Reduction of Carbon Dioxide to 1â€Butanol on Oxideâ€Derived Copper. Angewandte Chemie, 2020, 132, 21258-21265.	2.0	19
13	Electrochemical Reduction of Carbon Dioxide to 1â€Butanol on Oxideâ€Derived Copper. Angewandte Chemie - International Edition, 2020, 59, 21072-21079.	13.8	57
14	Formation of Câ€“C bonds during electrocatalytic CO₂reduction on non-copper electrodes. Journal of Materials Chemistry A, 2020, 8, 23162-23186.	10.3	36
15	Enhancing CO₂ Electroreduction to Ethanol on Copperâ€“Silver Composites by Opening an Alternative Catalytic Pathway. ACS Catalysis, 2020, 10, 4059-4069.	11.2	145
16	Catalysts for the Electrochemical Reduction of Carbon Dioxide to Methanol. Journal of Electrochemical Energy Conversion and Storage, 2020, 17, .	2.1	4
17	Oxygen evolution by stabilized single Ru atoms. Nature Catalysis, 2019, 2, 284-285.	34.4	35
18	The importance of morphology on the activity of lead cathodes for the reduction of carbon dioxide to formate. Journal of Materials Chemistry A, 2019, 7, 4093-4101.	10.3	62

#	ARTICLE	IF	CITATIONS
19	Electrochemical conversion of carbon dioxide to high value chemicals using gas-diffusion electrodes. Current Opinion in Chemical Engineering, 2019, 26, 112-121.	7.8	53
20	Enhanced Electroreduction of Carbon Dioxide to Methanol Using Zinc Dendrites Pulseâ€Deposited on Silver Foam. Angewandte Chemie - International Edition, 2019, 58, 2256-2260.	13.8	98
21	Enhanced Electroreduction of Carbon Dioxide to Methanol Using Zinc Dendrites Pulseâ€Deposited on Silver Foam. Angewandte Chemie, 2019, 131, 2278-2282.	2.0	7
22	Enhanced Electroreduction of Carbon Dioxide to Methanol Using Zinc Dendrites Pulse-deposited on Silver Foam. ECS Meeting Abstracts, 2019, , .	0.0	0
23	(Invited) Electrochemical Reduction of Carbon Dioxide: Controlling Selectivity to Formic Acid and Methanol. ECS Meeting Abstracts, 2019, , .	0.0	0
24	The effects of currents and potentials on the selectivities of copper toward carbon dioxide electroreduction. Nature Communications, 2018, 9, 925.	12.8	214
25	Investigating the Role of Copper Oxide in Electrochemical CO₂ Reduction in Real Time. ACS Applied Materials & Interfaces, 2018, 10, 8574-8584.	8.0	207
26	Rutheniumâ€"Tungsten Composite Catalyst for the Efficient and Contamination-Resistant Electrochemical Evolution of Hydrogen. ACS Applied Materials & Interfaces, 2018, 10, 6354-6360.	8.0	51
27	Enhanced Catalysis of the Electrochemical Oxygen Evolution Reaction by Iron(III) Ions Adsorbed on Amorphous Cobalt Oxide. ACS Catalysis, 2018, 8, 807-814.	11.2	163
28	Recent advances in understanding mechanisms for the electrochemical reduction of carbon dioxide. Current Opinion in Electrochemistry, 2018, 8, 126-134.	4.8	71
29	Rational Design of Sulfurâ€Doped Copper Catalysts for the Selective Electroreduction of Carbon Dioxide to Formate. ChemSusChem, 2018, 11, 320-326.	6.8	102
30	Understanding the Heterogeneous Electrocatalytic Reduction of Carbon Dioxide on Oxideâ€Derived Catalysts. ChemElectroChem, 2018, 5, 219-237.	3.4	126
31	Crystal structure and surface characteristics of Sr-doped GdBaCo₂O_{6âˆ'Î´} double perovskites: oxygen evolution reaction and conductivity. Journal of Materials Chemistry A, 2018, 6, 5335-5345.	10.3	42
32	Understanding heterogeneous electrocatalytic carbon dioxide reduction through operando techniques. Nature Catalysis, 2018, 1, 922-934.	34.4	515
33	Mechanistic Study of the Synergy between Iron and Transition Metals for the Catalysis of the Oxygen Evolution Reaction. ChemSusChem, 2018, 11, 3790-3795.	6.8	32
34	Effects of Electrolyte Anions on the Reduction of Carbon Dioxide to Ethylene and Ethanol on Copper (100) and (111) Surfaces. ChemSusChem, 2018, 11, 3299-3306.	6.8	106
35	On the Role of Sulfur for the Selective Electrochemical Reduction of CO₂ to Formate on CuS_{<i>x</i>} Catalysts. ACS Applied Materials & Interfaces, 2018, 10, 28572-28581.	8.0	157
36	Interface confined hydrogen evolution reaction in zero valent metal nanoparticles-intercalated molybdenum disulfide. Nature Communications, 2017, 8, 14548.	12.8	174

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37	Electrochemical Reduction of CO₂ Using Copper Single-Crystal Surfaces: Effects of CO* Coverage on the Selective Formation of Ethylene. ACS Catalysis, 2017, 7, 1749-1756.	11.2	507
38	Characterization of Electrocatalytic Water Splitting and CO₂ Reduction Reactions Using In Situ/Operando Raman Spectroscopy. ACS Catalysis, 2017, 7, 7873-7889.	11.2	196
39	â€“CH₃ Mediated Pathway for the Electroreduction of CO₂ to Ethane and Ethanol on Thick Oxide-Derived Copper Catalysts at Low Overpotentials. ACS Energy Letters, 2017, 2, 2103-2109.	17.4	117
40	Continuous Production of Ethylene from Carbon Dioxide and Water Using Intermittent Sunlight. ACS Sustainable Chemistry and Engineering, 2017, 5, 9191-9199.	6.7	39
41	Investigating synergistic interactions of group 4, 5 and 6 metals with gold nanoparticles for the catalysis of the electrochemical hydrogen evolution reaction. Physical Chemistry Chemical Physics, 2017, 19, 20861-20866.	2.8	3
42	Practices for the collection and reporting of electrocatalytic performance and mechanistic information for the CO₂reduction reaction. Catalysis Science and Technology, 2017, 7, 5820-5832.	4.1	29
43	Editorial: â€˜Electrochemical reduction of carbon dioxide by heterogenous and homogeneous catalysts: experiment and theoryâ€™. Catalysis Today, 2017, 288, 1.	4.4	0
44	Electrochemical Carbon Dioxide Reduction on Cu-Zn Bimetallic Catalysts with Enhanced Ethanol Selectivity. ECS Meeting Abstracts, 2017, , .	0.0	0
45	(Invited) Tuning the Selectivity of Carbon Dioxide Electroreduction Using Copper-Based Catalysts. ECS Meeting Abstracts, 2017, , .	0.0	0
46	(Invited) Developing Efficient Electrocatalysts for the Hydrogen and Oxygen Evolution Reactions. ECS Meeting Abstracts, 2017, , .	0.0	0
47	Mechanistic Insights into the Selective Electroreduction of Carbon Dioxide to Ethylene on Cu₂O-Derived Copper Catalysts. Journal of Physical Chemistry C, 2016, 120, 20058-20067.	3.1	164
48	Enhanced catalysis of the electrochemical hydrogen evolution reaction using composites of molybdenum-based compounds, gold nanoparticles and carbon. Physical Chemistry Chemical Physics, 2016, 18, 21548-21553.	2.8	25
49	Tuning the Selectivity of Carbon Dioxide Electroreduction toward Ethanol on Oxide-Derived Cu_{<i>x</i>}Zn Catalysts. ACS Catalysis, 2016, 6, 8239-8247.	11.2	539
50	Operando Raman Spectroscopy of Amorphous Molybdenum Sulfide (MoS_{<i>x</i>}) during the Electrochemical Hydrogen Evolution Reaction: Identification of Sulfur Atoms as Catalytically Active Sites for H⁺ Reduction. ACS Catalysis, 2016, 6, 7790-7798.	11.2	210
51	Efficient and Stable Evolution of Oxygen Using Pulse-Electrodeposited Ir/Ni Oxide Catalyst in Fe-Spiked KOH Electrolyte. ACS Applied Materials & Interfaces, 2016, 8, 15985-15990.	8.0	46
52	<i>In Situ</i> Raman Spectroscopy of Copper and Copper Oxide Surfaces during Electrochemical Oxygen Evolution Reaction: Identification of Cu^{III} Oxides as Catalytically Active Species. ACS Catalysis, 2016, 6, 2473-2481.	11.2	592
53	Catalytic Activities of Sulfur Atoms in Amorphous Molybdenum Sulfide for the Electrochemical Hydrogen Evolution Reaction. ACS Catalysis, 2016, 6, 861-867.	11.2	280
54	Mechanistic Insights into the Enhanced Activity and Stability of Agglomerated Cu Nanocrystals for the Electrochemical Reduction of Carbon Dioxide to <i>n</i>-Propanol. Journal of Physical Chemistry Letters, 2016, 7, 20-24.	4.6	211

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55	Enhanced activity of H2O2-treated copper(ii) oxide nanostructures for the electrochemical evolution of oxygen. Catalysis Science and Technology, 2016, 6, 269-274.	4.1	48
56	Selective Electrochemical Reduction of Carbon Dioxide to Ethylene and Ethanol on Copper(I) Oxide Catalysts. ACS Catalysis, 2015, 5, 2814-2821.	11.2	741
57	Efficient hydrogen evolution reaction catalyzed by molybdenum carbide and molybdenum nitride nanocatalysts synthesized via the urea glass route. Journal of Materials Chemistry A, 2015, 3, 8361-8368.	10.3	364
58	Electrocatalysts for the Selective Reduction of Carbon Dioxide to Useful Products. Chimia, 2015, 69, 131.	0.6	4
59	Electrochemical Reduction of Carbon Dioxide to Ethane Using Nanostructured Cu₂O-Derived Copper Catalyst and Palladium(II) Chloride. Journal of Physical Chemistry C, 2015, 119, 26875-26882.	3.1	115
60	Stable and selective electrochemical reduction of carbon dioxide to ethylene on copper mesocrystals. Catalysis Science and Technology, 2015, 5, 161-168.	4.1	292
61	On the chemical state of Co oxide electrocatalysts during alkaline water splitting. Physical Chemistry Chemical Physics, 2013, 15, 17460.	2.8	89
62	Surface multiheme <i>c</i> -type cytochromes from <i>Thermincola potens</i> and implications for respiratory metal reduction by Gram-positive bacteria. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 1702-1707.	7.1	178
63	Size and Composition Control of Ptâ€“In Nanoparticles Prepared by Seed-Mediated Growth Using Bimetallic Seeds. Langmuir, 2012, 28, 3345-3349.	3.5	12
64	In Situ Raman Study of Nickel Oxide and Gold-Supported Nickel Oxide Catalysts for the Electrochemical Evolution of Oxygen. Journal of Physical Chemistry C, 2012, 116, 8394-8400.	3.1	609
65	Enhanced Activity of Gold-Supported Cobalt Oxide for the Electrochemical Evolution of Oxygen. Journal of the American Chemical Society, 2011, 133, 5587-5593.	13.7	1,264
66	Identification of Hydroperoxy Species as Reaction Intermediates in the Electrochemical Evolution of Oxygen on Gold. ChemPhysChem, 2010, 11, 1854-1857.	2.1	120
67	Performing tipâ€enhanced Raman spectroscopy in liquids. Journal of Raman Spectroscopy, 2009, 40, 1392-1399.	2.5	156
68	Nanoscale Probing of a Polymerâ€Blend Thin Film with Tipâ€Enhanced Raman Spectroscopy. Small, 2009, 5, 952-960.	10.0	88
69	Tip-enhanced Raman Spectroscopy â€“ Its status, challenges and future directions. Chemical Physics Letters, 2009, 472, 1-13.	2.6	229
70	Towards chemical analysis of nanostructures in biofilms I: imaging of biological nanostructures. Analytical and Bioanalytical Chemistry, 2008, 391, 1899-1905.	3.7	39
71	Towards chemical analysis of nanostructures in biofilms II: tip-enhanced Raman spectroscopy of alginates. Analytical and Bioanalytical Chemistry, 2008, 391, 1907-1916.	3.7	138
72	Tip-Enhanced Raman Spectroscopy Can See More:â€‰ The Case of Cytochrome c. Journal of Physical Chemistry C, 2008, 112, 4867-4873.	3.1	113

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73	Near-Field Heating, Annealing, and Signal Loss in Tip-Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2008, 112, 2104-2108.	3.1	83
74	A Strategy to Prevent Signal Losses, Analyte Decomposition, and Fluctuating Carbon Contamination Bands in Surface-Enhanced Raman Spectroscopy. Applied Spectroscopy, 2008, 62, 708-713.	2.2	38
75	Tuning the resonance frequency of Ag-coated dielectric tips. Optics Express, 2007, 15, 8309.	3.4	46
76	Single Molecule Tip-Enhanced Raman Spectroscopy with Silver Tips. Journal of Physical Chemistry C, 2007, 111, 1733-1738.	3.1	314
77	Nanoscale Roughness on Metal Surfaces Can Increase Tip-Enhanced Raman Scattering by an Order of Magnitude. Nano Letters, 2007, 7, 1401-1405.	9.1	160
78	Tipâ€enhanced Raman spectroscopy reveals rich nanoscale adsorption chemistry of 2â€mercaptopyridine on Ag. Israel Journal of Chemistry, 2007, 47, 177-184.	2.3	16
79	Towards rapid nanoscale chemical analysis using tip-enhanced Raman spectroscopy with Ag-coated dielectric tips. Analytical and Bioanalytical Chemistry, 2007, 387, 2655-2662.	3.7	86
80	Multifunctional microscope for far-field and tip-enhanced Raman spectroscopy. Review of Scientific Instruments, 2006, 77, 023104.	1.3	41
81	Enhancement of Raman Signals with Silver-Coated Tips. Applied Spectroscopy, 2006, 60, 1142-1147.	2.2	73
82	Methods for Molecular Nanoanalysis. Chimia, 2006, 60, 783-788.	0.6	9
83	Efficient growth of ordered thin oxide films on Ni by NO2 oxidation. Surface Science, 2004, 557, 201-207.	1.9	5
84	Surface Functionalization of Ni(111) with Acrylate Monolayers. Langmuir, 2003, 19, 2787-2794.	3.5	14
85	Isolation and Identification of Surface-Bound Acetone Enolate on Ni(111). Journal of the American Chemical Society, 2002, 124, 4970-4971.	13.7	33