Ana Sofia Varela

List of Publications by Year
in descending order

33 papers	7,578 citations	201385 27 h-index	360668 35 g-index
36 all docs	36 docs citations	36 times ranked	7124 citing authors

#	Article	IF	Citations
1	CO₂ electrochemical reduction on metalâ€“organic framework catalysts: current status and future directions. Journal of Materials Chemistry A, 2022, 10, 5899-5917.	5.2	38
2	Effect of the reaction environment on the CO2 electrochemical reduction. Chem Catalysis, 2022, 2, 233-235.	2.9	0
3	The benefits of cycling. Nature Energy, 2021, 6, 698-699.	19.8	3
4	The role of the metal center on charge transport rate in MOF-525: cobalt and nickel porphyrin. Dalton Transactions, 2021, 50, 16939-16944.	1.6	8
5	Degradation and mineralization of oxytetracycline in pure and tap water under visible light irradiation using bismuth oxyiodides and the effect of depositing Au nanoparticles. Journal of Photochemistry and Photobiology A: Chemistry, 2020, 388, 112163.	2.0	16
6	Electrocatalytic CO₂ Reduction on CuO_{<i>x</i>} Nanocubes: Tracking the Evolution of Chemical State, Geometric Structure, and Catalytic Selectivity using Operando Spectroscopy. Angewandte Chemie, 2020, 132, 18130-18139.	1.6	45
7	The importance of pH in controlling the selectivity of the electrochemical CO2 reduction. Current Opinion in Green and Sustainable Chemistry, 2020, 26, 100371.	3.2	53
8	Electrocatalytic CO₂ Reduction on CuO_{<i>x</i>} Nanocubes: Tracking the Evolution of Chemical State, Geometric Structure, and Catalytic Selectivity using Operando Spectroscopy. Angewandte Chemie - International Edition, 2020, 59, 17974-17983.	7.2	138
9	Optimizing FeNC Materials as Electrocatalysts for the CO₂ Reduction Reaction: Heatâ€Treatment Temperature, Structure and Performance Correlations. ChemCatChem, 2019, 11, 4854-4861.	1.8	19
10	Electrochemical CO₂ Reduction: Classifying Cu Facets. ACS Catalysis, 2019, 9, 7894-7899.	5.5	170
11	Electrochemical Reduction of CO₂ on Metal-Nitrogen-Doped Carbon Catalysts. ACS Catalysis, 2019, 9, 7270-7284.	5.5	282
12	Efficient CO₂ to CO electrolysis on solid Niâ€“Nâ€“C catalysts at industrial current densities. Energy and Environmental Science, 2019, 12, 640-647.	15.6	357
13	Unraveling Mechanistic Reaction Pathways of the Electrochemical CO₂ Reduction on Feâ€“Nâ€“C Single-Site Catalysts. ACS Energy Letters, 2019, 4, 1663-1671.	8.8	138
14	pH Effects on the Selectivity of the Electrocatalytic CO₂ Reduction on Graphene-Embedded Feâ€“Nâ€“C Motifs: Bridging Concepts between Molecular Homogeneous and Solid-State Heterogeneous Catalysis. ACS Energy Letters, 2018, 3, 812-817.	8.8	168
15	The chemical identity, state and structure of catalytically active centers during the electrochemical CO₂ reduction on porous Feâ€“nitrogenâ€“carbon (Feâ€“Nâ€“C) materials. Chemical Science, 2018, 9, 5064-5073.	3.7	128
16	Molecular Nitrogenâ€“Carbon Catalysts, Solid Metal Organic Framework Catalysts, and Solid Metal/Nitrogenâ€Doped Carbon (MNC) Catalysts for the Electrochemical CO₂ Reduction. Advanced Energy Materials, 2018, 8, 1703614.	10.2	157
17	Single site porphyrine-like structures advantages over metals for selective electrochemical CO2 reduction. Catalysis Today, 2017, 288, 74-78.	2.2	116
18	Quantification of liquid products from the electroreduction of CO2 and CO using static headspace-gas chromatography and nuclear magnetic resonance spectroscopy. Catalysis Today, 2017, 288, 54-62.	2.2	16

#	Article	IF	Citations
19	Understanding activity and selectivity of metal-nitrogen-doped carbon catalysts for electrochemical reduction of CO2. Nature Communications, 2017, 8, 944.	5.8	890
20	Electrochemical CO₂ Reduction: A Classification Problem. ChemPhysChem, 2017, 18, 3266-3273.	1.0	534
21	Catalyst Particle Density Controls Hydrocarbon Product Selectivity in CO₂ Electroreduction on CuO_{<i>x</i>}. ChemSusChem, 2017, 10, 4642-4649.	3.6	66
22	Opportunities and challenges in the electrocatalysis of CO2 and CO reduction using bifunctional surfaces: A theoretical and experimental study of Auâ€“Cd alloys. Journal of Catalysis, 2016, 343, 215-231.	3.1	115
23	Nanostructured electrocatalysts with tunable activity and selectivity. Nature Reviews Materials, 2016, 1, .	23.3	675
24	Highly selective plasma-activated copper catalysts for carbon dioxide reduction to ethylene. Nature Communications, 2016, 7, 12123.	5.8	896
25	Tuning Catalytic Selectivity at the Mesoscale via Interparticle Interactions. ACS Catalysis, 2016, 6, 1075-1080.	5.5	123
26	Tuning the Catalytic Activity and Selectivity of Cu for CO₂ Electroreduction in the Presence of Halides. ACS Catalysis, 2016, 6, 2136-2144.	5.5	344
27	Controlling the selectivity of CO2 electroreduction on copper: The effect of the electrolyte concentration and the importance of the local pH. Catalysis Today, 2016, 260, 8-13.	2.2	417
28	Metalâ€Doped Nitrogenated Carbon as an Efficient Catalyst for Direct CO₂ Electroreduction to CO and Hydrocarbons. Angewandte Chemie - International Edition, 2015, 54, 10758-10762.	7.2	504
29	The effect of functionalised multi-walled carbon nanotubes in the hydrogen electrooxidation reaction in reactive currents impurified with CO. International Journal of Hydrogen Energy, 2014, 39, 5063-5073.	3.8	13
30	CO₂ Electroreduction on Well-Defined Bimetallic Surfaces: Cu Overlayers on Pt(111) and Pt(211). Journal of Physical Chemistry C, 2013, 117, 20500-20508.	1.5	119
31	The importance of surface morphology in controlling the selectivity of polycrystalline copper for CO2 electroreduction. Physical Chemistry Chemical Physics, 2012, 14, 76-81.	1.3	576
32	Design of an Active Site towards Optimal Electrocatalysis: Overlayers, Surface Alloys and Nearâ€Surface Alloys of Cu/Pt(111). Angewandte Chemie - International Edition, 2012, 51, 11845-11848.	7.2	94
33	Electrochemical Hydrogen Evolution: Sabatierâ€™s Principle and the Volcano Plot. Journal of Chemical Education, 2012, 89, 1595-1599.	1.1	243