

# Manuel Alvarez-Guerra

## List of Publications by Year in descending order

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Version: 2024-02-01

37  
papers

2,114  
citations

304743

22  
h-index

361022

35  
g-index

38  
all docs

38  
docs citations

38  
times ranked

2661  
citing authors

#	ARTICLE	IF	CITATIONS
1	Towards the electrochemical conversion of carbon dioxide into methanol. <i>Green Chemistry</i> , 2015, 17, 2304-2324.	9.0	441
2	Ionic liquids in the electrochemical valorisation of CO <sub>2</sub> . <i>Energy and Environmental Science</i> , 2015, 8, 2574-2599.	30.8	172
3	Sn nanoparticles on gas diffusion electrodes: Synthesis, characterization and use for continuous CO <sub>2</sub> electroreduction to formate. <i>Journal of CO<sub>2</sub> Utilization</i> , 2017, 18, 222-228.	6.8	152
4	Design of ionic liquids: an ecotoxicity ( <i>Vibrio fischeri</i> ) discrimination approach. <i>Green Chemistry</i> , 2011, 13, 1507.	9.0	130
5	Electrocatalytic reduction of CO <sub>2</sub> to formate using particulate Sn electrodes: Effect of metal loading and particle size. <i>Applied Energy</i> , 2015, 157, 165-173.	10.1	116
6	Conversion of carbon dioxide into formate using a continuous electrochemical reduction process in a lead cathode. <i>Chemical Engineering Journal</i> , 2012, 207-208, 278-284.	12.7	114
7	Assessment of Self-Organizing Map artificial neural networks for the classification of sediment quality. <i>Environment International</i> , 2008, 34, 782-790.	10.0	95
8	Continuous electrochemical reduction of carbon dioxide into formate using a tin cathode: Comparison with lead cathode. <i>Chemical Engineering Research and Design</i> , 2014, 92, 692-701.	5.6	92
9	Environmental Assessment of Dimethyl Carbonate Production: Comparison of a Novel Electrosynthesis Route Utilizing CO <sub>2</sub> with a Commercial Oxidative Carbonylation Process. <i>ACS Sustainable Chemistry and Engineering</i> , 2016, 4, 2088-2097.	6.7	85
10	Continuous electroreduction of CO <sub>2</sub> to formate using Sn gas diffusion electrodes. <i>AIChE Journal</i> , 2014, 60, 3557-3564.	3.6	81
11	CO <sub>2</sub> electroreduction to formate: Continuous single-pass operation in a filter-press reactor at high current densities using Bi gas diffusion electrodes. <i>Journal of CO<sub>2</sub> Utilization</i> , 2019, 34, 12-19.	6.8	68
12	Improving trade-offs in the figures of merit of gas-phase single-pass continuous CO <sub>2</sub> electrocatalytic reduction to formate. <i>Chemical Engineering Journal</i> , 2021, 405, 126965.	12.7	57
13	A multicriteria-based methodology for site prioritisation in sediment management. <i>Environment International</i> , 2009, 35, 920-930.	10.0	53
14	Prioritization of sediment management alternatives using stochastic multicriteria acceptability analysis. <i>Science of the Total Environment</i> , 2010, 408, 4354-4367.	8.0	41
15	Catalyst coated membrane electrodes for the gas phase CO <sub>2</sub> electroreduction to formate. <i>Catalysis Today</i> , 2020, 346, 58-64.	4.4	35
16	Sediment quality assessment and dredged material management in Spain: Part I, application of sediment quality guidelines in the bay of Santander. <i>Integrated Environmental Assessment and Management</i> , 2007, 3, 529-538.	2.9	34
17	Development of models for predicting toxicity from sediment chemistry by partial least squares-discriminant analysis and counter-propagation artificial neural networks. <i>Environmental Pollution</i> , 2010, 158, 607-614.	7.5	32
18	Continuous electroconversion of CO <sub>2</sub> into formate using 2 nm tin oxide nanoparticles. <i>Applied Catalysis B: Environmental</i> , 2021, 297, 120447.	20.2	31

#	ARTICLE	IF	CITATIONS
19	Toxicity bioassays in core sediments from the Bay of Santander, northern Spain. Environmental Research, 2008, 106, 304-312.	7.5	29
20	Enhancement of the electrochemical reduction of CO <sub>2</sub> to methanol and suppression of H <sub>2</sub> evolution over CuO nanowires. Electrochimica Acta, 2020, 363, 137207.	5.2	25
21	Gas-liquid-solid reaction system for CO <sub>2</sub> electroreduction to formate without using supporting electrolyte. AIChE Journal, 2020, 66, e16299.	3.6	24
22	Sediment Quality Assessment and Dredged Material Management in Spain: Part II, Analysis of Action Levels for Dredged Material Management and Application to the Bay of Cádiz. Integrated Environmental Assessment and Management, 2007, 3, 539.	2.9	22
23	A chemometric approach to the environmental problem of predicting toxicity in contaminated sediments. Journal of Chemometrics, 2010, 24, 379-386.	1.3	21
24	Electrosynthesis of dimethyl carbonate from methanol and CO <sub>2</sub> using potassium methoxide and the ionic liquid [bmim][Br] in a filter-press cell: a study of the influence of cell configuration. Journal of Chemical Technology and Biotechnology, 2016, 91, 507-513.	3.2	21
25	Continuous electroreduction of CO <sub>2</sub> towards formate in gas-phase operation at high current densities with an anion exchange membrane. Journal of CO <sub>2</sub> Utilization, 2022, 56, 101822.	6.8	19
26	Binary copper-bismuth catalysts for the electrochemical reduction of CO <sub>2</sub> : Study on surface properties and catalytic activity. Chemical Engineering Journal, 2022, 445, 136575.	12.7	19
27	Continuous Electrochemical Reduction of CO <sub>2</sub> to Formate: Comparative Study of the Influence of the Electrode Configuration with Sn and Bi-Based Electrocatalysts. Molecules, 2020, 25, 4457.	3.8	18
28	CO <sub>2</sub> electro-valorization to dimethyl carbonate from methanol using potassium methoxide and the ionic liquid [bmim][Br] in a filter-press electrochemical cell. Journal of Chemical Technology and Biotechnology, 2015, 90, 1433-1438.	3.2	17
29	Electrochemical Conversion of CO <sub>2</sub> to Value-Added Products. , 2018, , 29-59.		17
30	A SOM-based methodology for classifying air quality monitoring stations. Environmental Progress and Sustainable Energy, 2011, 30, 424-438.	2.3	13
31	Monitoring and managing sediment quality and impact assessment in Spain in the past 10 years. TrAC - Trends in Analytical Chemistry, 2007, 26, 252-260.	11.4	12
32	Modeling of the binodal curve of ionic liquid/salt aqueous systems. Fluid Phase Equilibria, 2016, 426, 10-16.	2.5	10
33	Learning-by-Doing: The Chem-E-Car Competition® in the University of Cantabria as case study. Education for Chemical Engineers, 2019, 26, 14-23.	4.8	9
34	The many faces of carbon in electrochemistry: general discussion. Faraday Discussions, 2014, 172, 117-137.	3.2	4
35	Role of surface contaminants, functionalities, defects and electronic structure: general discussion. Faraday Discussions, 2014, 172, 365-395.	3.2	1
36	Carbon electrode interfaces for synthesis, sensing and electrocatalysis: general discussion. Faraday Discussions, 2014, 172, 497-520.	3.2	1

#	ARTICLE	IF	CITATIONS
37	Continuous gas-phase electrochemical reduction of CO <sub>2</sub> to formate using Bi Catalyst Coated Membrane Electrodes in a filter press reactor $\hat{A}$ , 0 , , .		0