Maria Cm Alvim-Ferraz

List of Publications by Year
in descending order

124 papers	6,972 citations	66343 42 h-index	60623 81 g-index
127 all docs	127 docs citations	127 times ranked	8690 citing authors

#	Article	IF	Citations
1	Waste materials for activated carbon preparation and its use in aqueous-phase treatment: A review. Journal of Environmental Management, 2007, 85, 833-846.	7.8	810
2	Recent developments on carbon capture and storage: An overview. Chemical Engineering Research and Design, 2011, 89, 1446-1460.	5.6	604
3	Activated carbon modifications to enhance its water treatment applications. An overview. Journal of Hazardous Materials, 2011, 187, 1-23.	12.4	467
4	Multiple linear regression and artificial neural networks based on principal components to predict ozone concentrations. Environmental Modelling and Software, 2007, 22, 97-103.	4.5	380
5	Carbon dioxide capture from flue gases using microalgae: Engineering aspects and biorefinery concept. Renewable and Sustainable Energy Reviews, 2012, 16, 3043-3053.	16.4	351
6	Comparison of the performance of different homogeneous alkali catalysts during transesterification of waste and virgin oils and evaluation of biodiesel quality. Fuel, 2008, 87, 3572-3578.	6.4	268
7	Production of biodiesel from acid waste lard. Bioresource Technology, 2009, 100, 6355-6361.	9.6	145
8	Biodiesel production from raw castor oil. Energy, 2013, 53, 58-66.	8.8	127
9	Wastewater treatment to enhance the economic viability of microalgae culture. Environmental Science and Pollution Research, 2013, 20, 5096-5105.	5.3	123
10	Photobioreactor design for microalgae production through computational fluid dynamics: A review. Renewable and Sustainable Energy Reviews, 2017, 79, 248-254.	16.4	122
11	Management of air quality monitoring using principal component and cluster analysisâ€"Part I: SO2 and PM10. Atmospheric Environment, 2008, 42, 1249-1260.	4.1	121
12	Polycyclic aromatic hydrocarbons in gas and particulate phases of indoor environments influenced by tobacco smoke: Levels, phase distributions, and health risks. Atmospheric Environment, 2011, 45, 1799-1808.	4.1	109
13	The activity-based methodology to assess ship emissions - A review. Environmental Pollution, 2017, 231, 87-103.	7.5	102
14	Development of low-cost indoor air quality monitoring devices: Recent advancements. Science of the Total Environment, 2020, 727, 138385.	8.0	99
15	Impact of vehicular traffic emissions on particulate-bound PAHs: Levels and associated health risks. Atmospheric Research, 2013, 127, 141-147.	4.1	96
16	Biodiesel production using oil from fish canning industry wastes. Energy Conversion and Management, 2013, 74, 17-23.	9.2	88
17	Selection of heterogeneous catalysts for biodiesel production from animal fat. Fuel, 2012, 94, 418-425.	6.4	86
18	Air pollution from traffic emissions in Oporto, Portugal: Health and environmental implications. Microchemical Journal, 2011, 99, 51-59.	4.5	84

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19	PAH air pollution at a Portuguese urban area: carcinogenic risks and sources identification. Environmental Science and Pollution Research, 2013, 20, 3932-3945.	5.3	83
20	Management of air quality monitoring using principal component and cluster analysisâ€"Part II: CO, NO2 and O3. Atmospheric Environment, 2008, 42, 1261-1274.	4.1	82
21	Mixtures of Vegetable Oils and Animal Fat for Biodiesel Production: Influence on Product Composition and Quality. Energy & Fuels, 2008, 22, 3889-3893.	5.1	75
22	Indoor air quality in urban nurseries at Porto city: Particulate matter assessment. Atmospheric Environment, 2014, 84, 133-143.	4.1	70
23	Selection and validation of parameters in multiple linear and principal component regressions. Environmental Modelling and Software, 2008, 23, 50-55.	4.5	66
24	Influence of atmospheric ozone, PM10 and meteorological factors on the concentration of airborne pollen and fungal spores. Atmospheric Environment, 2008, 42, 7452-7464.	4.1	66
25	Influence of tobacco smoke on the elemental composition of indoor particles of different sizes. Atmospheric Environment, 2009, 43, 486-493.	4.1	64
26	Time-series analysis of air pollution data. Atmospheric Environment, 1999, 33, 2361-2372.	4.1	62
27	Influence of traffic emissions on the composition of atmospheric particles of different sizes â€“ Part 1: concentrations and elemental characterization. Journal of Atmospheric Chemistry, 2007, 58, 55-68.	3.2	61
28	Biodiesel production using calcium manganese oxide as catalyst and different raw materials. Energy Conversion and Management, 2013, 65, 647-653.	9.2	61
29	Assessment of shipping emissions on four ports of Portugal. Environmental Pollution, 2017, 231, 1370-1379.	7.5	60
30	Towards sustainable microalgal biomass production by phycoremediation of a synthetic wastewater: A kinetic study. Algal Research, 2015, 11, 350-358.	4.6	56
31	Analysis of polycyclic aromatic hydrocarbons in atmospheric particulate samples by microwaveâ€assisted extraction and liquid chromatography. Journal of Separation Science, 2009, 32, 501-510.	2.5	53
32	Indoor Air Quality in Schools and Health Symptoms among Portuguese Teachers. Human and Ecological Risk Assessment (HERA), 2009, 15, 159-169.	3.4	53
33	Health effects of ozone focusing on childhood asthma: What is now known â€“ a review from an epidemiological point of view. Chemosphere, 2013, 90, 2051-2058.	8.2	52
34	Remediation of soils combining soil vapor extraction and bioremediation: Benzene. Chemosphere, 2010, 80, 823-828.	8.2	51
35	Quantifying indoor air quality determinants in urban and rural nursery and primary schools. Environmental Research, 2019, 176, 108534.	7.5	51
36	Incineration of healthcare wastes: management of atmospheric emissions through waste segregation. Waste Management, 2005, 25, 638-648.	7.4	48

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37	Prediction of ozone concentrations in Oporto city with statistical approaches. Chemosphere, 2006, 64, 1141-1149.	8.2	48
38	Influence of traffic emissions on the composition of atmospheric particles of different sizesâ€"Part 2: SEMâ€"EDS characterization. Journal of Atmospheric Chemistry, 2008, 60, 221-236.	3.2	48
39	Incineration of Different Types of Medical Wastes:Â Emission Factors for Particulate Matter and Heavy Metals. Environmental Science & Technology, 2003, 37, 3152-3157.	10.0	47
40	Integrated production of biodiesel and bioethanol from sweet potato. Renewable Energy, 2018, 124, 114-120.	8.9	47
41	Contribution of anthropogenic pollutants to the increase of tropospheric ozone levels in the Oporto Metropolitan Area, Portugal since the 19th century. Environmental Pollution, 2006, 140, 516-524.	7.5	46
42	Influence of Traffic Emissions on the Carcinogenic Polycyclic Aromatic Hydrocarbons in Outdoor Breathable Particles. Journal of the Air and Waste Management Association, 2010, 60, 393-401.	1.9	45
43	Remediation of sandy soils contaminated with hydrocarbons and halogenated hydrocarbons by soil vapour extraction. Journal of Environmental Management, 2012, 104, 195-201.	7.8	45
44	The microenvironmental modelling approach to assess children's exposure to air pollution â€“ A review. Environmental Research, 2014, 135, 317-332.	7.5	45
45	Children's exposure to indoor air in urban nurseries-part I: CO2 and comfort assessment. Environmental Research, 2015, 140, 1-9.	7.5	45
46	Influence of tobacco smoke on carcinogenic PAH composition in indoor PM10 and PM2.5. Atmospheric Environment, 2009, 43, 6376-6382.	4.1	44
47	Short-term effects of air pollution on respiratory morbidity at Rio de Janeiro â€" Part II: Health assessment. Environment International, 2012, 43, 1-5.	10.0	40
48	Glycerol-enriched heterogeneous catalyst for biodiesel production from soybean oil and waste frying oil. Energy Conversion and Management, 2015, 89, 665-671.	9.2	40
49	Potentialities of quantile regression to predict ozone concentrations. Environmetrics, 2009, 20, 147-158.	1.4	39
50	Children's exposure to indoor air in urban nurseries â€“ Part II: Gaseous pollutants' assessment. Environmental Research, 2015, 142, 662-670.	7.5	39
51	Particulate matter in rural and urban nursery schools in Portugal. Environmental Pollution, 2015, 202, 7-16.	7.5	37
52	Identification of redundant air quality measurements through the use of principal component analysis. Atmospheric Environment, 2009, 43, 3837-3842.	4.1	36
53	Environmental and social valuation of shipping emissions on four ports of Portugal. Journal of Environmental Management, 2019, 235, 62-69.	7.8	35
54	Determination of free formaldehyde in foundry resins as its 2,4-dinitrophenylhydrazone by liquid chromatography. Analytica Chimica Acta, 2002, 467, 97-103.	5.4	34

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55	Indoor air pollution on nurseries and primary schools: impact on childhood asthma â€“ study protocol. BMC Public Health, 2012, 12, 435.	2.9	34
56	Soil vapor extraction in sandy soils: Influence of airflow rate. Chemosphere, 2008, 73, 1557-1561.	8.2	33
57	Mapping Carbon Monoxide Using GPS Tracked Sensors. Environmental Monitoring and Assessment, 2006, 101, 203-21.	2.7	30
58	Identification and origin of nocturnal ozone maxima at urban and rural areas of Northern Portugal â€“ Influence of horizontal transport. Atmospheric Environment, 2011, 45, 942-956.	4.1	30
59	Remediation efficiency of vapour extraction of sandy soils contaminated with cyclohexane: Influence of air flow rate, water and natural organic matter content. Environmental Pollution, 2006, 143, 146-152.	7.5	28
60	Control of atmospheric emissions of volatile organic compounds using impregnated active carbons. Fuel, 1999, 78, 1567-1573.	6.4	27
61	Elemental Characterization Of Indoor Breathable Particles at a Portuguese Urban Hospital. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2012, 75, 909-919.	2.3	27
62	Incineration of different types of medical wastes: emission factors for gaseous emissions. Atmospheric Environment, 2003, 37, 5415-5422.	4.1	26
63	Air Quality Improvements Using European Environment Policies: A Case Study of SO2in a Coastal Region in Portugal. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2007, 70, 347-351.	2.3	26
64	Identification of tobacco smoke components in indoor breathable particles by SEMâ€“EDS. Atmospheric Environment, 2011, 45, 863-872.	4.1	26
65	Effect of light supply on CO2 capture from atmosphere by Chlorella vulgaris and Pseudokirchneriella subcapitata. Mitigation and Adaptation Strategies for Global Change, 2014, 19, 1109-1117.	2.1	26
66	Impact of indoor air pollution in nursery and primary schools on childhood asthma. Science of the Total Environment, 2020, 745, 140982.	8.0	26
67	Biodiesel Production through Transesterification of Poultry Fat at 30 Â°C. Energy & Fuels, 2010, 24, 5717-5721.	5.1	25
68	Water-free process for eco-friendly purification of biodiesel obtained using a heterogeneous Ca-based catalyst. Fuel Processing Technology, 2014, 121, 114-118.	7.2	25
69	Ozone exposure and its influence on the worsening of childhood asthma. Allergy: European Journal of Allergy and Clinical Immunology, 2009, 64, 1046-1055.	5.7	24
70	Gaseous pollutants on rural and urban nursery schools in Northern Portugal. Environmental Pollution, 2016, 208, 2-15.	7.5	24
71	Childrenâ€™s Exposure to Radon in Nursery and Primary Schools. International Journal of Environmental Research and Public Health, 2016, 13, 386.	2.6	22
72	Surface ozone behaviour at rural sites in Portugal. Atmospheric Research, 2012, 104-105, 164-171.	4.1	21

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73	Effect of Crambe abyssinica oil degumming in phosphorus concentration of refined oil and derived biodiesel. Renewable Energy, 2018, 124, 27-33.	8.9	21
74	Determination of free furfuryl alcohol in foundry resins by chromatographic techniques. Analytica Chimica Acta, 2005, 537, 47-51.	5.4	19
75	Soil remediation time to achieve clean-up goals II: Influence of natural organic matter and water contents. Chemosphere, 2006, 64, 817-825.	8.2	19
76	Estimating the health and economic burden of shipping related air pollution in the Iberian Peninsula. Environment International, 2021, 156, 106763.	10.0	19
77	Dioxin Emission Factors for the Incineration of Different Medical Waste Types. Archives of Environmental Contamination and Toxicology, 2003, 44, 460-466.	4.1	18
78	Study of an ethylic biodiesel integrated process: Raw-materials, reaction optimization and purification methods. Fuel Processing Technology, 2014, 124, 198-205.	7.2	18
79	Integration of Microalgae-Based Bioenergy Production into a Petrochemical Complex: Techno-Economic Assessment. Energies, 2016, 9, 224.	3.1	18
80	European Directives for Air Quality: Analysis of the New Limits in Comparison with Asthmatic Symptoms in Children Living in the Oporto Metropolitan Area, Portugal. Human and Ecological Risk Assessment (HERA), 2005, 11, 607-616.	3.4	17
81	Spirometric tests to assess the prevalence of childhood asthma at Portuguese rural areas: Influence of exposure to high ozone levels. Environment International, 2011, 37, 474-478.	10.0	17
82	Health economic assessment of a shift to active transport. Environmental Pollution, 2020, 258, 113745.	7.5	17
83	Impregnated active carbons to control atmospheric emissions. Journal of Colloid and Interface Science, 2003, 259, 133-138.	9.4	15
84	Estimation of pollutant partition in sandy soils with different water contents. Environmental Monitoring and Assessment, 2010, 171, 171-180.	2.7	14
85	Catalytic activity of active carbons impregnated before activation of pinewood sawdust and nutshells to be used on the control of atmospheric emissions. Journal of Hazardous Materials, 2005, 119, 135-143.	12.4	13
86	Asthma prevalence and risk factors in early childhood at Northern Portugal. Revista Portuguesa De Pneumologia, 2016, 22, 146-150.	0.7	12
87	Monitoring Enzymatic Hydroesterification of Low-Cost Feedstocks by Fourier Transform InfraRed Spectroscopy. Catalysts, 2019, 9, 535.	3.5	12
88	Prediction of tropospheric ozone concentrations: Application of a methodology based on the Darwinâ€™s Theory of Evolution. Expert Systems With Applications, 2011, 38, 1903-1908.	7.6	11
89	Soil remediation time to achieve clean-up goals I: Influence of soil water content. Chemosphere, 2006, 62, 853-860.	8.2	10
90	Prediction of PM10 concentrations through multiâ€“gene genetic programming. Atmospheric Pollution Research, 2010, 1, 305-310.	3.8	10

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91	Short-term effects of air pollution on respiratory morbidity at Rio de Janeiro â€" PART I: Air Pollution Assessment. Environment International, 2012, 44, 18-25.	10.0	10
92	Radon Levels in Nurseries and Primary Schools inBraganÃ§aDistrictâ€"Preliminary Assessment. Journal of Toxicology and Environmental Health - Part A: Current Issues, 2015, 78, 805-813.	2.3	10
93	Micropore Size Distribution of Activated Carbons Impregnated After Carbonization. Journal of Porous Materials, 2003, 10, 47-55.	2.6	9
94	Identification of Regions with High Ozone Concentrations Aiming the Impact Assessment on Childhood Asthma. Human and Ecological Risk Assessment (HERA), 2008, 14, 610-622.	3.4	9
95	Comparison of several linear statistical models to predict tropospheric ozone concentrations. Journal of Statistical Computation and Simulation, 2012, 82, 183-192.	1.2	9
96	Multiple Linear Regression and Artificial Neural Networks to Predict Time and Efficiency of Soil Vapor Extraction. Water, Air, and Soil Pollution, 2014, 225, 1.	2.4	9
97	Structure of impregnated active carbons produced with almond shellsâ€"influence of impregnation methodology. Fuel, 2000, 79, 645-650.	6.4	8
98	Effects of air pollution on emergency admissions for chronic obstructive pulmonary diseases in Oporto, Portugal. International Journal of Environment and Pollution, 2005, 23, 42.	0.2	8
99	Impregnated Active Carbons to Control Atmospheric Emissions:â€‰ Influence of Impregnation Methodology and Raw Material on the Catalytic Activity. Environmental Science & Technology, 2005, 39, 6231-6236.	10.0	8
100	Evolutionary procedure based model to predict groundâ€"level ozone concentrations. Atmospheric Pollution Research, 2010, 1, 215-219.	3.8	8
101	Sequential Application of Soil Vapor Extraction and Bioremediation Processes for the Remediation of Ethylbenzene-Contaminated Soils. Water, Air, and Soil Pollution, 2012, 223, 2601-2609.	2.4	8
102	Influence of land-sea breezes on nocturnal ozone maxima observed in urban sites. International Journal of Environment and Waste Management, 2010, 6, 293.	0.3	6
103	Indoor PM₁₀ and PM_{2.5} at Nurseries and Primary Schools. Advanced Materials Research, 0, 433-440, 385-390.	0.3	6
104	Asthma prevalence in Portuguese preschool children: The latest scientific evidence. Revista Portuguesa De Pneumologia, 2016, 22, 293-295.	0.7	5
105	Air pollution and lung diseases in Oporto Area. Environmental Monitoring and Assessment, 1988, 11, 183-192.	2.7	4
106	Impregnated active carbons to control atmospheric emissions. Journal of Colloid and Interface Science, 2003, 266, 160-167.	9.4	3
107	Active carbons impregnated before activation of olive stones: catalytic activity to remove benzene from gaseous emissions. Journal of Physics and Chemistry of Solids, 2004, 65, 655-659.	4.0	3
108	Evaluation of atmospheric deposition and patterns of polycyclic aromatic hydrocarbons in faÃ§ades of historic monuments of Oporto (Portugal). International Journal of Environmental Analytical Chemistry, 2013, 93, 1052-1064.	3.3	3

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109	Biocomplementation of SVE to achieve clean-up goals in soils contaminated with toluene and xylene. Environmental Monitoring and Assessment, 2013, 185, 8429-8438.	2.7	3
110	Exploratory study on internal recycling of crude glycerol for biodiesel production: Catalyst replacement. Chemical Industry and Chemical Engineering Quarterly, 2016, 22, 445-452.	0.7	3
111	Evolution of air pollution in Oporto area. Environmental Monitoring and Assessment, 1988, 11, 43-58.	2.7	2
112	Extraction of Chromium from Contaminated Soils. International Journal of Environmental Analytical Chemistry, 1999, 75, 33-42.	3.3	2
113	Activation and Impregnation of Chars â€" Nutshells and Pinewood Sawdust. Adsorption Science and Technology, 2003, 21, 897-909.	3.2	2
114	Outdoor and indoor benzene evaluation by GC-FID and GC-MS/MS. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2011, 46, 181-187.	1.7	2
115	Influence of traffic on the elemental composition of PM10 and PM2.5 in Oporto region. WIT Transactions on Ecology and the Environment, 2007, , .	0.0	2
116	Chromatographic Techniques for the Determination of Free Phenol in Foundry Resins. Analytical Letters, 2011, 44, 1536-1543.	1.8	1
117	Bioactive Nano-Filters to Control Legionella on Indoor Air. Advanced Materials Research, 2012, 506, 23-26.	0.3	1
118	RECOVERY OF BY-PRODUCTS FROM THE OLIVE OIL PRODUCTION AND THE VEGETABLE OIL REFINING FOR BIODIESEL PRODUCTION. Detritus, 2018, In Press, 1.	0.9	1
119	Textural modifications in impregnated active carbons. Studies in Surface Science and Catalysis, 1982, 10, 239-244.	1.5	0
120	Preparation Of Active Carbon Supported Oxidation Catalysts. Studies in Surface Science and Catalysis, 1983, , 571-577.	1.5	0
121	Poster 18 Principal component and multiple linear regressions to predict ozone concentrations. Developments in Environmental Science, 2007, 6, 790-792.	0.5	0
122	Evaluation of Formaldehyde in Foundry Waste Sands Using Liquid Chromatography. Analytical Letters, 2009, 42, 492-504.	1.8	0
123	Prediction of the next day maximum ozone concentration using multiple linear and principal component regressions. WIT Transactions on Ecology and the Environment, 2006, , .	0.0	0
124	Remediation of coastal sandy soils polluted by petroleum leaks. , 2011, , .		0