

# Maria Da Graça Carvalho

## List of Publications by Year in descending order

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97  
papers

5,088  
citations

94433

37  
h-index

91884

69  
g-index

97  
all docs

97  
docs citations

97  
times ranked

4212  
citing authors

#	ARTICLE	IF	CITATIONS
1	Fractal and projected structure properties of soot aggregates. <i>Combustion and Flame</i> , 1995, 100, 621-633.	5.2	413
2	Multi-criteria assessment of new and renewable energy power plants. <i>Energy</i> , 2002, 27, 739-755.	8.8	293
3	A RECIPE FOR IMAGE CHARACTERIZATION OF FRACTAL-LIKE AGGREGATES. <i>Journal of Aerosol Science</i> , 1999, 30, 1379-1389.	3.8	272
4	Optimisation of MSW collection routes for minimum fuel consumption using 3D GIS modelling. <i>Waste Management</i> , 2009, 29, 1176-1185.	7.4	236
5	Energy system assessment with sustainability indicators. <i>Energy Policy</i> , 2000, 28, 603-612.	8.8	187
6	EU energy and climate change strategy. <i>Energy</i> , 2012, 40, 19-22.	8.8	176
7	Increasing renewable energy sources in island energy supply: case study Porto Santo. <i>Renewable and Sustainable Energy Reviews</i> , 2004, 8, 383-399.	16.4	174
8	Sustainability assessment of hydrogen energy systems. <i>International Journal of Hydrogen Energy</i> , 2004, 29, 1327-1342.	7.1	171
9	How to achieve a 100% RES electricity supply for Portugal?. <i>Applied Energy</i> , 2011, 88, 508-517.	10.1	162
10	Planning for a 100% independent energy system based on smart energy storage for integration of renewables and CO2 emissions reduction. <i>Applied Thermal Engineering</i> , 2011, 31, 2073-2083.	6.0	155
11	Renewislands – Renewable energy solutions for islands. <i>Renewable and Sustainable Energy Reviews</i> , 2007, 11, 1888-1902.	16.4	151
12	Two energy system analysis models: A comparison of methodologies and results. <i>Energy</i> , 2007, 32, 948-954.	8.8	121
13	RenewIslands methodology for sustainable energy and resource planning for islands. <i>Renewable and Sustainable Energy Reviews</i> , 2008, 12, 1032-1062.	16.4	113
14	Optimization of a wind powered desalination and pumped hydro storage system. <i>Applied Energy</i> , 2016, 177, 487-499.	10.1	95
15	Sustainability assessment of a hybrid energy system. <i>Energy Policy</i> , 2008, 36, 2903-2910.	8.8	93
16	H2RES, Energy planning tool for island energy systems – The case of the Island of Mljet†. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 7015-7026.	7.1	93
17	Numerical characterization of the morphology of aggregated particles. <i>Journal of Aerosol Science</i> , 2001, 32, 489-508.	3.8	90
18	Modelling of the combustion process and NOx emission in a utility boiler. <i>Fuel</i> , 2000, 79, 1611-1619.	6.4	89

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19	Evaluation of the Fractal Properties of Cluster?Cluster Aggregates. <i>Aerosol Science and Technology</i> , 2000, 33, 440-454.	3.1	81
20	Multi-criteria evaluation of hydrogen system options. <i>International Journal of Hydrogen Energy</i> , 2007, 32, 3183-3193.	7.1	78
21	Hydrogen as an energy vector in the islands' energy supply. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 1091-1103.	7.1	76
22	A case study of fuel savings through optimisation of MSW transportation routes. <i>Management of Environmental Quality</i> , 2008, 19, 444-454.	4.3	76
23	Spray characterization: Numerical prediction of Sauter mean diameter and droplet size distribution. <i>Fuel</i> , 1996, 75, 1707-1714.	6.4	72
24	Flue gas recirculation in a gas-fired laboratory furnace: Measurements and modelling. <i>Fuel</i> , 1997, 76, 919-929.	6.4	71
25	Building a low carbon society. <i>Energy</i> , 2011, 36, 1842-1847.	8.8	71
26	3-D numerical model for predicting NOx emissions from an industrial pulverized coal combustor. <i>Fuel</i> , 1994, 73, 1128-1134.	6.4	63
27	Modelling of radiative heat transfer in enclosures with obstacles. <i>International Journal of Heat and Mass Transfer</i> , 1998, 41, 745-756.	4.8	63
28	Integrated waste-to-energy conversion and waste transportation within island communities. <i>Energy</i> , 2009, 34, 623-635.	8.8	63
29	Multi-criteria evaluation of natural gas resources. <i>Energy Policy</i> , 2007, 35, 704-713.	8.8	61
30	Feed-in tariffs for promotion of energy storage technologies. <i>Energy Policy</i> , 2011, 39, 1410-1425.	8.8	59
31	Sustainability assessment of desalination plants for water production. <i>Desalination</i> , 1999, 124, 19-31.	8.2	53
32	Effects of polydispersity of aggregates and primary particles on radiative properties of simulated soot. <i>Journal of Quantitative Spectroscopy and Radiative Transfer</i> , 1996, 55, 357-371.	2.3	48
33	Integrated analysis of energy and water supply in islands. Case study of S. Vicente, Cape Verde. <i>Energy</i> , 2015, 92, 639-648.	8.8	48
34	Potential of Kyoto Protocol Clean Development Mechanism in transfer of clean energy technologies to Small Island Developing States: case study of Cape Verde. <i>Renewable and Sustainable Energy Reviews</i> , 2003, 7, 83-98.	16.4	47
35	Sustainability assessment of cogeneration sector development in Croatia. <i>Energy</i> , 2006, 31, 2276-2284.	8.8	47
36	Combustion Characteristics of a Front-Wall-Fired Pulverized-Coal 300 MWe Utility Boiler. <i>Combustion Science and Technology</i> , 1997, 129, 277-293.	2.3	44

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37	Modeling of a front wall fired utility boiler for different operating conditions. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2001, 190, 3581-3590.	6.6	44
38	Calculation of laminar recirculating flows using a local non-staggered grid refinement system. <i>International Journal for Numerical Methods in Fluids</i> , 1991, 12, 535-557.	1.6	38
39	Increasing the supply of renewable energy sources in island energy systems. <i>International Journal of Sustainable Energy</i> , 2003, 23, 177-186.	2.4	35
40	Improvement of energy efficiency in glass-melting furnaces, cement kilns and baking ovens. <i>Applied Thermal Engineering</i> , 1997, 17, 921-933.	6.0	33
41	On NOx emissions from turbulent propane diffusion flames. <i>Combustion and Flame</i> , 1998, 112, 221-230.	5.2	31
42	Modelling of Heat Transfer in Radiating and Combusting Systems. <i>Chemical Engineering Research and Design</i> , 1998, 76, 175-184.	5.6	29
43	Radiative heat transfer in soot-containing combustion systems with aggregation. <i>International Journal of Heat and Mass Transfer</i> , 1998, 41, 2581-2587.	4.8	29
44	Predictions and measurements of laminar flow over two-dimensional obstacles. <i>Applied Mathematical Modelling</i> , 1987, 11, 23-34.	4.2	27
45	Prediction of the droplet size and velocity joint distribution for sprays. <i>Fuel</i> , 2001, 80, 383-394.	6.4	27
46	Concept of expert system for boiler fouling assessment. <i>Applied Thermal Engineering</i> , 1996, 16, 835-844.	6.0	26
47	Prediction of the near burner region and measurements of NOx and particulate emissions in heavy fuel oil spray flames. <i>Combustion and Flame</i> , 1993, 92, 231-240.	5.2	25
48	Analysis of potential for market penetration of renewable energy technologies in peripheral islands. <i>Renewable Energy</i> , 2000, 19, 311-317.	8.9	25
49	Sustainable Assessment Method for Energy Systems. , 2000, , .		25
50	Evaluation of natural gas supply options for south east and central Europe. Part 1: Indicator definitions and single indicator analysis. <i>Energy Conversion and Management</i> , 2007, 48, 2517-2524.	9.2	22
51	Evaluation of natural gas supply options for Southeast and Central Europe: Part 2. Multi-criteria assessment. <i>Energy Conversion and Management</i> , 2008, 49, 2345-2353.	9.2	22
52	Application of a domain decomposition technique to the mathematical modelling of a utility boiler. <i>International Journal for Numerical Methods in Engineering</i> , 1993, 36, 3401-3419.	2.8	20
53	Boiler tube leakage detection expert system. <i>Applied Thermal Engineering</i> , 1998, 18, 317-326.	6.0	20
54	An expert system concept for diagnosis and monitoring of gas turbine combustion chambers. <i>Applied Thermal Engineering</i> , 2006, 26, 766-771.	6.0	20

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55	Heat transfer in gas turbine combustors. <i>Journal of Thermophysics and Heat Transfer</i> , 1989, 3, 123-131.	1.6	18
56	Biomass-fired power plant: the sustainability option. <i>International Journal of Sustainable Energy</i> , 2007, 26, 179-193.	2.4	18
57	Influence of virtual changes in building configurations of a real street canyon on the dispersion of PM10. <i>Urban Climate</i> , 2013, 5, 68-81.	5.7	17
58	Potential of poplar short rotation coppice cultivation for bioenergy in Southern Portugal. <i>Energy Conversion and Management</i> , 2016, 125, 242-253.	9.2	17
59	The formation and destruction of NO in turbulent propane diffusion flames. <i>Fuel</i> , 1998, 77, 1705-1714.	6.4	16
60	A NOx diagnostic system based on a spectral ultraviolet/visible imaging device. <i>Fuel</i> , 1999, 78, 1283-1292.	6.4	15
61	Mathematical Simulation of a Circulating Fluidised Bed Combustor. <i>Combustion Science and Technology</i> , 1993, 93, 223-243.	2.3	14
62	Modeling of soot formation and oxidation in turbulent diffusion flames. <i>Journal of Thermophysics and Heat Transfer</i> , 1995, 9, 644-652.	1.6	14
63	Mathematical Modelling of NO Formation in a Power Station Boiler. <i>Combustion Science and Technology</i> , 1995, 108, 363-382.	2.3	13
64	A radiation and convection fluxmeter for high temperature applications. <i>Experimental Thermal and Fluid Science</i> , 2000, 22, 165-173.	2.7	13
65	An advanced model to assess fouling and slagging in coal fired boilers. <i>International Journal of Energy Research</i> , 2002, 26, 1221-1236.	4.5	13
66	?HySociety? in support of European hydrogen projects and EC policy. <i>International Journal of Hydrogen Energy</i> , 2005, 30, 239-245.	7.1	13
67	On aerodynamic sealing for industrial applications. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 1991, 37, 255-268.	3.9	12
68	Assessment of land use and land use change and forestry (LULUCF) as CDM projects in Brazil. <i>Ecological Economics</i> , 2006, 60, 260-270.	5.7	12
69	Monitoring, fault detection and operation prediction of MSW incinerators using multivariate statistical methods. <i>Waste Management</i> , 2011, 31, 1635-1644.	7.4	12
70	A new instrument for radiation heat flux measurement—analysis and parameter selection. <i>Heat Recovery Systems &amp; CHP</i> , 1995, 15, 787-796.	0.3	11
71	Investigation of challenges to the utilization of fuel cell buses in the EU vs transition economies. <i>Renewable and Sustainable Energy Reviews</i> , 2007, 11, 357-364.	16.4	11
72	Recent Advances in Low-Carbon and Sustainable, Efficient Technology: Strategies and Applications. <i>Energies</i> , 2022, 15, 2954.	3.1	11

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73	Numerical prediction of an oil-fired water tube boiler. <i>Engineering Computations</i> , 1990, 7, 227-234.	1.4	10
74	Knowledge-based expert system for fouling assessment of industrial heat exchangers. <i>Applied Thermal Engineering</i> , 1996, 16, 203-208.	6.0	10
75	Modelling of a solid fuel combustion chamber of a ramjet using a multi-block domain decomposition technique. <i>Aerospace Science and Technology</i> , 1998, 2, 107-119.	4.8	10
76	Fouling of combustion chambers and high-temperature filters. <i>Applied Thermal Engineering</i> , 1997, 17, 763-775.	6.0	9
77	Modelling of a Utility Boiler Using Parallel Computing. <i>Journal of Supercomputing</i> , 1999, 13, 211-232.	3.6	9
78	Evaluation of a three-dimensional model for the prediction of heat transfer in power station boilers. <i>International Journal of Energy Research</i> , 1995, 19, 579-592.	4.5	8
79	A recipe for image characterization of fractal-like aggregates. <i>Journal of Aerosol Science</i> , 1998, 29, S1275-S1276.	3.8	8
80	Comparison of measurements and predictions of wall heat flux and gas composition in an oil-fired utility boiler. <i>Proceedings of the Combustion Institute</i> , 1994, 25, 227-234.	0.3	7
81	Experimental verification and calibration of the blow-off heat flux sensor. <i>Applied Thermal Engineering</i> , 1998, 18, 481-489.	6.0	7
82	Sustainability Assessment of Aluminum Heat Sink Design. <i>Heat Transfer Engineering</i> , 2003, 24, 39-48.	1.9	7
83	Mathematical modeling of coal-fired fluidized bed combustors. <i>Combustion and Flame</i> , 1989, 77, 91-100.	5.2	6
84	Computational fluid dynamics. <i>Management of Environmental Quality</i> , 2004, 15, 102-110.	4.3	6
85	Influence of Pedestrian Trajectories on School Children Exposure to PM <sub>10</sub> . <i>Journal of Nanomaterials</i> , 2014, 2014, 1-9.	2.7	6
86	THE COMPARISON OF TWO COMPREHENSIVE COMBUSTION CODES TO SIMULATE LARGE-SCALE, OIL-FIRED BOILERS. <i>Combustion Science and Technology</i> , 1996, 120, 55-81.	2.3	5
87	On the effect of the local turbulence scales on the mixing rate of diffusion flames: assessment of two different combustion models. <i>International Journal of Energy Research</i> , 2002, 26, 893-920.	4.5	5
88	LIMPO: an improved version of the PISO algorithm for turbulent swirling flows. <i>Engineering Computations</i> , 1997, 14, 325-341.	1.4	4
89	Modelling and validation of the formation and oxidation of cenospheres in a confined spray flame. <i>International Journal of Energy Research</i> , 1997, 21, 1331-1344.	4.5	4
90	Flexibly using results of CFD and simplified heat transfer model for pulverized coal-fired boilers. <i>International Journal of Energy Research</i> , 2000, 24, 1161-1169.	4.5	4

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91	Modelling of combustion and NOx emissions in industrial equipment. Pure and Applied Chemistry, 1993, 65, 345-354.	1.9	3
92	A Confluence-Based Expert System for the Detection of Heat Exchanger Fouling. Heat Transfer Engineering, 1998, 19, 28-35.	1.9	2
93	Energy and environmental analysis of an entire coke production plant using ECLIPSE. International Journal of Energy Research, 2001, 25, 93-106.	4.5	2
94	Indoor environment quality: a new challenge for environmental education. International Journal of Environment and Sustainable Development, 2005, 4, 154.	0.3	2
95	Radiation and Convection Heat Flux Sensor for High Temperature Gas Environment. , 1998, , .		1
96	Increasing RES Penetration and Security of Energy Supply by Use of Energy Storages and Heat Pumps in Croatian Energy System. NATO Science for Peace and Security Series C: Environmental Security, 2010, , 159-171.	0.2	0
97	RADIATION AND CONVECTION HEAT FLUX MEASUREMENT. , 1998, , .		0