Mario Costa

List of Publications by Year
in descending order

186	7,183	50276	82547
papers	citations	46 h-index	72 g-index

192	192	192	4930
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Review on Ammonia as a Potential Fuel: From Synthesis to Economics. Energy & Fuels, 2021, 35, 6964-7029.	5.1	403
2	Experimental and kinetic modeling study of laminar burning velocities of NH3/air, NH3/H2/air, NH3/CO/air and NH3/CH4/air premixed flames. Combustion and Flame, 2019, 206, 214-226.	5.2	353
3	Ammonia as an energy vector: Current and future prospects for low-carbon fuel applications in internal combustion engines. Journal of Cleaner Production, 2021, 296, 126562.	9.3	194
4	Auto-ignition kinetics of ammonia and ammonia/hydrogen mixtures at intermediate temperatures and high pressures. Combustion and Flame, 2019, 206, 189-200.	5.2	177
5	Modelling approaches to biomass gasification: A review with emphasis on the stoichiometric method. Renewable and Sustainable Energy Reviews, 2017, 74, 71-88.	16.4	143
6	Experimental study and kinetic analysis of the laminar burning velocity of NH3/syngas/air, NH3/CO/air and NH3/H2/air premixed flames at elevated pressures. Combustion and Flame, 2020, 221, 270-287.	5.2	141
7	Chemical kinetic modelling of ammonia/hydrogen/air ignition, premixed flame propagation and NO emission. Fuel, 2019, 246, 24-33.	6.4	137
8	Relationship between fuel quality and gaseous and particulate matter emissions in a domestic pellet-fired boiler. Fuel, 2014, 119, 141-152.	6.4	127
9	Analysis of vehicle exhaust waste heat recovery potential using a Rankine cycle. Energy, 2013, 49, 71-85.	8.8	102
10	Optimization of a wind powered desalination and pumped hydro storage system. Applied Energy, 2016, 177, 487-499.	10.1	95
11	EXPERIMENTAL CHARACTERIZATION OF AN INDUSTRIAL PULVERIZED COAL-FIRED FURNACE UNDER DEEP STAGING CONDITIONS. Combustion Science and Technology, 2007, 179, 1923-1935.	2.3	93
12	Investigation on Pyrolysis of Low Lipid Microalgae Chlorella vulgaris and Dunaliella salina. Energy & Fuels, 2014, 28, 95-103.	5.1	93
13	In situ structural changes of crystalline and amorphous cellulose during slow pyrolysis at low temperatures. Fuel, 2018, 216, 313-321.	6.4	93
14	Operational, Combustion, and Emission Characteristics of a Small-Scale Combustor. Energy & Fuels, 2011, 25, 2469-2480.	5.1	92
15	Combustion and emission characteristics of a domestic boiler fired with pellets of pine, industrial wood wastes and peach stones. Renewable Energy, 2013, 51, 220-226.	8.9	88
16	Importance of the inlet air velocity on the establishment of flameless combustion in a laboratory combustor. Experimental Thermal and Fluid Science, 2013, 44, 75-81.	2.7	87
17	Potential of biomass residues for energy production and utilization in a region of Portugal. Biomass and Bioenergy, 2010, 34, 661-666.	5.7	83
18	Evaluation of the combustion behaviour and ash characteristics of biomass waste derived fuels, pine and coal in a drop tube furnace. Fuel, 2014, 117, 809-824.	6.4	81

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19	Techno-economic analysis of a trigeneration system based on biomass gasification. Renewable and Sustainable Energy Reviews, 2019, 103, 501-514.	16.4	77
20	Ash deposition during the co-firing of bituminous coal with pine sawdust and olive stones in a laboratory furnace. Fuel, 2010, 89, 4040-4048.	6.4	76
21	Measurements of gas species, temperature, and char burnout in a low-no x pulverized-coal-fired utility boiler. Combustion Science and Technology, 2003, 175, 271-289.	2.3	75
22	Impact of the air staging on the performance of a pulverized coal fired furnace. Proceedings of the Combustion Institute, 2009, 32, 2667-2673.	3.9	74
23	Flue gas recirculation in a gas-fired laboratory furnace: Measurements and modelling. Fuel, 1997, 76, 919-929.	6.4	71
24	Test of a small domestic boiler using different pellets. Biomass and Bioenergy, 2004, 27, 531-539.	5.7	71
25	Large Eddy Simulation of coal combustion in a large-scale laboratory furnace. Proceedings of the Combustion Institute, 2015, 35, 3609-3617.	3.9	71
26	Effect of KCl and CaCl2 loading on the formation of reaction intermediates during cellulose fast pyrolysis. Proceedings of the Combustion Institute, 2017, 36, 2263-2270.	3.9	69
27	Reexamination of the scaling laws for NOx emissions from hydrocarbon turbulent jet diffusion flames. Combustion and Flame, 2005, 142, 160-169.	5.2	65
28	A combined genetic algorithm and least squares fitting procedure for the estimation of the kinetic parameters of the pyrolysis of agricultural residues. Energy Conversion and Management, 2016, 125, 290-300.	9.2	64
29	A comparison between microalgae virtual biorefinery arrangements for bio-oil production based on lab-scale results. Journal of Cleaner Production, 2016, 130, 58-67.	9.3	62
30	On the road to 100% renewable energy systems in isolated islands. Energy, 2020, 198, 117321.	8.8	62
31	Combustion and Emission Characteristics of Ammonia under Conditions Relevant to Modern Gas Turbines. Combustion Science and Technology, 2021, 193, 2514-2533.	2.3	61
32	Structure and Laminar Flame Speed of an Ammonia/Methane/Air Premixed Flame under Varying Pressure and Equivalence Ratio. Energy & Fuels, 2021, 35, 7179-7192.	5.1	60
33	Effect of gas temperature and oxygen concentration on single particle ignition behavior of biomass fuels. Proceedings of the Combustion Institute, 2017, 36, 2235-2242.	3.9	59
34	Particle emissions from a domestic pellets-fired boiler. Fuel Processing Technology, 2012, 103, 51-56.	7.2	58
35	Heavy fuel oil combustion in a cylindrical laboratory furnace: measurements and modeling. Fuel, 2005, 84, 359-369.	6.4	57
36	Detailed measurements in a pulverized-coal-fired large-scale laboratory furnace with air staging. Fuel, 2009, 88, 40-45.	6.4	57

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37	Formation of Anhydro-sugars in the Primary Volatiles and Solid Residues from Cellulose Fast Pyrolysis in a Wire-Mesh Reactor. Energy & Fuels, 2014, 28, 5204-5211.	5.1	57
38	Experimental and kinetic modelling investigation on NO, CO and NH3 emissions from NH3/CH4/air premixed flames. Fuel, 2019, 254, 115693.	6.4	55
39	Modelling transport phenomena and chemical reactions in automotive three-way catalytic converters. Chemical Engineering Journal, 2009, 148, 173-183.	12.7	54
40	On the Combustion of Hydrogen-Rich Gaseous Fuels with Low Calorific Value in a Porous Burner. Energy & Fuels, 2010, 24, 880-887.	5.1	54
41	Experimental and modeling study on the auto-ignition properties of ammonia/methane mixtures at elevated pressures. Proceedings of the Combustion Institute, 2021, 38, 261-268.	3.9	54
42	Combustion of NH₃/CH₄/Air and NH₃/H₂/Air Mixtures in a Porous Burner: Experiments and Kinetic Modeling. Energy & Fuels, 2019, 33, 12767-12780.	5.1	52
43	Quantification and use of forest biomass residues in Maputo province, Mozambique. Biomass and Bioenergy, 2009, 33, 1221-1228.	5.7	51
44	Oxy-fuel combustion characteristics of pulverized-coal in a drop tube furnace. Fuel, 2014, 115, 452-460.	6.4	51
45	Increasing the penetration of renewable energy sources in isolated islands through the interconnection of their power systems. The case of Pico and Faial islands, Azores. Energy, 2019, 182, 502-510.	8.8	51
46	Ignition behavior of Turkish biomass and lignite fuels at low and high heating rates. Fuel, 2017, 207, 154-164.	6.4	50
47	Evaluation of the conversion efficiency of ceramic and metallic three way catalytic converters. Energy Conversion and Management, 2008, 49, 291-300.	9.2	49
48	Characteristics of NH3/H2/air flames in a combustor fired by a swirl and bluff-body stabilized burner. Proceedings of the Combustion Institute, 2021, 38, 5129-5138.	3.9	49
49	NOx formation and reduction mechanisms in pulverized coal flames. Fuel, 1994, 73, 1423-1436.	6.4	48
50	Integrated analysis of energy and water supply in islands. Case study of S. Vicente, Cape Verde. Energy, 2015, 92, 639-648.	8.8	48
51	Effect of low frequency ultrasound on microalgae solvent extraction: Analysis of products, energy consumption and emissions. Algal Research, 2016, 14, 9-16.	4.6	48
52	Laminar burning velocities of CH4/O2/N2 and oxygen-enriched CH4/O2/CO2 flames at elevated pressures measured using the heat flux method. Fuel, 2020, 259, 116152.	6.4	48
53	Numerical simulation of a reversed flow small-scale combustor. Fuel Processing Technology, 2013, 107, 126-137.	7.2	45
54	Performance analysis of a biomass powered micro-cogeneration system based on gasification and syngas conversion in a reciprocating engine. Energy Conversion and Management, 2018, 175, 33-48.	9.2	45

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55	Combustion Characteristics of a Front-Wall-Fired Pulverized-Coal 300 MWe Utility Boiler. Combustion Science and Technology, 1997, 129, 277-293.	2.3	44
56	Investigation on ash deposit formation during the co-firing of coal with agricultural residues in a large-scale laboratory furnace. Fuel, 2014, 117, 269-277.	6.4	44
57	Evaluation of the combustion characteristics of raw and torrefied grape pomace in a thermogravimetric analyzer and in a drop tube furnace. Fuel, 2018, 212, 95-100.	6.4	44
58	Comparison of Rice Husk and Wheat Straw: From Slow and Fast Pyrolysis to Char Combustion. Energy & Fuels, 2013, 27, 7115-7125.	5.1	43
59	Assessment of the Performance of Several Turbulence and Combustion Models in the Numerical Simulation of a Flameless Combustor. Combustion Science and Technology, 2013, 185, 600-626.	2.3	43
60	Thermo-economic analysis of a novel cogeneration system for sewage sludge treatment. Energy, 2016, 115, 1560-1571.	8.8	43
61	Experimental evaluation of the performance of a flameless combustor. Applied Thermal Engineering, 2013, 50, 805-815.	6.0	42
62	Spray Characteristics of Angled Liquid Injection into Subsonic Crossflows. AIAA Journal, 2006, 44, 646-653.	2.6	41
63	NO control through reburning using biomass in a laboratory furnace: Effect of particle size. Proceedings of the Combustion Institute, 2009, 32, 2641-2648.	3.9	40
64	Combustion kinetics and particle fragmentation of raw and torrified pine shells and olive stones in a drop tube furnace. Proceedings of the Combustion Institute, 2015, 35, 3591-3599.	3.9	39
65	Experimental and chemical kinetic study of CO and NO formation in oxy-methane premixed laminar flames doped with NH3. Combustion and Flame, 2015, 162, 1294-1303.	5.2	39
66	Effects of potassium and calcium on the early stages of combustion of single biomass particles. Fuel, 2017, 209, 787-794.	6.4	39
67	Experimental study on the influence of the thermal input on the reaction zone under flameless oxidation conditions. Fuel Processing Technology, 2013, 106, 423-428.	7.2	38
68	Co-combustion of crude glycerin with natural gas and hydrogen. Proceedings of the Combustion Institute, 2013, 34, 2759-2767.	3.9	37
69	Evaluation of thermochemical properties of raw and extracted microalgae. Energy, 2015, 92, 365-372.	8.8	37
70	Experimental Study of the Combustion Regimes Occurring in a Laboratory Combustor. Combustion Science and Technology, 2012, 184, 243-258.	2.3	34
71	Exergy analysis of a polygeneration-enabled district heating and cooling system based on gasification of refuse derived fuel. Journal of Cleaner Production, 2017, 141, 760-773.	9.3	34
72	Co-combustion of biomass in a natural gas-fired furnace. Combustion Science and Technology, 2003, 175, 1953-1977.	2.3	33

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73	The relative importance of external and internal transport phenomena in three way catalysts. International Journal of Heat and Mass Transfer, 2008, 51, 1409-1422.	4.8	33
74	Single particle ignition and combustion of pulverized pine wood, wheat straw, rice husk and grape pomace. Proceedings of the Combustion Institute, 2019, 37, 2663-2671.	3.9	33
75	Effects of KCl and CaCl2 on the evolution of anhydro sugars in reaction intermediates during cellulose fast pyrolysis. Fuel, 2019, 251, 307-315.	6.4	33
76	On NOx emissions from turbulent propane diffusion flames. Combustion and Flame, 1998, 112, 221-230.	5.2	31
77	CO2 gasification rates of char particles from torrefied pine shell, olive stones and straw. Fuel, 2015, 158, 753-763.	6.4	31
78	Numerical simulation of ignition mode and ignition delay time of pulverized biomass particles. Combustion and Flame, 2019, 206, 400-410.	5.2	31
79	Impact of using biomass boilers on the energy rating and CO2 emissions of Iberian Peninsula residential buildings. Energy and Buildings, 2013, 66, 732-744.	6.7	30
80	Towards a sustainable waste-to-energy pathway to pequi biomass residues: Biochar, syngas, and biodiesel analysis. Waste Management, 2022, 143, 144-156.	7.4	30
81	Unresolved Issues on the Kinetic Modeling of Pyrolysis of Woody and Nonwoody Biomass Fuels. Energy & Fuels, 2017, 31, 4035-4044.	5.1	29
82	Role of different chain end types in pyrolysis of glucose-based anhydro-sugars and oligosaccharides. Fuel, 2018, 234, 738-745.	6.4	29
83	Temporally and spectrally resolved images of single burning pulverized wheat straw particles. Fuel, 2018, 224, 434-441.	6.4	29
84	On the Conceptual Design of Novel Supercritical CO2 Power Cycles for Waste Heat Recovery. Energies, 2020, 13, 370.	3.1	29
85	In situ evolution of functional groups in char during cellulose pyrolysis under the catalysis of KCl and CaCl2. Fuel, 2022, 309, 122227.	6.4	29
86	Formation of Fine Particulate Matter in a Domestic Pellet-Fired Boiler. Energy & Fuels, 2013, 27, 1081-1092.	5.1	28
87	Nitrogen oxides emissions from buoyancy and momentum controlled turbulent methane jet diffusion flames. Experimental Thermal and Fluid Science, 2004, 28, 729-734.	2.7	27
88	Experimental Investigation of a Novel Combustor Model for Gas Turbines. Journal of Propulsion and Power, 2009, 25, 609-617.	2.2	27
89	Combustion of hydrogen rich gaseous fuels with low calorific value in a porous burner placed in a confined heated environment. Experimental Thermal and Fluid Science, 2013, 45, 102-109.	2.7	26
90	Impact of a reduction in heating, cooling and electricity loads on the performance of a polygeneration district heating and cooling system based on waste gasification. Energy, 2018, 151, 594-604.	8.8	26

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91	Ignition and combustion of single pulverized biomass and coal particles in N2/O2 and CO2/O2 environments. Fuel, 2021, 283, 118956.	6.4	26
92	Prediction of the near burner region and measurements of NOx and particulate emissions in heavy fuel oil spray flames. Combustion and Flame, 1993, 92, 231-240.	5.2	25
93	Analysis of the mass transfer controlled regime in automotive catalytic converters. International Journal of Heat and Mass Transfer, 2008, 51, 41-51.	4.8	23
94	Non-uniform velocity profile mechanism for flame stabilization in a porous radiant burner. Experimental Thermal and Fluid Science, 2011, 35, 172-179.	2.7	23
95	Characterization of the reaction zone structures in a laboratory combustor using optical diagnostics: from flame to flameless combustion. Proceedings of the Combustion Institute, 2017, 36, 4305-4312.	3.9	23
96	Effect of particle size on the burnout and emissions of particulate matter from the combustion of pulverized agricultural residues in a drop tube furnace. Energy Conversion and Management, 2017, 149, 774-780.	9.2	22
97	Review of Pulverized Combustion of Non-Woody Residues. Energy & Fuels, 2018, 32, 4069-4095.	5.1	22
98	Slow pyrolysis of xylan as pentose model compound for hardwood hemicellulose: A study of the catalytic effect of Na ions. Journal of Analytical and Applied Pyrolysis, 2019, 137, 266-275.	5.5	22
99	Modelling soot formation during biomass gasification. Renewable and Sustainable Energy Reviews, 2020, 134, 110380.	16.4	22
100	Effect of reducing ends on the pyrolysis characteristics and product distribution of cellulose. Journal of Analytical and Applied Pyrolysis, 2015, 114, 119-126.	5.5	21
101	Pyrolysis mechanism of Î²-O-4 type lignin model polymers with different oxygen functional groups on CÎ±. Journal of Analytical and Applied Pyrolysis, 2018, 136, 169-177.	5.5	21
102	Biomass production of poplar short rotation coppice over five and six rotations and its aptitude as a fuel. Biomass and Bioenergy, 2019, 122, 183-192.	5.7	21
103	CO-COMBUSTION OF PULVERIZED COAL, PINE SHELLS, AND TEXTILE WASTES IN A PROPANE-FIRED FURNACE: MEASUREMENTS AND PREDICTIONS. Combustion Science and Technology, 2004, 176, 2071-2104.	2.3	20
104	An experimental investigation of fluid flow and wall temperature distributions in an automotive headlight. International Journal of Heat and Fluid Flow, 2005, 26, 709-721.	2.4	20
105	Experimental and computational study of a lifted, non-premixed turbulent free jet flame. Fuel, 2007, 86, 793-806.	6.4	20
106	Multiple impinging jet air-assisted atomization. Experimental Thermal and Fluid Science, 2018, 96, 303-310.	2.7	20
107	Effect of steam on the single particle ignition of solid fuels in a drop tube furnace under air and simulated oxy-fuel conditions. Proceedings of the Combustion Institute, 2019, 37, 2977-2985.	3.9	20
108	Quantitative imaging of potassium release from single burning pulverized biomass char particles. Fuel, 2020, 264, 116866.	6.4	20

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109	Flow and Combustion Characteristics of a Low-NOx Combustor Model for Gas Turbines. Journal of Propulsion and Power, 2011, 27, 1212-1217.	2.2	19
110	Which chlorine ions are currently being quantified as total chlorine on solid alternative fuels?. Fuel Processing Technology, 2014, 128, 61-67.	7.2	19
111	Experimental and Numerical Investigation of the Influence of the Air Preheating Temperature on the Performance of a Small-Scale Mild Combustor. Combustion Science and Technology, 2015, 187, 1724-1741.	2.3	19
112	Modeling the impact of the presence of KCl on the slow pyrolysis of cellulose. Fuel, 2018, 215, 57-65.	6.4	19
113	Effects of KCl, KOH and K2CO3 on the pyrolysis of CÎ²-O type lignin-related polymers. Journal of Analytical and Applied Pyrolysis, 2020, 147, 104809.	5.5	19
114	Simultaneous reduction of NOx and particulate emissionsfrom heavy fuel oil-fired furnaces. Proceedings of the Combustion Institute, 2002, 29, 2243-2250.	3.9	18
115	Combustion of biodiesel in a large-scale laboratory furnace. Energy, 2014, 74, 950-955.	8.8	18
116	Short rotation coppice for bioenergy: From biomass characterization to establishment â€“ A review. Renewable and Sustainable Energy Reviews, 2017, 74, 1170-1180.	16.4	18
117	Influence of K/C Ratio on Gasification Rate of Biomass Chars. Energy & Fuels, 2018, 32, 10695-10700.	5.1	18
118	Small-Scale Biomass Gasification for Green Ammonia Production in Portugal: A Techno-Economic Study. Energy & Fuels, 2021, 35, 13847-13862.	5.1	18
119	THE EFFECTIVENESS OF REBURNING USING RICE HUSK AS SECONDARY FUEL FOR NOXREDUCTION IN A FURNACE. Combustion Science and Technology, 2005, 177, 539-557.	2.3	17
120	Evaluation of SI engine exhaust gas emissions upstream and downstream of the catalytic converter. Energy Conversion and Management, 2006, 47, 2811-2828.	9.2	17
121	Particle fragmentation of raw and torrefied biomass during combustion in a drop tube furnace. Fuel, 2015, 159, 530-537.	6.4	17
122	Potential of poplar short rotation coppice cultivation for bioenergy in Southern Portugal. Energy Conversion and Management, 2016, 125, 242-253.	9.2	17
123	Kinetics of Poplar Short Rotation Coppice Obtained from Thermogravimetric and Drop Tube Furnace Experiments. Energy & Fuels, 2016, 30, 6525-6536.	5.1	17
124	Ash deposit formation during the combustion of pulverized grape pomace in a drop tube furnace. Energy Conversion and Management, 2018, 169, 383-389.	9.2	17
125	Toward an Efficient and Sustainable Use of Energy in Industries and Cities. Energies, 2019, 12, 3150.	3.1	17
126	The formation and destruction of NO in turbulent propane diffusion flames. Fuel, 1998, 77, 1705-1714.	6.4	16

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127	Detailed measurements in a laboratory furnace with reburning. Fuel, 2011, 90, 1090-1100.	6.4	16
128	EFFECT OF THE LIQUID INJECTION ANGLE ON THE ATOMIZATION OF LIQUID JETS IN SUBSONIC CROSSFLOWS. Atomization and Sprays, 2014, 24, 81-96.	0.8	16
129	Effect of the Turbulenceâ€“Chemistry Interaction in Packed-Bed Biomass Combustion. Energy & Fuels, 2017, 31, 9967-9982.	5.1	16
130	Recent Advances in the Analysis of Sustainable Energy Systems. Energies, 2018, 11, 2520.	3.1	16
131	Is Renewable Energy-Powered Desalination a Viable Solution for Water Stressed Regions? A Case Study in Algarve, Portugal. Energies, 2019, 12, 4651.	3.1	16
132	Rapid Pyrolysis of Pulverized Biomass at a High Temperature: The Effect of Particle Size on Char Yield, Retentions of Alkali and Alkaline Earth Metallic Species, and Char Particle Shape. Energy & Fuels, 2020, 34, 7140-7148.	5.1	16
133	Combustion Measurements In a Heavy Fuel Oil-Fired Furnace. Combustion Science and Technology, 1991, 75, 129-154.	2.3	15
134	A NOx diagnostic system based on a spectral ultraviolet/visible imaging device. Fuel, 1999, 78, 1283-1292.	6.4	15
135	Energy and economic assessment of a polygeneration district heating and cooling system based on gasification of refuse derived fuels. Energy, 2017, 137, 696-705.	8.8	15
136	Numerical study on K/S/Cl release during devolatilization of pulverized biomass at high temperature. Proceedings of the Combustion Institute, 2021, 38, 3909-3917.	3.9	15
137	Effects of gas preheat temperature on soot formation in co-flow methane and ethylene diffusion flames. Proceedings of the Combustion Institute, 2021, 38, 1225-1232.	3.9	15
138	Single-Droplet Combustion of Jet A-1, Hydroprocessed Vegetable Oil, and Their Blends in a Drop-Tube Furnace. Energy & Fuels, 2021, 35, 7232-7241.	5.1	15
139	A decision support method for biochars characterization from carbonization of grape pomace. Biomass and Bioenergy, 2021, 145, 105946.	5.7	15
140	Initial stages of the devolatilization of pulverized-coal in a turbulent jet. Combustion and Flame, 1994, 96, 150-162.	5.2	14
141	Pyrolysis and Char Characterization of Refuse-Derived Fuel Components. Energy & Fuels, 2015, 29, 1997-2005.	5.1	14
142	Role of Potassium and Calcium on the Combustion Characteristics of Biomass Obtained from Thermogravimetric Experiments. Energy & Fuels, 2017, 31, 12238-12246.	5.1	14
143	Emissions of polycyclic aromatic hydrocarbons during biomass combustion in a drop tube furnace. Fuel, 2017, 207, 790-800.	6.4	14
144	Effect of particle size on particulate matter emissions during biosolid char combustion under air and oxyfuel conditions. Fuel, 2018, 232, 251-256.	6.4	14

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145	Soot and char formation in the gasification of pig manure in a drop tube reactor. Fuel, 2020, 281, 118738.	6.4	14
146	Experimental and kinetic modelling investigation on the effects of crystallinity on cellulose pyrolysis. Journal of Analytical and Applied Pyrolysis, 2020, 152, 104863.	5.5	14
147	Modelling the biomass updraft gasification process using the combination of a pyrolysis kinetic model and a thermodynamic equilibrium model. Energy Reports, 2021, 7, 8051-8061.	5.1	14
148	Experimental and numerical investigation of turbulent diffusion flames in a laboratory combustor with a slot burner. Fuel, 2016, 175, 182-190.	6.4	13
149	Nitrous oxide emissions from an industry-type pulverized-coal burner. Combustion and Flame, 1991, 87, 104-108.	5.2	12
150	Production of Synthetic Natural Gas from Refuse-Derived Fuel Gasification for Use in a Polygeneration District Heating and Cooling System. Energies, 2016, 9, 1080.	3.1	11
151	Insights about the effect of composition, branching and molecular weight on the slow pyrolysis of xylose-based polysaccharides. Journal of Analytical and Applied Pyrolysis, 2022, 161, 105369.	5.5	11
152	Detailed Measurements in a Heavy Fuel Oil-Fired Large-Scale Furnace. Combustion Science and Technology, 1991, 77, 1-26.	2.3	10
153	A Large Eddy Simulation Study on the Effect of Devolatilization Modelling and Char Combustion Mode Modelling on the Structure of a Large-Scale, Biomass and Coal Co-Fired Flame. Journal of Combustion, 2018, 2018, 1-15.	1.0	10
154	Emissions of polycyclic aromatic hydrocarbons from a domestic pellets-fired boiler. Fuel, 2019, 247, 108-112.	6.4	10
155	Occurrence characteristics of ash-forming elements in sea rice waste and their effects on particulate matter emission during combustion. Fuel, 2020, 273, 117769.	6.4	9
156	Multiparameter-analysis of CO2/Steam-enhanced gasification and pyrolysis for syngas and biochar production from low-cost feedstock. Energy Conversion and Management: X, 2021, 12, 100138.	1.6	9
157	Detailed measurements in and modelling of an industry-type pulverised-coal flame. Proceedings of the Combustion Institute, 1991, 23, 973-980.	0.3	8
158	Influence of the three way catalytic converter substrate cell density on the mass transfer and reaction resistances. Chemical Engineering Science, 2014, 107, 181-191.	3.8	8
159	Direct observations of single particle fragmentation in the early stages of combustion under dry and wet conventional and oxy-fuel conditions. Proceedings of the Combustion Institute, 2019, 37, 3005-3012.	3.9	8
160	Evaluation of Particle Fragmentation of Raw and Torrified Biomass in a Drop Tube Furnace. Energy Procedia, 2015, 66, 277-280.	1.8	7
161	Destruction of the Tar Present in Syngas by Combustion in Porous Media. Energy & Fuels, 2015, 29, 1130-1136.	5.1	7
162	Relationship between soil chemical composition and potential fuel quality of biomass from poplar short rotation coppices in Portugal and Belgium. Biomass and Bioenergy, 2017, 105, 66-72.	5.7	7

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163	Particle temperature and potassium release during combustion of single pulverized biomass char particles. Proceedings of the Combustion Institute, 2021, 38, 3949-3958.	3.9	7
164	Interactions during CO₂ Co-gasification of Biomass and Coal Chars Obtained from Fast Pyrolysis in a Drop Tube Furnace. Energy & Fuels, 2021, 35, 7065-7076.	5.1	7
165	On the quantification of the controlling regimes in automotive catalytic converters. AICHE Journal, 2011, 57, 218-226.	3.6	6
166	Oxidation behavior of particulate matter sampled from the combustion zone of a domestic pellet-fired boiler. Fuel Processing Technology, 2013, 116, 201-208.	7.2	5
167	Effect of the Oxidizer Composition on the CO and NOx Emissions from a Laboratory Combustor Operating under Oxy-Fuel Conditions. Energy & Fuels, 2013, 27, 561-567.	5.1	5
168	Spontaneous Emission Measurements of Selected Alkali Radicals during the Combustion of a Single Biomass Pellet. Energy & Fuels, 2018, 32, 10132-10143.	5.1	5
169	Particle history from massively parallel large eddy simulations of pulverised coal combustion in a large-scale laboratory furnace. Fuel, 2020, 271, 117587.	6.4	5
170	Numerical Simulation of a Small-Scale Mild Combustor. Journal of Physics: Conference Series, 2012, 395, 012003.	0.4	4
171	Size-Segregated Particulate Matter from Gasification of Bulgarian Agro-Forest Biomass Residue. Energies, 2021, 14, 385.	3.1	4
172	Effect of jet momentum flux and heat density on NO emission in a flameless gas turbine combustor. Aerospace Science and Technology, 2021, 119, 107137.	4.8	4
173	Burner stability limits and gas species measurement for lignite pulverized fuel in a cylindrical furnace. Fuel, 1990, 69, 403-406.	6.4	3
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