Paul R Medwell

List of Publications by Year
in descending order

102 papers	2,917 citations	159358 30 h-index	197535 49 g-index
102 all docs	102 docs citations	102 times ranked	1531 citing authors

#	Article	IF	Citations
1	Smouldering fire and emission characteristics of Eucalyptus litter fuel. Fire and Materials, 2022, 46, 576-586.	0.9	5
2	Laser ignition of iso-octane and n-heptane jets under compression-ignition conditions. Fuel, 2022, 311, 122555.	3.4	5
3	Dilute spray flames of ethanol and <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si8.svg"><mml:mi>n</mml:mi></mml:math>-heptane in the transition to mild combustion. Combustion and Flame, 2022, 238, 111918.	2.8	6
4	Toluene addition to turbulent H2/natural gas flames in bluff-body burners. International Journal of Hydrogen Energy, 2022, 47, 27733-27746.	3.8	8
5	Numerical and experimental investigation of turbulent n-heptane jet-in-hot-coflow flames. Fuel, 2021, 283, 118748.	3.4	9
6	The effect of fuel composition and Reynolds number on soot formation processes in turbulent non-premixed toluene jet flames. Proceedings of the Combustion Institute, 2021, 38, 1395-1402.	2.4	5
7	Highly radiating hydrogen flames: Effect of toluene concentration and phase. Proceedings of the Combustion Institute, 2021, 38, 1099-1106.	2.4	14
8	Effect of wood biochar dosage and re-use on high-solids anaerobic digestion of chicken litter. Biomass and Bioenergy, 2021, 144, 105872.	2.9	20
9	On the use of oscillating jet flames in a coflow to develop soot models for practical applications. Proceedings of the Combustion Institute, 2021, 38, 1309-1317.	2.4	0
10	Soot-flowfield interactions in turbulent non-premixed bluff-body flames of ethylene/nitrogen. Proceedings of the Combustion Institute, 2021, 38, 1125-1132.	2.4	6
11	Experimental investigation of the flame structure of dilute sprays issuing into a hot and low-oxygen coflow. Combustion and Flame, 2021, 230, 111439.	2.8	9
12	Co-Combustion Characteristics and Kinetics of Microalgae Chlorella Vulgaris and Coal through TGA. Combustion Science and Technology, 2020, 192, 26-45.	1.2	9
13	Small-scale autothermal thermochemical conversion of multiple solid biomass feedstock. Renewable Energy, 2020, 149, 1261-1270.	4.3	17
14	Effect of total solids content on anaerobic digestion of poultry litter with biochar. Journal of Environmental Management, 2020, 255, 109744.	3.8	47
15	Effects of biochar parent material and microbial pre-loading in biochar-amended high-solids anaerobic digestion. Bioresource Technology, 2020, 298, 122457.	4.8	57
16	Study of Ignition and Combustion Characteristics of Consecutive Injections with iso-Octane and n-Heptane as Fuels. Energy & Fuels, 2020, 34, 14741-14756.	2.5	10
17	Feedstock Dependence of Emissions from a Reverse-Downdraft Gasifier Cookstove. Energy for Sustainable Development, 2020, 56, 42-50.	2.0	10
18	Progress in Combustion Diagnostics, Science and Technology. Applied Sciences (Switzerland), 2020, 10, 1586.	1.3	0

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19	A new correlation between soot sheet width and soot volume fraction in turbulent non-premixed jet flames. Proceedings of the Combustion Institute, 2019, 37, 927-934.	2.4	6
20	Generalisation of the eddy-dissipation concept for jet flames with low turbulence and low DamkÃ¶hler number. Proceedings of the Combustion Institute, 2019, 37, 4497-4505.	2.4	46
21	Temperature and reaction zone imaging in turbulent swirling dual-fuel flames. Proceedings of the Combustion Institute, 2019, 37, 2159-2166.	2.4	20
22	Effects of flame-plane wall impingement on diesel combustion and soot processes. Fuel, 2019, 255, 115726.	3.4	28
23	Experimental and numerical study of soot formation in counterflow diffusion flames of gasoline surrogate components. Combustion and Flame, 2019, 210, 159-171.	2.8	40
24	Downstream evolution of n-heptane/toluene flames in hot and vitiated coflows. Combustion and Flame, 2019, 202, 78-89.	2.8	17
25	Effect of co-flow oxygen concentration on the MILD combustion of pulverised coal. Fuel Processing Technology, 2019, 193, 7-18.	3.7	42
26	Calculated concentration distributions and time histories of key species in an acoustically forced laminar flame. Combustion and Flame, 2019, 204, 189-203.	2.8	4
27	A Review of Hydrogen Direct Injection for Internal Combustion Engines: Towards Carbon-Free Combustion. Applied Sciences (Switzerland), 2019, 9, 4842.	1.3	204
28	Air Permeability of the Litter Layer in Broadleaf Forests. Frontiers in Mechanical Engineering, 2019, 5, .	0.8	5
29	Understanding and Interpreting Laser Diagnostics in Flames: A Review of Experimental Measurement Techniques. Frontiers in Mechanical Engineering, 2019, 5, .	0.8	6
30	Experimental investigation of soot evolution in a turbulent non-premixed prevaporized toluene flame. Proceedings of the Combustion Institute, 2019, 37, 849-857.	2.4	19
31	Transient interaction between a reaction control jet and a hypersonic crossflow. Physics of Fluids, 2018, 30, .	1.6	14
32	Influence of Primary and Secondary Air Supply on Gaseous Emissions from a Small-Scale Staged Solid Biomass Fuel Combustor. Energy & Fuels, 2018, 32, 4212-4220.	2.5	23
33	Structural differences of ethanol and DME jet flames in a hot diluted coflow. Combustion and Flame, 2018, 192, 473-494.	2.8	25
34	Combustion characterization of waste cooking oil and canola oil based biodiesels under simulated engine conditions. Fuel, 2018, 224, 167-177.	3.4	44
35	The role of primary and secondary air on wood combustion in cookstoves. International Journal of Sustainable Energy, 2018, 37, 268-277.	1.3	22
36	The effect of exit Reynolds number on soot volume fraction in turbulent non-premixed jet flames. Combustion and Flame, 2018, 187, 42-51.	2.8	30

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37	Effect of Multilateral Jet Mixing on Stability and Structure of Turbulent Partially-Premixed Flames. Flow, Turbulence and Combustion, 2018, 100, 225-247.	1.4	3
38	Biochar Addition in High-Solids Anaerobic Digestion of Poultry Litter. , 2018, , .		3
39	The significance of beam steering on laser-induced incandescence measurements in laminar counterflow flames. Applied Physics B: Lasers and Optics, 2018, 124, 1.	1.1	15
40	Numerical investigation of a pulsed reaction control jet in hypersonic crossflow. Physics of Fluids, 2018, 30, .	1.6	14
41	Soot evolution and flame response to acoustic forcing of laminar non-premixed jet flames at varying amplitudes. Combustion and Flame, 2018, 198, 249-259.	2.8	15
42	Influences of Fuel Bed Depth and Air Supply on Small-Scale Batch-Fed Reverse Downdraft Biomass Conversion. Energy & Fuels, 2018, 32, 8507-8518.	2.5	13
43	Influence of nozzle diameter on soot evolution in acoustically forced laminar non-premixed flames. Combustion and Flame, 2018, 194, 376-386.	2.8	23
44	Effect of particle size on the MILD combustion characteristics of pulverised brown coal. Fuel Processing Technology, 2017, 155, 74-87.	3.7	83
45	Simultaneous measurements of gas temperature, soot volume fraction and primary particle diameter in a sooting lifted turbulent ethylene/air non-premixed flame. Combustion and Flame, 2017, 179, 33-50.	2.8	51
46	Effects of oxidant stream composition on non-premixed laminar flames with heated and diluted coflows. Combustion and Flame, 2017, 178, 297-310.	2.8	18
47	Ignition features of methane and ethylene fuel-blends in hot and diluted coflows. Fuel, 2017, 203, 279-289.	3.4	31
48	Experimental investigation of acoustic forcing on temperature, soot volume fraction and primary particle diameter in non-premixed laminar flames. Combustion and Flame, 2017, 181, 270-282.	2.8	31
49	The effect of exit strain rate on soot volume fraction in turbulent non-premixed jet flames. Proceedings of the Combustion Institute, 2017, 36, 889-897.	2.4	42
50	Characteristics of turbulent n-heptane jet flames in a hot and diluted coflow. Combustion and Flame, 2017, 183, 330-342.	2.8	40
51	Optical thermometry for high temperature multiphase environments under high-flux irradiation. Solar Energy, 2017, 146, 191-198.	2.9	1
52	Effects of Oxygen Concentration on Radiation-Aided and Self-sustained Smoldering Combustion of Radiata Pine. Energy & Fuels, 2017, 31, 8619-8630.	2.5	17
53	Classification and lift-off height prediction of non-premixed MILD and autoignitive flames. Proceedings of the Combustion Institute, 2017, 36, 4297-4304.	2.4	37
54	Biochar production and characterisation â€" A field study. , 2017, , .		6

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55	Natural draft and forced primary air combustion properties of a top-lit up-draft research furnace. Biomass and Bioenergy, 2016, 91, 108-115.	2.9	33
56	Eulerian and Lagrangian stagnation plane behavior of moderate Reynolds number round opposed-jets flow. Computers and Fluids, 2016, 133, 116-128.	1.3	5
57	Automated determination of size and morphology information from soot transmission electron microscope (TEM)-generated images. Journal of Nanoparticle Research, 2016, 18, 1.	0.8	30
58	Laminar Flame Calculations for Analyzing Trends in Autoignitive Jet Flames in a Hot and Vitiated Coflow. Energy & Fuels, 2016, 30, 8680-8690.	2.5	16
59	Identification and Quantitative Analysis of Smoldering and Flaming Combustion of Radiata Pine. Energy & Fuels, 2016, 30, 7666-7677.	2.5	13
60	Ignition Characteristics in Spatially Zero-, One- and Two-Dimensional Laminar Ethylene Flames. AIAA Journal, 2016, 54, 3255-3264.	1.5	11
61	Burning characteristics of Victorian brown coal under MILD combustion conditions. Combustion and Flame, 2016, 172, 252-270.	2.8	82
62	The transition of ethanol flames from conventional to MILD combustion. Combustion and Flame, 2016, 171, 173-184.	2.8	43
63	Computational Methodology for Investigating the Transient Interaction Between a Reaction Control Jet and a Hypersonic Crossflow. , 2016, , .		3
64	External irradiation effect on the growth and evolution of in-flame soot species. Carbon, 2016, 102, 161-171.	5.4	20
65	Improvement of precision and accuracy of temperature imaging in sooting flames using two-line atomic fluorescence (TLAF). Combustion and Flame, 2016, 167, 481-493.	2.8	23
66	Simultaneous planar measurements of temperature and soot volume fraction in a turbulent non-premixed jet flame. Proceedings of the Combustion Institute, 2015, 35, 1931-1938.	2.4	50
67	Modeling Lifted Jet Flames in a Heated Coflow Using an Optimized Eddy Dissipation Concept Model. Combustion Science and Technology, 2015, 187, 1093-1109.	1.2	91
68	A sponge-layer damping technique for aeroacoustic Time-Reversal. Journal of Sound and Vibration, 2015, 342, 124-151.	2.1	20
69	An experimental study on MILD combustion of prevaporised liquid fuels. Applied Energy, 2015, 151, 93-101.	5.1	92
70	Ignition Characteristics in Spatially Zero-, One- and Two-Dimensional Laminar Ethylene Flames. , 2015, , .		0
71	Numerical Study of Pulverized Coal MILD Combustion in a Self-Recuperative Furnace. Energy & Fuels, 2015, 29, 7650-7669.	2.5	44
72	Mechanism for laser-induced fluorescence signal generation in a nanoparticle-seeded flow for planar flame thermometry. Applied Physics B: Lasers and Optics, 2015, 118, 209-218.	1.1	17

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73	Enhancing the Resolution Characteristics of Aeroacoustic Time-Reversal Using a Point-Time-Reversal-Sponge-Layer. , 2014, , .		4
74	Enhancing the focal-resolution of aeroacoustic time-reversal using a point sponge-layer damping technique. Journal of the Acoustical Society of America, 2014, 136, EL199-EL205.	0.5	11
75	Humanitarian technology research group: Developments at the University of Adelaide. , 2014, , .		0
76	The role of precursors on the stabilisation of jet flames issuing into a hot environment. Combustion and Flame, 2014, 161, 465-474.	2.8	28
77	Temperature imaging of turbulent dilute spray flames using two-line atomic fluorescence. Experiments in Fluids, 2014, 55, 1.	1.1	18
78	Moderate or Intense Low Oxygen Dilution (MILD) Combustion Characteristics of Pulverized Coal in a Self-Recuperative Furnace. Energy & Fuels, 2014, 28, 6046-6057.	2.5	53
79	A Biochar-producing, Dung-burning Cookstove for Humanitarian Purposes. Procedia Engineering, 2014, 78, 243-249.	1.2	26
80	Algorithm for soot sheet quantification in a piloted turbulent jet non-premixed natural gas flame. Experiments in Fluids, 2014, 55, 1.	1.1	18
81	Optics and Photonics in Solar Thermal Energy Technologies. , 2014, , .		0
82	Temperature measurements in turbulent non-premixed flames by two-line atomic fluorescence. Proceedings of the Combustion Institute, 2013, 34, 3619-3627.	2.4	23
83	Kinetic and fluid dynamic modeling of ethylene jet flames in diluted and heated oxidant stream combustion conditions. Applied Thermal Engineering, 2013, 52, 538-554.	3.0	62
84	Multiple line arrays for the characterization of aeroacoustic sources using a time-reversal method. Journal of the Acoustical Society of America, 2013, 134, EL327-EL333.	0.5	15
85	New Seeding Methodology for Gas Concentration Measurements. Applied Spectroscopy, 2012, 66, 803-809.	1.2	15
86	Developing sports engineering education in Australia. Procedia Engineering, 2012, 34, 260-265.	1.2	8
87	Effect of fuel composition on jet flames in a heated and diluted oxidant stream. Combustion and Flame, 2012, 159, 3138-3145.	2.8	60
88	Experimental Observation of Lifted Flames in a Heated and Diluted Coflow. Energy & Fuels, 2012, 26, 5519-5527.	2.5	49
89	Flow seeding with elemental metal species via an optical method. Applied Physics B: Lasers and Optics, 2012, 107, 665-668.	1.1	18
90	Recent advances in the measurement of strongly radiating, turbulent reacting flows. Progress in Energy and Combustion Science, 2012, 38, 41-61.	15.8	72

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91	Analysis of the Lawn Bowl Trajectory as a teaching tool for Sports Engineering: development of a graphical user-interface. Procedia Engineering, 2011, 13, 531-537.	1.2	5
92	The influence on the soot distribution within a laminar flame of radiation at fluxes of relevance to concentrated solar radiation. Combustion and Flame, 2011, 158, 1814-1821.	2.8	24
93	Assessment of interferences to nonlinear two-line atomic fluorescence (NTLAF) in sooty flames. Applied Physics B: Lasers and Optics, 2011, 104, 189-198.	1.1	17
94	Simultaneous imaging of temperature and soot volume fraction. Proceedings of the Combustion Institute, 2011, 33, 791-798.	2.4	41
95	Recent Advances in Measurement of Turbulent Reacting Flows in Which Heat Transfer is Dominated by Radiation. , 2010, , .		0
96	Solvent effects on two-line atomic fluorescence of indium. Applied Optics, 2010, 49, 1257.	2.1	18
97	Instantaneous Temperature Imaging of Diffusion Flames Using Two-Line Atomic Fluorescence. Applied Spectroscopy, 2010, 64, 173-176.	1.2	20
98	Development of temperature imaging using two-line atomic fluorescence. Applied Optics, 2009, 48, 1237.	2.1	57
99	Reaction Zone Weakening Effects under Hot and Diluted Oxidant Stream Conditions. Combustion Science and Technology, 2009, 181, 937-953.	1.2	54
100	Imaging of diluted turbulent ethylene flames stabilized on a Jet in Hot Coflow (JHC) burner. Combustion and Flame, 2008, 152, 100-113.	2.8	136
101	Simultaneous imaging of OH, formaldehyde, and temperature of turbulent nonpremixed jet flames in a heated and diluted coflow. Combustion and Flame, 2007, 148, 48-61.	2.8	197
102	A conceptual framework for evaluating cooking systems. Environmental Research Letters, 0, , .	2.2	0