Matthew J Dunn

List of Publications by Year
in descending order

31 papers	1,348 citations	361413 20 h-index	434195 31 g-index
31 all docs	31 docs citations	31 times ranked	680 citing authors

#	Article	IF	Citations
1	A new piloted premixed jet burner to study strong finite-rate chemistry effects. Combustion and Flame, 2007, 151, 46-60.	5.2	142
2	The structure of turbulent stratified and premixed methane/air flames II: Swirling flows. Combustion and Flame, 2012, 159, 2912-2929.	5.2	136
3	The structure of turbulent stratified and premixed methane/air flames I: Non-swirling flows. Combustion and Flame, 2012, 159, 2896-2911.	5.2	136
4	Effects of preferential transport in turbulent bluff-body-stabilized lean premixed CH4/air flames. Combustion and Flame, 2012, 159, 2563-2575.	5.2	129
5	Large Eddy Simulations of a piloted lean premix jet flame using finite-rate chemistry. Combustion Theory and Modelling, 2011, 15, 537-568.	1.9	113
6	The compositional structure of highly turbulent piloted premixed flames issuing into a hot coflow. Proceedings of the Combustion Institute, 2009, 32, 1779-1786.	3.9	85
7	Finite Rate Chemistry Effects in Highly Sheared Turbulent Premixed Flames. Flow, Turbulence and Combustion, 2010, 85, 621-648.	2.6	81
8	Detection of nanostructures and soot in laminar premixed flames. Combustion and Flame, 2017, 176, 299-308.	5.2	49
9	Multiply conditioned analyses of stratification in highly swirling methane/air flames. Combustion and Flame, 2013, 160, 322-334.	5.2	46
10	Investigation of flame propagation in a partially premixed jet by high-speed-Stereo-PIV and acetone-PLIF. Proceedings of the Combustion Institute, 2015, 35, 3773-3781.	3.9	37
11	A comparative analysis of flame surface density metrics inpremixed and stratified flames. Proceedings of the Combustion Institute, 2011, 33, 1419-1427.	3.9	35
12	Effects of ammonia and hydrogen on the sooting characteristics of laminar coflow flames of ethylene and methane. Fuel, 2022, 307, 121914.	6.4	35
13	Effects of preferential transport and strain in bluff body stabilized lean and rich premixed CH4/air flames. Proceedings of the Combustion Institute, 2013, 34, 1411-1419.	3.9	34
14	Soot formation in turbulent flames of ethylene/hydrogen/ammonia. Combustion and Flame, 2021, 226, 315-324.	5.2	33
15	Preferential transport effects in premixed bluff-body stabilized CH4/H2 flames. Combustion and Flame, 2015, 162, 727-735.	5.2	31
16	On the structure of the near field of oxy-fuel jet flames using Raman/Rayleigh laser diagnostics. Combustion and Flame, 2012, 159, 3342-3352.	5.2	29
17	Soot inception in laminar coflow diffusion flames. Combustion and Flame, 2019, 205, 180-192.	5.2	27
18	Large Eddy Simulation of a premixed jet flame stabilized by a vitiated co-flow: Evaluation of auto-ignition tabulated chemistry. Combustion and Flame, 2013, 160, 2879-2895.	5.2	26

#	Article	IF	Citations
19	Tracking the evolution of soot particles and precursors in turbulent flames using laser-induced emission. Proceedings of the Combustion Institute, 2017, 36, 1869-1876.	3.9	25
20	Stabilisation of turbulent auto-igniting dimethyl ether jet flames issuing into a hot vitiated coflow. Proceedings of the Combustion Institute, 2017, 36, 1661-1668.	3.9	21
21	Fuel effects on the stability of turbulent flames with compositionally inhomogeneous inlets. Proceedings of the Combustion Institute, 2017, 36, 1777-1784.	3.9	16
22	Heat release zones in turbulent, moderately dense spray flames of ethanol and biodiesel. Combustion and Flame, 2020, 220, 298-311.	5.2	15
23	The role of DME addition on the evolution of soot and soot precursors in laminar ethylene jet flames. Proceedings of the Combustion Institute, 2021, 38, 5319-5329.	3.9	13
24	Multiple conditioned analysis of the turbulent stratified flame A. Proceedings of the Combustion Institute, 2017, 36, 1947-1955.	3.9	11
25	Structure of a stratified CH4 flame with H2 addition. Proceedings of the Combustion Institute, 2019, 37, 2307-2315.	3.9	11
26	The evolution of autoignition kernels in turbulent flames of dimethyl ether. Combustion and Flame, 2018, 197, 182-196.	5.2	10
27	Effects of shear inhomogeneities on the structure of turbulent premixed flames. Combustion and Flame, 2019, 208, 63-78.	5.2	9
28	The influence of fuel type and partial premixing on the structure and behaviour of turbulent autoigniting flames. Proceedings of the Combustion Institute, 2019, 37, 2277-2285.	3.9	4
29	Spontaneous Ramanâ€“LIFâ€“COâ€“OH measurements of species concentration in turbulent spray flames. Proceedings of the Combustion Institute, 2021, 38, 1779-1786.	3.9	4
30	On the effects of varying coflow oxygen on soot and precursor nanoparticles in ethylene laminar diffusion flames. Fuel, 2021, 300, 120913.	6.4	3
31	On the Effects of Carbon Dioxide as a Diluent on Precursor Nanoparticles and Soot in Axi-symmetric Laminar Coflow Diffusion Flames. Combustion Science and Technology, 2022, 194, 946-962.	2.3	2