Bassam B Dally

List of Publications by Year
in descending order

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127	6,024	66343	76900
papers	citations	42	74
		h-index	g-index

127	127	127	2042
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Model for Estimating Time-Varying Properties of an Inductively Coupled Plasma. IEEE Transactions on Plasma Science, 2022, 50, 1227-1236.	1.3	0
2	Experimental and numerical study of transcritical oxygen-hydrogen rocket flame response to transverse acoustic excitation. Proceedings of the Combustion Institute, 2021, 38, 5979-5986.	3.9	7
3	Experimental investigation of the influence of solar-to-fuel ratio on performance and stability characteristics of hybrid solar-MILD hydrogen processes. Proceedings of the Combustion Institute, 2021, 38, 6723-6731.	3.9	3
4	Statistical relationship between soot volume fraction, temperature, primary particle diameter and OH radicals along transects normal to the local reaction zone in a turbulent flame. Proceedings of the Combustion Institute, 2021, 38, 1497-1505.	3.9	3
5	Power efficiency estimation of an inductive plasma generator using propellant mixtures of oxygen, carbon-dioxide and argon. Acta Astronautica, 2021, 179, 536-545.	3.2	7
6	Soot-flowfield interactions in turbulent non-premixed bluff-body flames of ethylene/nitrogen. Proceedings of the Combustion Institute, 2021, 38, 1125-1132.	3.9	6
7	Generating planar distributions of soot particles from luminosity images in turbulent flames using deep learning. Applied Physics B: Lasers and Optics, 2021, 127, 1.	2.2	5
8	The effect of oxygen concentration in the co-flow of laminar ethylene diffusion flames. Combustion and Flame, 2020, 211, 96-111.	5.2	40
9	LES/TPDF investigation of the role of reaction and diffusion timescales in the stabilization of a jet-in-hot-coflow CH4/H2 flame. Combustion and Flame, 2020, 211, 477-492.	5.2	14
10	Resolving transient discharge cycle behaviour in modulated inductive plasmas. Vacuum, 2020, 182, 109636.	3.5	5
11	Experimental and numerical study of the influence of syngas composition on the performance and stability of a laboratory-scale MILD combustor. Experimental Thermal and Fluid Science, 2020, 115, 110083.	2.7	12
12	Experimental investigation on the influence of an air curtain on the convective heat losses from solar cavity receivers under windy condition. AIP Conference Proceedings, 2020, , .	0.4	3
13	First-of-a-kind demonstration of a direct hybrid between a solar receiver and the radiant burner technology. AIP Conference Proceedings, 2020, , .	0.4	0
14	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.	3.9	6
15	An experimental study of the stability and performance characteristics of a Hybrid Solar Receiver Combustor operated in the MILD combustion regime. Proceedings of the Combustion Institute, 2019, 37, 5687-5695.	3.9	16
16	Temperature and reaction zone imaging in turbulent swirling dual-fuel flames. Proceedings of the Combustion Institute, 2019, 37, 2159-2166.	3.9	20
17	Performance characteristics of a hybrid solar receiver combustor utilising hydrogen or syngas. AIP Conference Proceedings, 2019, , .	0.4	1
18	Hybrid Solar-MILD Combustion for Renewable Energy Generation. Frontiers in Mechanical Engineering, 2019, 5, .	1.8	1

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19	Downstream evolution of n-heptane/toluene flames in hot and vitiated coflows. Combustion and Flame, 2019, 202, 78-89.	5.2	17
20	Effect of co-flow oxygen concentration on the MILD combustion of pulverised coal. Fuel Processing Technology, 2019, 193, 7-18.	7.2	42
21	Calculated concentration distributions and time histories of key species in an acoustically forced laminar flame. Combustion and Flame, 2019, 204, 189-203.	5.2	4
22	Characteristics of swirling and precessing flows generated by multiple confined jets. Physics of Fluids, 2019, 31, 055102.	4.0	5
23	Experimental investigation of soot evolution in a turbulent non-premixed prevaporized toluene flame. Proceedings of the Combustion Institute, 2019, 37, 849-857.	3.9	19
24	Energy Concentration by Bluff Bodiesâ€"A Particle Image Velocimetry Investigation. Journal of Fluids Engineering, Transactions of the ASME, 2019, 141, .	1.5	1
25	Simultaneously calibrated two-line atomic fluorescence for high-precision temperature imaging in sooting flames. Proceedings of the Combustion Institute, 2019, 37, 1417-1425.	3.9	12
26	Thermal performance analysis of a syngas-fuelled hybrid solar receiver combustor operated in the MILD combustion regime. Combustion Science and Technology, 2019, 191, 2-17.	2.3	19
27	Combustion dynamics in cryogenic rocket engines: Research programme at DLR Lampoldshausen. Acta Astronautica, 2018, 147, 251-258.	3.2	13
28	Experimental investigation of the effects of wind speed and yaw angle on heat losses from a heated cavity. Solar Energy, 2018, 165, 178-188.	6.1	20
29	Global reaction mechanisms for MILD oxy-combustion of methane. Energy, 2018, 147, 839-857.	8.8	46
30	Comparative Study of the MILD Combustion Characteristics of Biomass and Brown Coal. Energy & Fuels, 2018, 32, 4202-4211.	5.1	15
31	Structural differences of ethanol and DME jet flames in a hot diluted coflow. Combustion and Flame, 2018, 192, 473-494.	5.2	25
32	Solar thermal hybrids for combustion power plant: A growing opportunity. Progress in Energy and Combustion Science, 2018, 64, 4-28.	31.2	110
33	The effect of exit Reynolds number on soot volume fraction in turbulent non-premixed jet flames. Combustion and Flame, 2018, 187, 42-51.	5.2	30
34	Performance of a hybrid solar receiver combustor. AIP Conference Proceedings, 2018, , .	0.4	1
35	The influence of aspect ratio on the iso-thermal flow characteristics of multiple confined jets. Physics of Fluids, 2018, 30, 125108.	4.0	6
36	Combined solar energy and combustion of hydrogen-based fuels under MILD conditions. International Journal of Hydrogen Energy, 2018, 43, 20086-20100.	7.1	13

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37	Soot evolution and flame response to acoustic forcing of laminar non-premixed jet flames at varying amplitudes. Combustion and Flame, 2018, 198, 249-259.	5.2	15
38	Iso-thermal flow characteristics of rotationally symmetric jets generating a swirl within a cylindrical chamber. Physics of Fluids, 2018, 30, 055110.	4.0	11
39	Experimental demonstration of the hybrid solar receiver combustor. Applied Energy, 2018, 224, 426-437.	10.1	23
40	Influence of nozzle diameter on soot evolution in acoustically forced laminar non-premixed flames. Combustion and Flame, 2018, 194, 376-386.	5.2	23
41	Experimental and numerical study of oxygen-hydrogen rocket flame response to transverse acoustic excitation. , 2018, , .		0
42	A numerical investigation into the effects of Reynolds number on the flow mechanism induced by a tubercled leading edge. Theoretical and Computational Fluid Dynamics, 2017, 31, 1-32.	2.2	45
43	Effect of particle size on the MILD combustion characteristics of pulverised brown coal. Fuel Processing Technology, 2017, 155, 74-87.	7.2	83
44	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.	5.2	51
45	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.	5.2	31
46	Characteristics of turbulent n-heptane jet flames in a hot and diluted coflow. Combustion and Flame, 2017, 183, 330-342.	5.2	40
47	Optical thermometry for high temperature multiphase environments under high-flux irradiation. Solar Energy, 2017, 146, 191-198.	6.1	1
48	Comparison of system performance in a hybrid solar receiver combustor operating with MILD and conventional combustion. Part I: Solar-only and combustion-only employing conventional combustion. Solar Energy, 2017, 147, 489-503.	6.1	20
49	Comparison of system performance in a hybrid solar receiver combustor operating with MILD and conventional combustion. Part II: Effect of the combustion mode. Solar Energy, 2017, 147, 479-488.	6.1	21
50	Effects of hydrogen and nitrogen on soot volume fraction, primary particle diameter and temperature in laminar ethylene/air diffusion flames. Combustion and Flame, 2017, 175, 270-282.	5.2	77
51	Experimental and numerical investigation of the iso-thermal flow characteristics within a cylindrical chamber with multiple planar-symmetric impinging jets. Physics of Fluids, 2017, 29, 105111.	4.0	10
52	Research challenges in combustion and gasification arising from emerging technologies employing directly irradiated concentrating solar thermal radiation. Proceedings of the Combustion Institute, 2017, 36, 2055-2074.	3.9	34
53	Hydrodynamic and chemical effects of hydrogen addition on soot evolution in turbulent nonpremixed bluff body ethylene flames. Proceedings of the Combustion Institute, 2017, 36, 807-814.	3.9	29
54	The influence of high flux broadband irradiation on soot concentration and temperature of a sooty flame. Combustion and Flame, 2016, 171, 103-111.	5.2	11

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55	Evolution of the streamwise vortices generated between leading edge tubercles. Journal of Fluid Mechanics, 2016, 788, 730-766.	3.4	99
56	Burning characteristics of Victorian brown coal under MILD combustion conditions. Combustion and Flame, 2016, 172, 252-270.	5.2	82
57	The transition of ethanol flames from conventional to MILD combustion. Combustion and Flame, 2016, 171, 173-184.	5.2	43
58	Assessment of the potential benefits and constraints of a hybrid solar receiver and combustor operated in the MILD combustion regime. Energy, 2016, 116, 735-745.	8.8	21
59	Analytical assessment of a novel hybrid solar tubular receiver and combustor. Applied Energy, 2016, 162, 298-307.	10.1	21
60	Improvement of precision and accuracy of temperature imaging in sooting flames using two-line atomic fluorescence (TLAF). Combustion and Flame, 2016, 167, 481-493.	5.2	23
61	Extension of the Eddy Dissipation Concept for turbulence/chemistry interactions to MILD combustion. Fuel, 2016, 163, 98-111.	6.4	180
62	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.	3.9	50
63	Single-shot, Time-Resolved planar Laser-Induced Incandescence (TiRe-LII) for soot primary particle sizing in flames. Proceedings of the Combustion Institute, 2015, 35, 3673-3680.	3.9	45
64	Flow dynamics of multi-lateral jets injection into a round pipe flow. Experiments in Fluids, 2015, 56, 1.	2.4	10
65	Moderate or Intense Low-Oxygen Dilution Combustion of Methane Diluted by CO₂ and N₂. Energy & Fuels, 2015, 29, 4576-4585.	5.1	69
66	An experimental study on MILD combustion of prevaporised liquid fuels. Applied Energy, 2015, 151, 93-101.	10.1	92
67	Numerical Study of Pulverized Coal MILD Combustion in a Self-Recuperative Furnace. Energy & Fuels, 2015, 29, 7650-7669.	5.1	44
68	Global characteristics of non-premixed jet flames of hydrogenâ€“hydrocarbon blended fuels. Combustion and Flame, 2015, 162, 1326-1335.	5.2	20
69	Effect of a rigid wall on the vortex induced vibration of two staggered circular cylinders. Journal of Renewable and Sustainable Energy, 2014, 6, .	2.0	15
70	LOx Jet Atomization Under Transverse Acoustic Oscillations. Journal of Propulsion and Power, 2014, 30, 337-349.	2.2	48
71	Mechanisms of NO formation in MILD combustion of CH 4 /H 2 fuel blends. International Journal of Hydrogen Energy, 2014, 39, 19187-19203.	7.1	95
72	The role of precursors on the stabilisation of jet flames issuing into a hot environment. Combustion and Flame, 2014, 161, 465-474.	5.2	28

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73	Temperature imaging of turbulent dilute spray flames using two-line atomic fluorescence. Experiments in Fluids, 2014, 55, 1.	2.4	18
74	Moderate or Intense Low Oxygen Dilution (MILD) Combustion Characteristics of Pulverized Coal in a Self-Recuperative Furnace. Energy & Fuels, 2014, 28, 6046-6057.	5.1	53
75	The effect of arrangement of two circular cylinders on the maximum efficiency of Vortex-Induced Vibration power using a Scale-Adaptive Simulation model. Journal of Fluids and Structures, 2014, 49, 654-666.	3.4	34
76	MILD Combustion under Different Premixing Patterns and Characteristics of the Reaction Regime. Energy & Fuels, 2014, 28, 2211-2226.	5.1	61
77	Coupling of Cryogenic Oxygenâ€“Hydrogen Flames to Longitudinal and Transverse Acoustic Instabilities. Journal of Propulsion and Power, 2014, 30, 991-1004.	2.2	39
78	Optics and Photonics in Solar Thermal Energy Technologies. , 2014, , .		0
79	The effect of surface reactions on the prediction of NOX conversion efficiency in a porous burner. Combustion and Flame, 2013, 160, 2169-2181.	5.2	2
80	3D framework combining CFD and MATLAB techniques for plume source localization research. Building and Environment, 2013, 70, 10-19.	6.9	37
81	Experimental and computational study of soot evolution in a turbulent nonpremixed bluff body ethylene flame. Combustion and Flame, 2013, 160, 1298-1309.	5.2	55
82	Temperature measurements in turbulent non-premixed flames by two-line atomic fluorescence. Proceedings of the Combustion Institute, 2013, 34, 3619-3627.	3.9	23
83	MILD oxy-combustion of gaseous fuels in a laboratory-scale furnace. Combustion and Flame, 2013, 160, 933-946.	5.2	193
84	Study of LOx/H2 Spray Flame Response to Acoustic Excitation in a Rectangular Rocket Combustor. , 2013, , .		6
85	Acoustic characterisation of a rectangular rocket combustor with liquid oxygen and hydrogen propellants. Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering, 2013, 227, 436-446.	1.3	4
86	Beam displacement as a function of temperature and turbulence length scale at two different laser radiation wavelengths. Applied Optics, 2012, 51, 55.	1.8	4
87	Coupling Behaviour of LOx/H2 Flames to Longitudinal and Transverse Acoustic Instabilities. , 2012, , .		2
88	New Seeding Methodology for Gas Concentration Measurements. Applied Spectroscopy, 2012, 66, 803-809.	2.2	15
89	Large-Eddy Simulation of a Jet-in-Hot-Coflow Burner Operating in the Oxygen-Diluted Combustion Regime. Flow, Turbulence and Combustion, 2012, 89, 449-464.	2.6	87
90	Modified Vitiation in a Moderate or Intense Low-Oxygen Dilution (MILD) Combustion Furnace. Energy & Fuels, 2012, 26, 265-277.	5.1	41

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91	Effect of fuel composition on jet flames in a heated and diluted oxidant stream. Combustion and Flame, 2012, 159, 3138-3145.	5.2	60
92	Experimental Observation of Lifted Flames in a Heated and Diluted Coflow. Energy & Fuels, 2012, 26, 5519-5527.	5.1	49
93	Flow seeding with elemental metal species via an optical method. Applied Physics B: Lasers and Optics, 2012, 107, 665-668.	2.2	18
94	Recent advances in the measurement of strongly radiating, turbulent reacting flows. Progress in Energy and Combustion Science, 2012, 38, 41-61.	31.2	72
95	Premixed Moderate or Intense Low-Oxygen Dilution (MILD) Combustion from a Single Jet Burner in a Laboratory-Scale Furnace. Energy & Fuels, 2011, 25, 2782-2793.	5.1	47
96	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.	5.2	24
97	Assessment of interferences to nonlinear two-line atomic fluorescence (NTLAF) in sooty flames. Applied Physics B: Lasers and Optics, 2011, 104, 189-198.	2.2	17
98	Investigation of the MILD combustion regime via Principal Component Analysis. Proceedings of the Combustion Institute, 2011, 33, 3333-3341.	3.9	81
99	Flame response to acoustic excitation in a rectangular rocket combustor with LOx/H2 propellants. CEAS Space Journal, 2011, 2, 41-49.	2.3	18
100	Progress and recent trend in MILD combustion. Science China Technological Sciences, 2011, 54, 255-269.	4.0	133
101	Simultaneous imaging of temperature and soot volume fraction. Proceedings of the Combustion Institute, 2011, 33, 791-798.	3.9	41
102	Performance Variations of Leading-Edge Tubercles for Distinct Airfoil Profiles. AIAA Journal, 2011, 49, 185-194.	2.6	295
103	On the Burning of Sawdust in a MILD Combustion Furnace. Energy & Fuels, 2010, 24, 3462-3470.	5.1	67
104	Solvent effects on two-line atomic fluorescence of indium. Applied Optics, 2010, 49, 1257.	2.1	18
105	Instantaneous Temperature Imaging of Diffusion Flames Using Two-Line Atomic Fluorescence. Applied Spectroscopy, 2010, 64, 173-176.	2.2	20
106	Operational characteristics of a parallel jet MILD combustion burner system. Combustion and Flame, 2009, 156, 429-438.	5.2	179
107	Development of temperature imaging using two-line atomic fluorescence. Applied Optics, 2009, 48, 1237.	2.1	57
108	Importance of Initial Momentum Rate and Air-Fuel Premixing on Moderate or Intense Low Oxygen Dilution (MILD) Combustion in a Recuperative Furnace. Energy & Fuels, 2009, 23, 5349-5356.	5.1	123

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109	Reaction Zone Weakening Effects under Hot and Diluted Oxidant Stream Conditions. Combustion Science and Technology, 2009, 181, 937-953.	2.3	54
110	Scaling of NOx emissions from a laboratory-scale mild combustion furnace. Combustion and Flame, 2008, 154, 281-295.	5.2	140
111	Investigation of NOx conversion characteristics in a porous medium. Combustion and Flame, 2008, 152, 604-615.	5.2	17
112	Imaging of diluted turbulent ethylene flames stabilized on a Jet in Hot Coflow (JHC) burner. Combustion and Flame, 2008, 152, 100-113.	5.2	136
113	Propagation of 632.8 nm and 4.67 Ã‚Âµm laser beams in a turbulent flow containing CO 2 and H 2 O at high temperatures. Proceedings of SPIE, 2008, , .	0.8	2
114	On the interaction of turbulence intensity and its scales with various diameter laser beams at high temperatures. , 2008, , .		1
115	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.	5.2	197
116	Effect of a delta-winglet vortex pair on the performance of a tubeâ€“fin heat exchanger. International Journal of Heat and Mass Transfer, 2007, 50, 5065-5072.	4.8	69
117	Conditional moment closure modeling of turbulent nonpremixed combustion in diluted hot coflow. Proceedings of the Combustion Institute, 2005, 30, 751-757.	3.9	97
118	Modeling turbulent reacting jets issuing into a hot and diluted coflow. Combustion and Flame, 2005, 142, 117-129.	5.2	318
119	Effect of fuel mixture on moderate and intense low oxygen dilution combustion. Combustion and Flame, 2004, 137, 418-431.	5.2	221
120	Two-photon laser-induced fluorescence measurement of CO in turbulent non-premixed bluff body flames. Combustion and Flame, 2003, 132, 272-274.	5.2	25
121	Structure of turbulent non-premixed jet flames in a diluted hot coflow. Proceedings of the Combustion Institute, 2002, 29, 1147-1154.	3.9	367
122	Turbulent Shear Stress Effects on Plant Cell Suspension Cultures. Chemical Engineering Research and Design, 2001, 79, 867-875.	5.6	28
123	Probability density function computations of a strongly swirling nonpremixed flame stabilized on a new burner. Proceedings of the Combustion Institute, 2000, 28, 123-131.	3.9	42
124	Instantaneous and Mean Compositional Structure of Bluff-Body Stabilized Nonpremixed Flames. Combustion and Flame, 1998, 114, 119-148.	5.2	214
125	The instantaneous spatial structure of the recirculation zone in bluff-body stabilized flames. Proceedings of the Combustion Institute, 1998, 27, 1031-1038.	0.3	19
126	Measurements of no in turbulent non-premixed flames stabilized on a bluff body. Proceedings of the Combustion Institute, 1996, 26, 2191-2197.	0.3	27

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127	CFD Analysis of the Tigerfish Retractable Float System on a DHC- Twin Otter. SAE International Journal of Aerospace, 0, 1, 619-629.	4.0	0