Subrata Bhattacharjee

List of Publications by Year
in descending order

42 papers	672 citations	471509 17 h-index	580821 25 g-index
42 all docs	42 docs citations	42 times ranked	159 citing authors

#	Article	IF	Citations
1	Opposed-flow flame spread in microgravity-theoretical prediction of spread rate and flammability map. Proceedings of the Combustion Institute, 2005, 30, 2279-2286.	3.9	51
2	Radiation-controlled, opposed-flow flame spread in a microgravity environment. Proceedings of the Combustion Institute, 1991, 23, 1627-1633.	0.3	42
3	The behavior of flames spreading over thin solids in microgravity. Combustion and Flame, 1995, 100, 71-84.	5.2	39
4	Determination of the spread rate in opposed-flow flame spread over thick solid fuels in the thermal regime. Proceedings of the Combustion Institute, 1996, 26, 1477-1485.	0.3	38
5	Inherently unsteady flame spread to extinction over thick fuels in microgravity. Proceedings of the Combustion Institute, 1998, 27, 2515-2524.	0.3	37
6	Structure of downward spreading flames: a comparison of numerical simulation, experimental results and a simplified parabolic theory. Combustion Theory and Modelling, 2004, 8, 23-39.	1.9	35
7	Effect of radiation loss on flame spread over a thin PMMA sheet in microgravity. Proceedings of the Combustion Institute, 2002, 29, 2579-2586.	3.9	34
8	Opposed-flow flame spread: A comparison of microgravity and normal gravity experiments to establish the thermal regime. Fire Safety Journal, 2016, 79, 111-118.	3.1	33
9	Radiative, thermal, and kinetic regimes of opposed-flow flame spread: A comparison between experiment and theory. Proceedings of the Combustion Institute, 2017, 36, 2963-2969.	3.9	32
10	Quiescent flame spread over thick fuels in microgravity. Proceedings of the Combustion Institute, 1996, 26, 1335-1343.	0.3	29
11	A Comparison of the Roles Played by Natural and Forced Convection in Opposed-Flow Flame Spreading. Combustion Science and Technology, 1992, 83, 233-244.	2.3	28
12	A Correlation for an Effective Flow Velocity for Capturing the Boundary Layer Effect in Opposed-Flow Flame Spread over Thin Fuels. Combustion Science and Technology, 2014, 186, 975-987.	2.3	23
13	Implications of Spread Rate and Temperature Measurements in Flame Spread Over a Thin Fuel in a Quiescent, Microgravity, Space-Based Environment. Combustion Science and Technology, 1993, 91, 225-242.	2.3	22
14	Predictions of a critical fuel thickness for flame extinction in a quiescent microgravity environment. Combustion and Flame, 2003, 132, 523-532.	5.2	22
15	The critical flow velocity for radiative extinction in opposed-flow flame spread in a microgravity environment: A comparison of experimental, computational, and theoretical results. Combustion and Flame, 2016, 163, 472-477.	5.2	19
16	A simplified theory for de ris flame over thick and thin fuel beds. Combustion and Flame, 1996, 104, 66-80.	5.2	18
17	Experimental validation of a correlation capturing the boundary layer effect on spread rate in the kinetic regime of opposed-flow flame spread. Proceedings of the Combustion Institute, 2015, 35, 2631-2638.	3.9	18
18	Correlation of Burning Rate with Spread Rate for Downward Flame Spread Over PMMA. Fire Technology, 2018, 54, 613-624.	3.0	17

#	Article	IF	Citations
19	A comparison of theoretical and experimental results in flame spread over thin condensed fuels in a quiescent, microgravity environment. Proceedings of the Combustion Institute, 1992, 24, 1669-1676.	0.3	15
20	A comparison of numerical and analytical solution of the creeping flame spread over thermally thin material. Combustion and Flame, 1993, 93, 434-444.	5.2	14
21	Temperature and CO2 fields of a downward spreading flame over thin cellulose: A comparison of experimental and computational results. Proceedings of the Combustion Institute, 2015, 35, 2665-2672.	3.9	14
22	A novel apparatus for flame spread study. Proceedings of the Combustion Institute, 2013, 34, 2513-2521.	3.9	13
23	Measurement of instantaneous flame spread rate over solid fuels using image analysis. Fire Safety Journal, 2017, 91, 123-129.	3.1	13
24	Influence of edge propagation on downward flame spread over three-dimensional PMMA samples. Proceedings of the Combustion Institute, 2019, 37, 3203-3209.	3.9	13
25	Boundary Layer Effect on Opposed-Flow Flame Spread and Flame Length over Thin Polymethyl-Methacrylate in Microgravity. Combustion Science and Technology, 2018, 190, 535-549.	2.3	12
26	The Effect of Boundary Layer on Blow-Off Extinction in Opposed-Flow Flame Spread over Thin Cellulose: Experiments and a Simplified Analysis. Fire Technology, 2017, 53, 967-982.	3.0	8
27	A numerical investigation of radiation feedback in different regimes of opposed flow flame spread. International Journal of Heat and Mass Transfer, 2020, 150, 119358.	4.8	8
28	Solving Chemical Equilibrium Problems Online. Journal of Chemical Education, 2010, 87, 456-456.	2.3	4
29	Radiation-kinetics interactions: A comparison of opposed-flow flame spread in a low-velocity microgravity and low-pressure downward environments. Proceedings of the Combustion Institute, 2021, 38, 4795-4803.	3.9	4
30	A Java Based Web Application for Performing Chemical Equilibrium Analysis in Thermodynamics Courses. , 2006, , .		2
31	Property evaluation in The Expert System for Thermodynamics (â€œTESTâ€) web application. Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2009, 33, 343-352.	1.6	2
32	Radiation signature in opposed-flow flame spread. Progress in Computational Fluid Dynamics, 2012, 12, 293.	0.2	2
33	Two different approaches for creating a prescribed opposed-flow velocity field for flame spread experiments. EPJ Web of Conferences, 2015, 92, 02011.	0.3	2
34	Comparison of flame spread and blow-off extinction over vertical and horizontal PMMA samples. Mechanical Engineering Journal, 2016, 3, 16-00277-16-00277.	0.4	2
35	Thermal radiation measurements of downward spreading flames. Applied Thermal Engineering, 2019, 160, 114022.	6.0	2
36	Behavior of Flame Spread on Thin PMMA near Extinction Limit at Low Oxygen Level. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2012, 10, Ph_9-Ph_13.	0.2	2

#	Article	IF	Citations
37	A response to the comments by M. A. Delichatsios on â€œA comparison of numerical and analytical solution of the creeping flame spread over thermally thin materialâ€ Combustion and Flame, 1993, 95, 340.	5.2	1
38	IGE Model: An Extension of the Ideal Gas Model to Include Chemical Composition as Part of the Equilibrium State. Journal of Thermodynamics, 2012, 2012, 1-18.	0.8	1
39	Burn angle in forced and natural convection: a simplified scaling approach. Combustion Theory and Modelling, 2019, 23, 956-968.	1.9	1
40	Effect of Ambient Gas on Flammability Limit of Flat Materials in Microgravity. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2016, 14, Ph_1-Ph_6.	0.2	0
41	Prediction of Flame Length in Opposed-Flow Flame Spread: Global Similarity Analysis and Experiments. Combustion Science and Technology, 0, , 1-15.	2.3	0
42	OS24-1 The Effect of Boundary Layer on Blow-Off Extinction in Opposed-Flow Flame Spread: Results of Experiments and Simplified Analysis(invited,Scale modeling on solid combustion,OS24 Scale) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 542 Technology in Experimental Mechanics Asian Conference on Experimental Mechanics, 2015, 2015.14, 289.	0.0	0