Somesh P Roy

List of Publications by Year
in descending order

23 papers	321 citations	759233 12 h-index	839539 18 g-index
23 all docs	23 docs citations	23 times ranked	247 citing authors

#	Article	IF	Citations
1	Molecular arrangement and fringe identification and analysis from molecular dynamics (MAFIA-MD): A tool for analyzing the molecular structures formed during reactive molecular dynamics simulation of hydrocarbons. Computer Physics Communications, 2022, 276, 108325.	7.5	2
2	A new line-by-line methodology based on the spectral contributions of the bands. International Journal of Heat and Mass Transfer, 2021, 164, 120423.	4.8	6
3	The coalescence of incipient soot clusters. Carbon, 2021, 180, 215-225.	10.3	24
4	A quasi-Monte Carlo solver for thermal radiation in participating media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 242, 106753.	2.3	18
5	Effect of O₂ concentration in ambient mixture and multiphase radiation on pollutant formation in ECN spray-A. Combustion Theory and Modelling, 2020, 24, 549-572.	1.9	6
6	Detailed modeling of a small-scale turbulent pool fire. Combustion and Flame, 2020, 214, 224-237.	5.2	24
7	Using online discussions to connect theory and practice in core engineering undergraduate courses. Computer Applications in Engineering Education, 2020, 28, 675-691.	3.4	5
8	A detailed modeling study of radiative heat transfer in a heavy-duty diesel engine. Combustion and Flame, 2019, 200, 325-341.	5.2	31
9	Soot and spectral radiation modeling for high-pressure turbulent spray flames. Combustion and Flame, 2018, 190, 402-415.	5.2	42
10	Monte Carlo Simulation for Radiative Transfer in a High-Pressure Industrial Gas Turbine Combustion Chamber. Journal of Engineering for Gas Turbines and Power, 2018, 140, .	1.1	19
11	Effect of multiphase radiation on coal combustion in a pulverized coal jet flame. Journal of Quantitative Spectroscopy and Radiative Transfer, 2017, 197, 154-165.	2.3	23
12	Development of a multiphase photon Monte Carlo method for spray combustion and its application in high-pressure conditions. International Journal of Heat and Mass Transfer, 2017, 115, 453-466.	4.8	12
13	Monte Carlo Simulation for Radiative Transfer in a High-Pressure Industrial Gas Turbine Combustion Chamber. , 2017, , .		1
14	APPLICATION OF HIGH-ORDER SPHERICAL HARMONICS METHODS FOR RADIATIVE TRANSFER IN SIMULATION OF A TURBULENT JET FLAME. , 2017, , .		0
15	A comparison of specularly reflective boundary conditions and rotationally invariant formulations for Discrete Ordinate Methods in axisymmetric geometries. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 182, 75-86.	2.3	8
16	A Systematic Comparison of Detailed Soot Models and Gas-Phase Chemical Mechanisms in Laminar Premixed Flames. Combustion Science and Technology, 2016, 188, 1021-1053.	2.3	26
17	Development of high-order P models for radiative heat transfer in special geometries and boundary conditions. Journal of Quantitative Spectroscopy and Radiative Transfer, 2016, 172, 98-109.	2.3	14
18	MONTE CARLO MODELING OF RADIATIVE TRANSFER IN A PULVERIZED COAL JET FLAME. , 2016, , .		3

#	Article	IF	Citations
19	Implementation of High-Order Spherical Harmonics Methods for Radiative Heat Transfer on openfoam. Journal of Heat Transfer, 2015, 137, .	2.1	21
20	Dynamics of flowâ€“soot interaction in wrinkled non-premixed ethyleneâ€“air flames. Combustion Theory and Modelling, 2015, 19, 568-586.	1.9	6
21	Development of High Fidelity Soot Aerosol Dynamics Models using Method of Moments with Interpolative Closure. Aerosol Science and Technology, 2014, 48, 379-391.	3.1	12
22	Direct numerical simulations of non-premixed ethyleneâ€“air flames: Local flame extinction criterion. Combustion and Flame, 2014, 161, 2933-2950.	5.2	18
23	Detailed computational modeling of laminar and turbulent sooting flames. , 2014, , .		0