## Somesh P Roy

List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Soot and spectral radiation modeling for high-pressure turbulent spray flames. Combustion and Flame, 2018, 190, 402-415.	5.2	42
2	A detailed modeling study of radiative heat transfer in a heavy-duty diesel engine. Combustion and Flame, 2019, 200, 325-341.	5.2	31
3	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
4	Detailed modeling of a small-scale turbulent pool fire. Combustion and Flame, 2020, 214, 224-237.	5.2	24
5	The coalescence of incipient soot clusters. Carbon, 2021, 180, 215-225.	10.3	24
6	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
7	Implementation of High-Order Spherical Harmonics Methods for Radiative Heat Transfer on openfoam. Journal of Heat Transfer, 2015, 137, .	2.1	21
8	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
9	Direct numerical simulations of non-premixed ethylene–air flames: Local flame extinction criterion. Combustion and Flame, 2014, 161, 2933-2950.	5.2	18
10	A quasi-Monte Carlo solver for thermal radiation in participating media. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 242, 106753.	2.3	18
11	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
12	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
13	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
14	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
15	Dynamics of flow–soot interaction in wrinkled non-premixed ethylene–air flames. Combustion Theory and Modelling, 2015, 19, 568-586.	1.9	6
16	Effect of O <sub>2</sub> 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
17	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
18	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

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#	Article	IF	CITATIONS
19	MONTE CARLO MODELING OF RADIATIVE TRANSFER IN A PULVERIZED COAL JET FLAME. , 2016, , .		3
20	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
21	Monte Carlo Simulation for Radiative Transfer in a High-Pressure Industrial Gas Turbine Combustion Chamber. , 2017, , .		1
22	Detailed computational modeling of laminar and turbulent sooting flames. , 2014, , .		0
23	APPLICATION OF HIGH-ORDER SPHERICAL HARMONICS METHODS FOR RADIATIVE TRANSFER IN SIMULATION OF A TURBULENT JET FLAME. , 2017, , .		Ο