Rob Jm Bastiaans

List of Publications by Year
in descending order

29 papers	1,266 citations	516710 16 h-index	477307 29 g-index
30 all docs	30 docs citations	30 times ranked	943 citing authors

#	Article	IF	Citations
1	State-of-the-art in premixed combustion modeling using flamelet generated manifolds. Progress in Energy and Combustion Science, 2016, 57, 30-74.	31.2	241
2	Premixed and nonpremixed generated manifolds in large-eddy simulation of Sandia flame D and F. Combustion and Flame, 2008, 153, 394-416.	5.2	226
3	The effect of elevated pressures on the laminar burning velocity of methane + air mixtures. Combustion and Flame, 2013, 160, 1627-1635.	5.2	149
4	Effects of temperature and composition on the laminar burning velocity of CH4+ H2+ O2+ N2 flames. Fuel, 2010, 89, 114-121.	6.4	98
5	Laminar Burning Velocities of Diluted Hydrogenâ^'Oxygenâ^'Nitrogen Mixtures. Energy & Fuels, 2007, 21, 1977-1981.	5.1	58
6	Laminar burning velocity of lean H2â€“CO mixtures at elevated pressure using the heat flux method. International Journal of Hydrogen Energy, 2014, 39, 1485-1498.	7.1	58
7	Direct and large-eddy simulation of the transition of two- and three-dimensional plane plumes in a confined enclosure. International Journal of Heat and Mass Transfer, 2000, 43, 2375-2393.	4.8	48
8	Direct numerical simulation of hydrogen addition in turbulent premixed Bunsen flames using flamelet-generated manifold reduction. International Journal of Hydrogen Energy, 2009, 34, 2778-2788.	7.1	45
9	Experimental and modelling study of the effect of elevated pressure on ethane and propane flames. Fuel, 2016, 166, 410-418.	6.4	44
10	Anomalous blow-off behavior of laminar inverted flames of ultra-lean hydrogenâ€“methaneâ€“air mixtures. Combustion and Flame, 2013, 160, 565-576.	5.2	39
11	Hydrogen-enriched nonpremixed jet flames: Effects of preferential diffusion. International Journal of Hydrogen Energy, 2013, 38, 4848-4863.	7.1	38
12	A Premixed Flameletâ^'PDF Model for Biomass Combustion in a Grate Furnace. Energy & Fuels, 2008, 22, 1570-1580.	5.1	27
13	Experimental analysis of a confined transitional plume with respect to subgrid-scale modelling. International Journal of Heat and Mass Transfer, 1998, 41, 3989-4007.	4.8	24
14	The performance of a new PTV algorithm applied in super-resolution PIV. Experiments in Fluids, 2002, 32, 346-356.	2.4	23
15	Effect of hydrogen addition on conjugate heat transfer in a planar micro-combustor with the detailed reaction mechanism: An analytical approach. International Journal of Hydrogen Energy, 2020, 45, 15425-15440.	7.1	23
16	Biomass pyrolysis in a heated-grid reactor: Visualization of carbon monoxide and formaldehyde using Laser-Induced Fluorescence. Journal of Analytical and Applied Pyrolysis, 2011, 92, 280-286.	5.5	19
17	Visualization of Biomass Pyrolysis and Temperature Imaging in a Heated-Grid Reactor. Energy & Fuels, 2009, 23, 993-1006.	5.1	14
18	Analysis of a filtered flamelet approach for coarse DNS of premixed turbulent combustion. Fuel, 2015, 144, 388-399.	6.4	14

#	Article	IF	Citations
19	Numerical Simulations of Flat Laminar Premixed Methane-Air Flames at Elevated Pressure. Combustion Science and Technology, 2014, 186, 1447-1459.	2.3	13
20	An a priori DNS subgrid analysis of the presumed Î²-PDF model. International Journal of Hydrogen Energy, 2015, 40, 12811-12823.	7.1	11
21	Heat transfer and flame stabilization of laminar premixed flames anchored to a heat-flux burner. International Journal of Hydrogen Energy, 2016, 41, 2037-2051.	7.1	10
22	Steady large-scale modulation of a moderately turbulent co-flow jet. Journal of Turbulence, 2014, 15, 273-292.	1.4	9
23	Kinetics of CO release from bark and medium density fibreboard pyrolysis. Biomass and Bioenergy, 2010, 34, 771-779.	5.7	8
24	Numerical simulation of instabilities in lean premixed hydrogen combustion. International Journal of Numerical Methods for Heat and Fluid Flow, 2012, 22, 112-128.	2.8	8
25	A coupling energy system of 10 clean-energy heating systems: A case study in Shandong province in China. International Journal of Green Energy, 2021, 18, 1323-1338.	3.8	5
26	Analytical and numerical modeling, sensitivity analysis, and multi-objective optimization of the acoustic performance of the herschel-quincke tube. Applied Acoustics, 2021, 180, 108096.	3.3	5
27	Reverse combustion: Kinetically controlled and mass transfer controlled conversion front structures. Combustion and Flame, 2008, 153, 417-433.	5.2	4
28	Modulation of a methane Bunsen flame by upstream perturbations. Journal of Turbulence, 2017, 18, 316-337.	1.4	3
29	DNS Study of Spherically Expanding Premixed Turbulent Ammonia-Hydrogen Flame Kernels, Effect of Equivalence Ratio and Hydrogen Content. Energies, 2022, 15, 4749.	3.1	2