Gaurav Mittal

List of Publications by Year
in descending order

26 papers	1,670 citations	430754 18 h-index	552653 26 g-index
26 all docs	26 docs citations	26 times ranked	984 citing authors

#	Article	IF	Citations
1	A RAPID COMPRESSION MACHINE FOR CHEMICAL KINETICS STUDIES AT ELEVATED PRESSURES AND TEMPERATURES. Combustion Science and Technology, 2007, 179, 497-530.	1.2	193
2	Aerodynamics inside a rapid compression machine. Combustion and Flame, 2006, 145, 160-180.	2.8	171
3	An aerosol rapid compression machine for studying energetic-nanoparticle-enhanced combustion of liquid fuels. Proceedings of the Combustion Institute, 2011, 33, 3367-3374.	2.4	152
4	Autoignition of ethanol in a rapid compression machine. Combustion and Flame, 2014, 161, 1164-1171.	2.8	148
5	Dimethyl ether autoignition in a rapid compression machine: Experiments and chemical kinetic modeling. Fuel Processing Technology, 2008, 89, 1244-1254.	3.7	143
6	Autoignition of H2/CO at elevated pressures in a rapid compression machine. International Journal of Chemical Kinetics, 2006, 38, 516-529.	1.0	124
7	Autoignition of toluene and benzene at elevated pressures in a rapid compression machine. Combustion and Flame, 2007, 150, 355-368.	2.8	101
8	An experimental investigation of ethylene/O2/diluent mixtures: Laminar flame speeds with preheat and ignition delays at high pressures. Combustion and Flame, 2008, 153, 343-354.	2.8	92
9	Autoignition of n-decane under elevated pressure and low-to-intermediate temperature conditions. Combustion and Flame, 2009, 156, 1278-1288.	2.8	75
10	Ignition delay study of moist hydrogen/oxidizer mixtures using a rapid compression machine. International Journal of Hydrogen Energy, 2012, 37, 6901-6911.	3.8	67
11	CFD modeling of two-stage ignition in a rapid compression machine: Assessment of zero-dimensional approach. Combustion and Flame, 2010, 157, 1316-1324.	2.8	62
12	Autoignition of methylcyclohexane at elevated pressures. Combustion and Flame, 2009, 156, 1852-1855.	2.8	60
13	Computational fluid dynamics modeling of hydrogen ignition in a rapid compression machine. Combustion and Flame, 2008, 155, 417-428.	2.8	49
14	A rapid compression machine with crevice containment. Combustion and Flame, 2013, 160, 2975-2981.	2.8	38
15	Vortex formation in a rapid compression machine: Influence of physical and operating parameters. Fuel, 2012, 94, 409-417.	3.4	37
16	A computationally efficient, physics-based model for simulating heat loss during compression and the delay period in RCM experiments. Combustion and Flame, 2012, 159, 3476-3492.	2.8	36
17	Homogeneous charge compression ignition of binary fuel blends. Combustion and Flame, 2008, 155, 431-439.	2.8	31
18	A numerical assessment of the novel concept of crevice containment in a rapid compression machine. Combustion and Flame, 2011, 158, 2420-2427.	2.8	22

#	Article	IF	Citations
19	Computational assessment of an approach for implementing crevice containment in rapid compression machines. Fuel, 2012, 102, 536-544.	3.4	18
20	Interpretation of experimental data from rapid compression machines without creviced pistons. Combustion and Flame, 2014, 161, 75-83.	2.8	16
21	Effect of crevice mass transfer in a rapid compression machine. Combustion and Flame, 2014, 161, 398-404.	2.8	15
22	Computational Investigation of the Double-Injection Strategy on Ethanol Partially Premixed Compression Ignition. Energy & Fuels, 2017, 31, 11280-11290.	2.5	8
23	Acetone photophysics at 282Ânm excitation at elevated pressure and temperature. I: absorption and fluorescence experiments. Applied Physics B: Lasers and Optics, 2017, 123, 1.	1.1	6
24	Acetone Tracer Laser-Induced Fluorescence (LIF) at 282â€‰nm Excitation as a Diagnostic Tool in Elevated Pressure and Temperature Systems. Applied Spectroscopy, 2019, 73, 395-402.	1.2	3
25	Effect of initial turbulence on combustion with ECFM-3Z model in a CI engine. Materials Today: Proceedings, 2021, 46, 11007-11010.	0.9	2
26	System Validation Experiments for Obtaining Tracer Laser-Induced Fluorescence Data at Elevated Pressure and Temperature. Applied Spectroscopy, 2018, 72, 618-626.	1.2	1