

Ratna Kishore Velamati

List of Publications by Year in descending order

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Version: 2024-02-01

68
papers

2,126
citations

257101

24
h-index

243296

44
g-index

69
all docs

69
docs citations

69
times ranked

1521
citing authors

#	ARTICLE	IF	CITATIONS
1	A review on small scale wind turbines. <i>Renewable and Sustainable Energy Reviews</i> , 2016, 56, 1351-1371.	8.2	385
2	A comprehensive review of measurements and data analysis of laminar burning velocities for various fuel+air mixtures. <i>Progress in Energy and Combustion Science</i> , 2018, 68, 197-267.	15.8	329
3	Compact design of planar stepped micro combustor for portable thermoelectric power generation. <i>Energy Conversion and Management</i> , 2018, 156, 224-234.	4.4	118
4	Effect of airfoil and solidity on performance of small scale vertical axis wind turbine using three dimensional CFD model. <i>Energy</i> , 2017, 133, 179-190.	4.5	109
5	Investigation of dilution effect with N ₂ /CO ₂ on laminar burning velocity of premixed methane/oxygen mixtures using freely expanding spherical flames. <i>Fuel</i> , 2017, 196, 225-232.	3.4	75
6	Adiabatic burning velocity and cellular flame characteristics of H ₂ -CO-CO ₂ -air mixtures. <i>Combustion and Flame</i> , 2011, 158, 2149-2164.	2.8	70
7	Numerical Simulation of Temperature Distribution and Material Flow During Friction Stir Welding of Dissimilar Aluminum Alloys. <i>Procedia Engineering</i> , 2014, 97, 854-863.	1.2	68
8	Laminar Burning Velocity of Propane/CO ₂ /N ₂ -Air Mixtures at Elevated Temperatures. <i>Energy & Fuels</i> , 2012, 26, 5509-5518.	2.5	64
9	Measurement of adiabatic burning velocity in natural gas-like mixtures. <i>Experimental Thermal and Fluid Science</i> , 2008, 33, 10-16.	1.5	52
10	Measurement of laminar burning velocities of methane-air mixtures simultaneously at elevated pressures and elevated temperatures. <i>Fuel</i> , 2019, 257, 116120.	3.4	49
11	Burning velocities of DME(dimethyl ether)-air premixed flames at elevated temperatures. <i>Energy</i> , 2017, 126, 34-41.	4.5	47
12	Adiabatic burning velocity of H ₂ -O ₂ mixtures diluted with CO ₂ /N ₂ /Ar. <i>International Journal of Hydrogen Energy</i> , 2009, 34, 8378-8388.	3.8	44
13	Dynamics of Premixed Hydrogen-Air Flames in Microchannels with a Wall Temperature Gradient. <i>Combustion Science and Technology</i> , 2015, 187, 1620-1637.	1.2	36
14	Experimental and numerical investigation on the effect of hydrogen addition and N ₂ /CO ₂ dilution on laminar burning velocity of methane/oxygen mixtures. <i>International Journal of Hydrogen Energy</i> , 2020, 45, 16838-16850.	3.8	34
15	Investigation on supersonic combustion of hydrogen with variation of combustor inlet conditions. <i>International Journal of Hydrogen Energy</i> , 2016, 41, 5833-5841.	3.8	33
16	Development of a numerical model for performance prediction of an integrated microcombustor-thermoelectric power generator. <i>Energy</i> , 2020, 192, 116624.	4.5	32
17	Dynamics of premixed methane/air mixtures in a heated microchannel with different wall temperature gradients. <i>RSC Advances</i> , 2017, 7, 2066-2073.	1.7	30
18	Influence of fluctuating wind conditions on vertical axis wind turbine using a three dimensional CFD model. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2016, 158, 98-108.	1.7	29

#	ARTICLE	IF	CITATIONS
19	Effect OF CO ₂ /N ₂ dilution on laminar burning velocity of liquid petroleum gas-air mixtures at elevated temperatures. Energy, 2016, 100, 145-153.	4.5	28
20	Three-Dimensional Simulations of Steady Perforated-Plate Stabilized Propane-Air Premixed Flames. Energy & Fuels, 2014, 28, 5415-5425.	2.5	26
21	Combustion characteristics of the effect of hydrogen addition on LPG-air mixtures. International Journal of Hydrogen Energy, 2015, 40, 16605-16617.	3.8	26
22	Numerical investigations of unsteady flame propagation in stepped microtubes. RSC Advances, 2015, 5, 100879-100890.	1.7	26
23	A review on fundamental combustion characteristics of syngas mixtures and feasibility in combustion devices. Renewable and Sustainable Energy Reviews, 2021, 146, 111178.	8.2	26
24	Investigations on flame dynamics of premixed H ₂ -air mixtures in microscale tubes. RSC Advances, 2016, 6, 50358-50367.	1.7	25
25	Numerical study on effect of vent locations on natural convection in an enclosure with an internal heat source. International Communications in Heat and Mass Transfer, 2013, 49, 69-77.	2.9	22
26	Numerical study of effect of pitch angle on performance characteristics of a HAWT. Engineering Science and Technology, an International Journal, 2016, 19, 632-641.	2.0	22
27	Laminar burning velocity of n-butane/Hydrogen/Air mixtures at elevated temperatures. Energy, 2019, 176, 410-417.	4.5	22
28	Parametric studies of dissimilar friction stir welding using computational fluid dynamics simulation. International Journal of Advanced Manufacturing Technology, 2015, 80, 91-98.	1.5	20
29	Effect of Wall Thermal Boundary Conditions on Flame Dynamics of CH ₄ -Air and H ₂ -Air Mixtures in Straight Microtubes. Combustion Science and Technology, 2017, 189, 150-168.	1.2	20
30	Effect of Helix Angle on the Performance of Helical Vertical Axis Wind Turbine. Energies, 2021, 14, 393.	1.6	20
31	Effects of CO ₂ /N ₂ dilution on laminar burning velocity of stoichiometric DME-air mixture at elevated temperatures. Journal of Hazardous Materials, 2017, 333, 215-221.	6.5	19
32	Studies on effusion cooling: Impact of geometric parameters on cooling effectiveness and coolant consumption. Aerospace Science and Technology, 2018, 77, 58-66.	2.5	19
33	Numerical simulations of steady perforated-plate stabilized Syngas air pre-mixed flames. International Journal of Hydrogen Energy, 2016, 41, 13747-13757.	3.8	15
34	Effect of hole pattern on the structure of small scale perforated plate burner flames. Fuel, 2018, 216, 722-733.	3.4	15
35	Power generation by high head water in a building using micro hydro turbine—a greener approach. Environmental Science and Pollution Research, 2016, 23, 9381-9390.	2.7	14
36	Influence of thickness on performance characteristics of non-sinusoidal plunging motion of symmetric airfoil. Aerospace Science and Technology, 2018, 81, 333-347.	2.5	14

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37	Effect of Hydrogen Addition on Laminar Burning Velocity of Liquefied Petroleum Gas Blends. Energy & Fuels, 2020, 34, 798-805.	2.5	13
38	Effect of solidity and airfoil on the performance of vertical axis wind turbine under fluctuating wind conditions. International Journal of Green Energy, 2019, 16, 1329-1342.	2.1	11
39	Enhancement of Heat Transfer with Porous/Solid Insert for Laminar Flow of a Participating Gas in a 3-D Square Duct. Numerical Heat Transfer; Part A: Applications, 2009, 56, 764-784.	1.2	10
40	Combustion of methylcyclohexane at elevated temperatures to investigate burning velocity for surrogate fuel development. Journal of Hazardous Materials, 2021, 406, 124627.	6.5	10
41	Numerical study of a buoyant plume from a multi-flue stack into a variable temperature gradient atmosphere. Environmental Science and Pollution Research, 2015, 22, 16814-16829.	2.7	8
42	Study of flow patterns and impingement heat transfer for an annular array of eight co-rotating dual-swirling flames. International Journal of Heat and Mass Transfer, 2019, 144, 118657.	2.5	8
43	Aerodynamic characteristics of an aerostat under unsteady wind gust conditions. Aerospace Science and Technology, 2021, 113, 106684.	2.5	8
44	Numerical Study of Natural Convection in an Enclosure with an Internal Heat Source at Higher Rayleigh Numbers. Heat Transfer - Asian Research, 2015, 44, 620-640.	2.8	7
45	Numerical investigations on behaviour bifurcation of premixed H ₂ -air flames in mesoscale tubes. Combustion Theory and Modelling, 2019, 23, 969-993.	1.0	7
46	Effect of Axial Pressure and Tool Rotation Speed on Temperature Distribution during Dissimilar Friction Stir Welding. Advanced Materials Research, 0, 418-420, 1934-1938.	0.3	6
47	Tip Opening of Burner-Stabilized Flames. Energy & Fuels, 2018, 32, 2344-2354.	2.5	6
48	A proposal for a correlation to calculate pressure drop in reticulated porous media with the help of numerical investigation of pressure drop in ideal & randomized reticulated structures. Chemical Engineering Science, 2021, 237, 116518.	1.9	6
49	Experimental and computational analysis of a row of three co-swirling impinging flames. Heat and Mass Transfer, 2020, 56, 365-384.	1.2	4
50	Combustion characteristics of syngas laminar microjet diffusion flames. Journal of the Taiwan Institute of Chemical Engineers, 2020, 115, 47-59.	2.7	4
51	A Study on Plume Dispersion Characteristics of Two Discrete Plume Stacks for Negative Temperature Gradient Conditions. Environmental Modeling and Assessment, 2021, 26, 405-422.	1.2	4
52	Computational Fluid Dynamics Analysis of Aerodynamics and Impingement Heat Transfer From Hexagonal Arrays of Multiple Dual-Swirling Impinging Flame Jets. Journal of Heat Transfer, 2020, 142, .	1.2	4
53	Flame dynamics of premixed CH ₄ /H ₂ /air flames in a microchannel with a wall temperature gradient. Combustion Theory and Modelling, 2022, 26, 989-1013.	1.0	4
54	Effect of hydrocarbon addition on tip opening of hydrogen-air bunsen flames. International Journal of Hydrogen Energy, 2021, 46, 5763-5775.	3.8	3

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55	Effect of Knudsen Number, Lid Velocity and Velocity Ratio on Flow Features of Single and Double Lid Driven Cavities. <i>Journal of Applied Fluid Mechanics</i> , 2019, 12, 1575-1583.	0.4	3
56	A Numerical Investigation on Fluid Dynamics and Heating Characteristics of Co-and-Counterrotating Multiple Swirling Impinging Flames Arranged in 3 Å– 3 Inline Array. <i>Journal of Thermal Science and Engineering Applications</i> , 2020, 12, .	0.8	3
57	Modeling of Homogeneous Mixture Formation and Combustion in GDI Engine with Negative Valve Overlap. <i>ISRN Mechanical Engineering</i> , 2013, 2013, 1-12.	0.9	2
58	Numerical Study on Thrust Generation in an Airfoil Undergoing Nonsinusoidal Plunging Motion. <i>Journal of Aerospace Engineering</i> , 2018, 31, 04018037.	0.8	2
59	Laminar Flow over a Square Cylinder Undergoing Combined Rotational and Transverse Oscillations. <i>Journal of Applied Fluid Mechanics</i> , 2021, 14, .	0.4	2
60	Effect of Burner Wall Material on Microjet Hydrogen Diffusion Flames near Extinction: A Numerical Study. <i>Energies</i> , 2021, 14, 8266.	1.6	2
61	Computational analysis of the aerodynamic characteristics and stability derivatives of an aerostat under unsteady wind conditions. <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> , 2022, 44, 1.	0.8	2
62	Effect of interactions on impingement heat transfer in odd and even element linear arrays of co-axial flames. <i>International Communications in Heat and Mass Transfer</i> , 2021, 127, 105576.	2.9	1
63	Aeroacoustics Analysis of Globe Control Valves. <i>International Journal of Automotive and Mechanical Engineering</i> , 2018, 15, 5547-5561.	0.5	1
64	Numerical Study of Characteristics of Underexpanded Supersonic Jet. <i>Journal of Aerospace Technology and Management</i> , 2020, , .	0.3	1
65	Stability Derivatives of Various Lighter-than-Air Vehicles: A CFD-Based Comparative Study. <i>Drones</i> , 2022, 6, 168.	2.7	1
66	Numerical Investigation on Combustion Characteristics of Premixed H ₂ /Air in Stepped Micro-Combustors. <i>Lecture Notes in Mechanical Engineering</i> , 2021, , 863-872.	0.3	0
67	Numerical Investigation on the Lewis Number Effects on the Turbulent Premixed Swirl Stabilized Propane-Air Flames. , 2022, , .		0
68	Effect of Solidity on Performance of Vertical Axis Wind Turbine Using Constant Chord Reynolds Number. , 2021, , .		0