

# Arafat Ahmed Bhuiyan

## List of Publications by Year in descending order

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Version: 2024-02-01

42  
papers

1,593  
citations

331259

21  
h-index

360668

35  
g-index

43  
all docs

43  
docs citations

43  
times ranked

1126  
citing authors

#	ARTICLE	IF	CITATIONS
1	CFD modelling of co-firing of biomass with coal under oxy-fuel combustion in a large scale power plant. <i>Fuel</i> , 2015, 159, 150-168.	3.4	136
2	Heat transfer enhancement using different types of vortex generators (VGs): A review on experimental and numerical activities. <i>Thermal Science and Engineering Progress</i> , 2018, 5, 524-545.	1.3	116
3	Heat transfer and pressure drop performance of Nanofluid: A state-of- the-art review. <i>International Journal of Thermofluids</i> , 2021, 9, 100065.	4.0	114
4	Thermal and hydraulic performance of finned-tube heat exchangers under different flow ranges: A review on modeling and experiment. <i>International Journal of Heat and Mass Transfer</i> , 2016, 101, 38-59.	2.5	108
5	A review on thermo-chemical characteristics of coal/biomass co-firing in industrial furnace. <i>Journal of the Energy Institute</i> , 2018, 91, 1-18.	2.7	102
6	Computational modelling of co-firing of biomass with coal under oxy-fuel condition in a small scale furnace. <i>Fuel</i> , 2015, 143, 455-466.	3.4	99
7	Numerical modelling of oxy fuel combustion, the effect of radiative and convective heat transfer and burnout. <i>Fuel</i> , 2015, 139, 268-284.	3.4	86
8	Three-dimensional performance analysis of plain fin tube heat exchangers in transitional regime. <i>Applied Thermal Engineering</i> , 2013, 50, 445-454.	3.0	82
9	Recent advancements in impedance of fouling resistance and particulate depositions in heat exchangers. <i>International Journal of Heat and Mass Transfer</i> , 2019, 141, 580-603.	2.5	81
10	Synthesis, heat transport mechanisms and thermophysical properties of nanofluids: A critical overview. <i>International Journal of Thermofluids</i> , 2021, 10, 100086.	4.0	63
11	Heat and mass transfer for compact heat exchanger (CHXs) design: A state-of-the-art review. <i>International Journal of Heat and Mass Transfer</i> , 2018, 127, 359-380.	2.5	61
12	CFD simulation of biomass thermal conversion under air/oxy-fuel conditions in a reciprocating grate boiler. <i>Renewable Energy</i> , 2020, 146, 1416-1428.	4.3	50
13	Thermal characterization of coal/straw combustion under air/oxy-fuel conditions in a swirl-stabilized furnace: A CFD modelling. <i>Applied Thermal Engineering</i> , 2016, 93, 639-651.	3.0	49
14	A review on recent advancements of the usage of nano fluid in hybrid photovoltaic/thermal (PV/T) solar systems. <i>Renewable Energy</i> , 2022, 188, 114-131.	4.3	43
15	Enhancement of thermal and hydraulic performance of compact finned-tube heat exchanger using vortex generators (VGs): A parametric study. <i>International Journal of Thermal Sciences</i> , 2019, 140, 154-166.	2.6	40
16	Effect of recycled flue gas ratios for pellet type biomass combustion in a packed bed furnace. <i>International Journal of Heat and Mass Transfer</i> , 2018, 120, 1031-1043.	2.5	33
17	Numerical Modeling of Biomass Co-firing combustion with Pulverized coal in a Small Scale Furnace. <i>Procedia Engineering</i> , 2015, 105, 504-511.	1.2	31
18	Co-firing of biomass and slagging in industrial furnace: A review on modelling approach. <i>Journal of the Energy Institute</i> , 2017, 90, 838-854.	2.7	28

#	ARTICLE	IF	CITATIONS
19	Plate Fin and Tube Heat Exchanger Modeling: Effects of Performance Parameters for Turbulent Flow Regime. International Journal of Automotive and Mechanical Engineering, 2014, 9, 1768-1781.	0.5	26
20	Modelling of slag deposition and flow characteristics of coal combustion under oxy-firing condition in a 550 MW tangentially fired furnace. Applied Thermal Engineering, 2016, 106, 221-235.	3.0	25
21	Computational assessment of Nano-particulate (Al <sub>2</sub> O <sub>3</sub> /Water) utilization for enhancement of heat transfer with varying straight section lengths in a serpentine tube heat exchanger. Thermal Science and Engineering Progress, 2020, 20, 100521.	1.3	23
22	Modeling of Slagging in Industrial Furnace: A Comprehensive Review. Procedia Engineering, 2015, 105, 512-519.	1.2	22
23	The impact of D-shaped jaggedness on heat transfer enhancement technique using Al <sub>2</sub> O <sub>3</sub> based nanoparticles. International Journal of Thermofluids, 2021, 10, 100069.	4.0	21
24	Finite Element Analysis of Aluminum Honeycombs Subjected to Dynamic Indentation and Compression Loads. Materials, 2016, 9, 162.	1.3	18
25	Numerical modelling of thermal characteristics in a microstructure filled porous cavity with mixed convection. International Journal of Heat and Mass Transfer, 2016, 93, 464-476.	2.5	17
26	Reduction of GHG emissions by utilizing biomass co-firing in a swirl-stabilized furnace. Renewable Energy, 2019, 143, 1201-1209.	4.3	17
27	Improvement of an exhaust gas recirculation cooler using discrete ribbed and perforated louvered strip vortex generator. International Journal of Thermofluids, 2022, 13, 100132.	4.0	16
28	Development of 3D transient wall filming mechanism during combustion by coupling Eulerian-Lagrangian approach and particle-wall interaction model. Applied Thermal Engineering, 2017, 112, 911-923.	3.0	13
29	EFFECTS OF GEOMETRIC PARAMETERS FOR WAVY FINNED-TUBE HEAT EXCHANGER IN TURBULENT FLOW: A CFD MODELING. Frontiers in Heat and Mass Transfer, 0, 6, .	0.1	13
30	Modeling of Solid and Bio-Fuel Combustion Technologies. , 2016, , 259-309.		12
31	NUMERICAL STUDY OF 3D THERMAL AND HYDRAULIC CHARACTERISTICS OF WAVY FIN-AND-TUBE HEAT EXCHANGER. Frontiers in Heat and Mass Transfer, 2012, 3, .	0.1	12
32	Aerodynamics of burner jet in a tangentially-fired boiler: A CFD modelling and experiment. International Journal of Thermal Sciences, 2018, 129, 238-253.	2.6	11
33	Experimental and numerical investigation of coherent structure dynamics on mass transfer in a separated cavity flow. Experimental Thermal and Fluid Science, 2016, 76, 146-162.	1.5	7
34	Adverse environmental impacts of wind farm installations and alternative research pathways to their mitigation. Cleaner Engineering and Technology, 2022, 7, 100415.	2.1	6
35	Numerical modelling of unsteady flow behaviour in the rectangular jets with oblique opening. AEJ - Alexandria Engineering Journal, 2016, 55, 2309-2320.	3.4	5
36	Mixed Convection and Entropy Generation Characteristics Inside a Porous Cavity With Viscous Dissipation Effect. , 2009, , .		2

#	ARTICLE	IF	CITATIONS
37	Comparative analysis of refrigerant performance between LPG and R134a under subtropical climate. Journal of Thermal Analysis and Calorimetry, 2020, 139, 2925-2935.	2.0	2
38	Improvement of thermal-hydraulic performance of compact heat exchangers with multi-corrugated fin and oval tube arrays. AIP Conference Proceedings, 2019, , .	0.3	1
39	Numerical investigation on the effectiveness of water injection method for mitigating propeller cavitation. AIP Conference Proceedings, 2019, , .	0.3	1
40	Investigation of Slot-Burner Aerodynamics with Recessed-Type Nozzle Geometry. Fluids, 2016, 1, 10.	0.8	0
41	3D numerical analysis of the effect of various geometric parameters of EATHEs under steady condition. AIP Conference Proceedings, 2019, , .	0.3	0
42	Experimental investigation on thermal treatment of local and marine based micro-algae for production of biodiesel. AIP Conference Proceedings, 2019, , .	0.3	0