# Majid Saffar-avval

## List of Publications by Year in Descending Order



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|---|---|---|---|
| 90 papers | 2,542 citations | 28 h-index | 48 g-index |
| 101 ext. papers | 2,937 ext. citations | 4.4 avg, IF | 5.46 L-index |

| # | Paper | IF | Citations |
|---|---|---|---|
| 90 | Configuration optimization of the honeycomb core in the latent heat thermal energy storage of a solar air heater: Experimental and numerical study. *International Journal of Energy Research*, **2022**, 46, 5924-5954 | 4.5 | 1 |
| 89 | A combined rate-shaping-splitting injection strategy for regulating stratification characteristics of fuel sprays. *Applied Thermal Engineering*, **2021**, 187, 116544 | 5.8 | 0 |
| 88 | Experimental study of partially metal foam wrapped tube bundles. *International Journal of Thermal Sciences*, **2021**, 162, 106798 | 4.1 | 2 |
| 87 | Electrohydrodynamic water desalination: Evaluating the productivity and energy consumption. *Desalination*, **2021**, 497, 114768 | 10.3 | 1 |
| 86 | 3D simulation and parametric optimization of a solar air heater with a novel staggered cuboid baffles. *International Journal of Mechanical Sciences*, **2021**, 205, 106607 | 5.5 | 8 |
| 85 | Enhancement of evaporation from liquid surfaces due to electrohydrodynamic flow: A review. *Journal of Electrostatics*, **2021**, 114, 103630 | 1.7 | 0 |
| 84 | Study of particle mass loading effects on sand erosion in a series of fittings. *Powder Technology*, **2020**, 373, 118-141 | 5.2 | 8 |
| 83 | Heat transfer enhancement in an annulus under ultrasound field: A numerical and experimental study. *International Communications in Heat and Mass Transfer*, **2020**, 114, 104560 | 5.8 | 9 |
| 82 | 3D computational modeling of sand erosion in gas-liquid-particle multiphase annular flows in bends. *Wear*, **2020**, 450-451, 203241 | 3.5 | 14 |
| 81 | A large eddy simulation study of cyclones: The effect of sub-models on efficiency and erosion prediction. *Powder Technology*, **2020**, 360, 1237-1252 | 5.2 | 8 |
| 80 | Forced convection heat transfer enhancement using a coaxial wire-tube corona system. *Journal of Electrostatics*, **2020**, 103, 103415 | 1.7 | 8 |
| 79 | On the evaporation enhancement from saline water due to corona discharge generated EHD flow: A numerical and experimental study. *International Communications in Heat and Mass Transfer*, **2020**, 119, 104988 | 5.8 | 2 |
| 78 | Numerical simulation of oscillating plates at the visco-inertial regime for bio-inspired pumping and mixing applications. *Physics of Fluids*, **2020**, 32, 101906 | 4.4 | 2 |
| 77 | Numerical simulation of convective heat transfer of non-Newtonian carbon-based nanofluids in U-bend tubes using Buongiorno□ model. *Journal of Thermal Analysis and Calorimetry*, **2020**, 1 | 4.1 | |
| 76 | Experimental and numerical study on heat transfer enhancement using ultrasonic vibration in a double-pipe heat exchanger. *Applied Thermal Engineering*, **2019**, 159, 113867 | 5.8 | 25 |
| 75 | A solar-powered solution for water shortage problem in arid and semi-arid regions in coastal countries. *Sustainable Energy Technologies and Assessments*, **2019**, 35, 1-11 | 4.7 | 17 |
| 74 | Study of erosion prediction of turbulent gas-solid flow in plugged tees via CFD-DEM. *Powder Technology*, **2019**, 352, 136-150 | 5.2 | 15 |

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| 73 | Heat transfer enhancement of a nanofluid in a helical coil with flattened cross-section. *Chemical Engineering Research and Design*, **2019**, 146, 36-47 | 5.5 | 8 |
| 72 | Parcel-number-density control algorithms for the efficient simulation of particle-laden two-phase flows. *Journal of Computational Physics*, **2019**, 387, 569-588 | 4.1 | 6 |
| 71 | Theoretical and experimental modeling of EHD conduction in porous conductive material inside a tube. *Journal of Electrostatics*, **2019**, 97, 15-25 | 1.7 | 8 |
| 70 | An Investigation of Flow Across Porous Layer Wrapped Flat Tube Banks. *Transport in Porous Media*, **2019**, 127, 329-352 | 3.1 | 3 |
| 69 | Heat Transfer Investigation of a Tube Partially Wrapped by Metal Porous Layer as a Potential Novel Tube for Air Cooled Heat Exchangers. *Journal of Heat Transfer*, **2019**, 141, | 1.8 | 5 |
| 68 | An investigation of erosion prediction for 15□to 90□elbows by numerical simulation of gas-solid flow. *Powder Technology*, **2018**, 334, 9-26 | 5.2 | 23 |
| 67 | Numerical investigation of turbulent forced convection flow of nano fluid in curved and helical pipe using four-equation model. *Powder Technology*, **2018**, 328, 47-53 | 5.2 | 14 |
| 66 | Enhancement of convection heat transfer using EHD conduction method. *Experimental Thermal and Fluid Science*, **2018**, 93, 108-118 | 3 | 16 |
| 65 | Numerical modeling of sand particle erosion in return bends in gas-particle two-phase flow. *Scientia Iranica*, **2018**, 0-0 | 1.5 | 3 |
| 64 | Partially metal foam wrapped tube bundle as a novel generation of air cooled heat exchangers. *International Journal of Heat and Mass Transfer*, **2018**, 118, 171-181 | 4.9 | 19 |
| 63 | Numerical investigation of water surface deformation due to corona discharge. *Journal of Electrostatics*, **2018**, 96, 151-159 | 1.7 | 9 |
| 62 | Numerical investigation of natural convection heat transfer in a cylindrical enclosure due to ultrasonic vibrations. *Ultrasonics*, **2017**, 76, 52-62 | 3.5 | 15 |
| 61 | Numerical investigation of nanofluid heat transfer in helically coiled tubes using the four-equation model. *Advanced Powder Technology*, **2017**, 28, 256-265 | 4.6 | 9 |
| 60 | Numerical Investigation of Magnetic Field Effect on Heat Transfer and Entropy Generation in Channel; New Approach for Fluid and Length Scale Selections. *Heat Transfer Engineering*, **2017**, 38, 1222-1232 | 1.7 | 4 |
| 59 | Experimental study on heat transfer enhancement of laminar ferrofluid flow in horizontal tube partially filled porous media under fixed parallel magnet bars. *Journal of Magnetism and Magnetic Materials*, **2017**, 424, 16-25 | 2.8 | 36 |
| 58 | Experimental investigation of laminar forced convective heat transfer of Graphene□water nanofluid inside a circular tube. *International Journal of Thermal Sciences*, **2016**, 100, 316-323 | 4.1 | 78 |
| 57 | Effects of non-equilibrium condensation on deviation angle and efficiency in a steam turbine stage. *Journal of Mechanical Science and Technology*, **2016**, 30, 1351-1361 | 1.6 | 3 |
| 56 | Experimental Investigation of Saturated Flow Boiling Heat Transfer to TiO2/R141b Nanorefrigerant. *Experimental Heat Transfer*, **2016**, 29, 188-204 | 2.4 | 19 |

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| 55 | Effects of surface roughness on deviation angle and performance losses in wet steam turbines. *Applied Thermal Engineering*, **2015**, 90, 158-173 | 5.8 | 27 |
| 54 | Optimization of conjugate heat transfer in wavy walls microchannels. *Applied Thermal Engineering*, **2015**, 82, 318-328 | 5.8 | 59 |
| 53 | Effect of different magnetic field distributions on laminar ferroconvection heat transfer in horizontal tube. *Journal of Magnetism and Magnetic Materials*, **2015**, 389, 136-143 | 2.8 | 21 |
| 52 | Experimental and numerical investigation of nanofluid heat transfer in helically coiled tubes at constant wall heat flux. *Advanced Powder Technology*, **2015**, 26, 1483-1494 | 4.6 | 31 |
| 51 | The effects of wall roughness on erosion rate in gas–solid turbulent annular pipe flow. *Powder Technology*, **2015**, 271, 248-254 | 5.2 | 11 |
| 50 | Experimental and numerical investigation of turbulent nanofluid flow in helically coiled tubes under constant wall heat flux using Eulerian–Lagrangian approach. *Powder Technology*, **2015**, 269, 93-100 | 5.2 | 71 |
| 49 | Experimental Modeling of Gas–Solid Heat Transfer in a Pipe with Various Inclination Angles. *Heat Transfer Engineering*, **2015**, 36, 113-122 | 1.7 | 5 |
| 48 | Numerical simulation of gas flow and heat transfer in a rough microchannel using the lattice Boltzmann method. *Physical Review E*, **2015**, 92, 063034 | 2.4 | 8 |
| 47 | Analytical and numerical investigation of heat transfer and entropy generation of stratified two-phase flow in mini-channel. *International Journal of Thermal Sciences*, **2015**, 90, 24-37 | 4.1 | 10 |
| 46 | Cold start-up condition model for heat recovery steam generators. *Applied Thermal Engineering*, **2014**, 65, 502-512 | 5.8 | 20 |
| 45 | Turbulent Convective Heat Transfer and Pressure Drop of Graphene–Water Nanofluid Flowing Inside a Horizontal Circular Tube. *Journal of Dispersion Science and Technology*, **2014**, 35, 1230-1240 | 1.5 | 53 |
| 44 | Modeling and numerical investigation of erosion rate for turbulent two-phase gas–solid flow in horizontal pipes. *Powder Technology*, **2014**, 267, 362-370 | 5.2 | 30 |
| 43 | Entropy generation and heat transfer numerical analysis in pipes partially filled with porous medium. *International Journal of Heat and Mass Transfer*, **2014**, 79, 496-506 | 4.9 | 72 |
| 42 | Three dimensional heat transfer modeling of gas-solid flow in a pipe under various inclination angles. *Powder Technology*, **2014**, 262, 223-232 | 5.2 | 8 |
| 41 | Wall Roughness Effect on Heat Transfer Rate of the Turbulent Gas-Solid Flow in Inclined Pipes **2014** , | | 1 |
| 40 | Heat transfer investigation of laminar developing flow of nanofluids in a microchannel based on Eulerian–Lagrangian approach. *Canadian Journal of Chemical Engineering*, **2014**, 92, 1139-1149 | 2.3 | 31 |
| 39 | Experimental and numerical investigation of nanofluid heat transfer in helically coiled tubes at constant wall temperature using dispersion model. *International Journal of Heat and Mass Transfer*, **2013**, 58, 480-491 | 4.9 | 83 |
| 38 | Hourly energy analysis and feasibility study of employing a thermocline TES system for an integrated CHP and DH network. *Energy Conversion and Management*, **2013**, 68, 281-292 | 10.6 | 31 |

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| 37 | A new configuration of bend tubes for compound optimization of heat and fluid flow. *Energy*, **2013**, 62, 418-424 | 7.9 | 54 |
| 36 | Development of a CHP/DH system for the new town of Parand: An opportunity to mitigate global warming in Middle East. *Applied Thermal Engineering*, **2013**, 59, 298-308 | 5.8 | 21 |
| 35 | Heat transfer enhancement by acoustic streaming in a closed cylindrical enclosure filled with water. *International Journal of Heat and Mass Transfer*, **2013**, 60, 230-235 | 4.9 | 32 |
| 34 | Optimum design of dual pressure heat recovery steam generator using non-dimensional parameters based on thermodynamic and thermoeconomic approaches. *Applied Thermal Engineering*, **2013**, 52, 371-384 | 5.8 | 38 |
| 33 | Effects of continuous sonication on laminar convective heat transfer inside a tube using water□TiO2 nanofluid. *Experimental Thermal and Fluid Science*, **2013**, 48, 8-14 | 3 | 35 |
| 32 | Nonlinear dynamics, bifurcation and performance analysis of an air-handling unit: Disturbance rejection via feedback linearization. *Energy and Buildings*, **2013**, 56, 150-159 | 7 | 5 |
| 31 | Multivariable robust control of an air-handling unit: A comparison between pole-placement and H□ controllers. *Energy Conversion and Management*, **2012**, 55, 136-148 | 10.6 | 20 |
| 30 | Ultrasonic properties of suspensions of TiO2 and Al2O3 nanoparticles in water. *Powder Technology*, **2012**, 217, 171-176 | 5.2 | 39 |
| 29 | Sliding mode control of drum water level in an industrial boiler unit with time varying parameters: A comparison with H□robust control approach. *Journal of Process Control*, **2012**, 22, 1844-1855 | 3.9 | 41 |
| 28 | Experimental and numerical investigation of nanofluid forced convection inside a wide microchannel heat sink. *Applied Thermal Engineering*, **2012**, 36, 260-268 | 5.8 | 196 |
| 27 | Heat Transfer in Turbulent Liquid-solid Flow Considering the Interparticle Collision Effect. *Petroleum Science and Technology*, **2012**, 30, 1296-1306 | 1.4 | |
| 26 | Numerical Simulation of Acoustic Streaming for Nonlinear Standing Ultrasonic Wave in Water Inside Axisymmetric Enclosure. *Engineering Applications of Computational Fluid Mechanics*, **2012**, 6, 366-382 | 4.5 | 10 |
| 25 | Steady and Unsteady Heat Transfer in a Channel Partially Filled with Porous Media Under Thermal Non-Equilibrium Condition. *Transport in Porous Media*, **2011**, 86, 177-198 | 3.1 | 23 |
| 24 | Numerical study of nanofluid mixed convection in a horizontal curved tube using two-phase approach. *Heat and Mass Transfer*, **2011**, 47, 107-118 | 2.2 | 21 |
| 23 | Temperature measurement of a premixed radially symmetric methane flame jet using the Mach□ehnder Interferometry. *Optics and Lasers in Engineering*, **2011**, 49, 859-865 | 4.6 | 15 |
| 22 | Nonlinear multivariable control and performance analysis of an air-handling unit. *Energy and Buildings*, **2011**, 43, 805-813 | 7 | 24 |
| 21 | Eulerian□Eulerian two-phase numerical simulation of nanofluid laminar forced convection in a microchannel. *International Journal of Heat and Fluid Flow*, **2011**, 32, 107-116 | 2.4 | 192 |
| 20 | Turbulence modulation for gas □particle flow in vertical tube and horizontal channel using four-way Eulerian□agrangian approach. *International Journal of Heat and Fluid Flow*, **2011**, 32, 826-833 | 2.4 | 6 |

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| 19 | **2010**, | | 4 |
| 18 | Thermal stochastic collision model in turbulent gas–solid pipe flows. *International Journal of Heat and Mass Transfer*, **2010**, 53, 1175-1182 | 4.9 | 3 |
| 17 | A comparative study between linear and sliding mode adaptive controllers for a hot gas generator. *Applied Thermal Engineering*, **2010**, 30, 413-424 | 5.8 | 3 |
| 16 | Prediction of nanofluid convective heat transfer using the dispersion model. *International Journal of Thermal Sciences*, **2010**, 49, 471-478 | 4.1 | 61 |
| 15 | Robust control of an industrial boiler system; a comparison between two approaches: Sliding mode control & H∞ technique. *Energy Conversion and Management*, **2009**, 50, 1401-1410 | 10.6 | 27 |
| 14 | Two Dimensional Hydro Dynamic and Thermal Modeling of a Turbulent Two Phase Stratified Gas-Liquid Pipe Flow **2009**, | | 4 |
| 13 | Efficient design of feedwater heaters network in steam power plants using pinch technology and exergy analysis. *International Journal of Energy Research*, **2008**, 32, 1-11 | 4.5 | 54 |
| 12 | Thermodynamic design and parametric study of MED-TVC. *Desalination*, **2008**, 222, 596-604 | 10.3 | 58 |
| 11 | Numerical simulation of fluid bed drying based on two-fluid model and experimental validation. *Applied Thermal Engineering*, **2007**, 27, 422-429 | 5.8 | 29 |
| 10 | Gas–solid turbulent flow and heat transfer with collision effect in a vertical pipe. *International Journal of Thermal Sciences*, **2007**, 46, 67-75 | 4.1 | 6 |
| 9 | Prediction of turbulent forced convection of a nanofluid in a tube with uniform heat flux using a two phase approach. *International Journal of Heat and Fluid Flow*, **2007**, 28, 211-219 | 2.4 | 302 |
| 8 | Inter-particle heat transfer in a riser of gas–solid turbulent flows. *Powder Technology*, **2005**, 159, 35-45 | 5.2 | 24 |
| 7 | Experimental study of turbulent gas–solid heat transfer at different particles temperature. *Experimental Thermal and Fluid Science*, **2004**, 28, 655-665 | 3 | 13 |
| 6 | Transient response of dry expansion evaporator in household refrigerators. *Applied Thermal Engineering*, **2004**, 24, 1465-1480 | 5.8 | 3 |
| 5 | Minimizing capital and operating costs of shell and tube condensers using optimum baffle spacing. *Applied Thermal Engineering*, **2004**, 24, 2801-2810 | 5.8 | 68 |
| 4 | Thermo-mechanical modeling of turbulent heat transfer in gas–solid flows including particle collisions. *International Journal of Heat and Fluid Flow*, **2002**, 23, 792-806 | 2.4 | 33 |
| 3 | Modeling of heat transfer in turbulent gas–solid flow. *International Journal of Heat and Mass Transfer*, **2002**, 45, 1173-1184 | 4.9 | 42 |
| 2 | Two-dimensional mathematical model of a packed bed dryer and experimentation. *Proceedings of the Institution of Mechanical Engineers, Part A: Journal of Power and Energy*, **2002**, 216, 161-168 | 1.6 | 18 |

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| 1 | A general correlation for determining optimum baffle spacing for all types of shell and tube exchangers. *International Journal of Heat and Mass Transfer*, **1995**, 38, 2501-2506 | 4.9 | 45 |