## Mohammad Hassan Shojaeefard

List of Publications by Year in descending order

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78 papers 1,868 citations

304602 22 h-index 302012 39 g-index

78 all docs

78 docs citations

78 times ranked 1720 citing authors

#	Article	IF	Citations
1	Modelling and Pareto optimization of mechanical properties of friction stir welded AA7075/AA5083 butt joints using neural network and particle swarm algorithm. Materials & Design, 2013, 44, 190-198.	5.1	152
2	Numerical study of the effects of some geometric characteristics of a centrifugal pump impeller that pumps a viscous fluid. Computers and Fluids, 2012, 60, 61-70.	1.3	131
3	A hybrid method of modified NSGA-II and TOPSIS to optimize performance and emissions of a diesel engine using biodiesel. Applied Thermal Engineering, 2013, 59, 309-315.	3.0	120
4	A review on microstructure reconstruction of PEM fuel cells porous electrodes for pore scale simulation. International Journal of Hydrogen Energy, 2016, 41, 20276-20293.	3.8	91
5	Micro temperature-dependent FG porous plate: Free vibration and thermal buckling analysis using modified couple stress theory with CPT and FSDT. Applied Mathematical Modelling, 2017, 50, 633-655.	2.2	80
6	Multi objective optimization of friction stir welding parameters using FEM and neural network. International Journal of Precision Engineering and Manufacturing, 2014, 15, 2351-2356.	1.1	70
7	Theoretical development and numerical investigation on energy absorption behavior of tapered multi-cell tubes. Thin-Walled Structures, 2016, 102, 98-110.	2.7	65
8	Sensitivity Analysis of the Artificial Neural Network Outputs in Friction Stir Lap Joining of Aluminum to Brass. Advances in Materials Science and Engineering, 2013, 2013, 1-7.	1.0	58
9	Free vibration of an ultra-fast-rotating-induced cylindrical nano-shell resting on a Winkler foundation under thermo-electro-magneto-elastic condition. Applied Mathematical Modelling, 2018, 61, 255-279.	2.2	58
10	Application of Taguchi optimization technique in determining aluminum to brass friction stir welding parameters. Materials & Design, 2013, 52, 587-592.	5.1	57
11	Optimization of microstructural and mechanical properties of friction stir welding using the cellular automaton and Taguchi method. Materials & Design, 2014, 64, 660-666.	5.1	54
12	Hybrid multi-objective optimization of microstructural and mechanical properties of B4C/A356 composites fabricated by FSP using TOPSIS and modified NSGA-II. Transactions of Nonferrous Metals Society of China, 2017, 27, 2317-2333.	1.7	47
13	The effect of reinforcement type on the microstructure, mechanical properties, and wear resistance of A356 matrix composites produced by FSP. International Journal of Advanced Manufacturing Technology, 2017, 91, 1391-1407.	1.5	46
14	Wear Performance of A356 Matrix Composites Reinforced with Different Types of Reinforcing Particles. Journal of Materials Engineering and Performance, 2017, 26, 4297-4310.	1.2	39
15	Comparison of steel, aluminum and composite bonnet in terms of pedestrian head impact. Safety Science, 2011, 49, 1371-1380.	2.6	35
16	Experimental investigation on performance and exhaust emissions of castor oil biodiesel from a diesel engine. Environmental Technology (United Kingdom), 2013, 34, 2019-2026.	1.2	30
17	Pedestrian safety investigation of the new inner structure of the hood to mitigate the impact injury of the head. Thin-Walled Structures, 2014, 77, 77-85.	2.7	29
18	Effect of tool pin profile on distribution of reinforcement particles during friction stir processing of B <sub>4</sub> C/aluminum composites. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2018, 232, 637-651.	0.7	28

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19	Free vibration and critical angular velocity of a rotating variable thickness two-directional FG circular microplate. Microsystem Technologies, 2018, 24, 1525-1543.	1.2	28
20	Energy absorption analysis for tapered multi-cell tubes improved by foams: Theoretical development and numerical simulation. Composite Structures, 2019, 207, 213-222.	3.1	26
21	CFD simulation and Pareto-based multi-objective shape optimization of the centrifugal pump inducer applying GMDH neural network, modified NSGA-II, and TOPSIS. Structural and Multidisciplinary Optimization, 2019, 60, 1509-1525.	1.7	25
22	Multi-objective optimization of an automotive louvered fin-flat tube condenser for enhancing HVAC system cooling performance. Applied Thermal Engineering, 2017, 125, 546-558.	3.0	24
23	Effects of electrode compression on the water droplet removal from proton exchange membrane fuel cells. Korean Journal of Chemical Engineering, 2019, 36, 136-145.	1.2	23
24	Investigation of friction stir welding tool parameters using FEM and neural network. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2015, 229, 209-217.	0.7	22
25	Modeling and combined application of the modified NSGA-II and TOPSIS to optimize a refrigerant-to-air multi-pass louvered fin-and-flat tube condenser. Applied Thermal Engineering, 2016, 103, 212-225.	3.0	22
26	The Numerical Estimation of Thermal Contact Resistance in Contacting Surfaces. American Journal of Applied Sciences, 2008, 5, 1566-1571.	0.1	22
27	Elastic Mechanical Stress Analysis in a 2D-FGM Thick Finite Length Hollow Cylinder with Newly Developed Material Model. Acta Mechanica Solida Sinica, 2016, 29, 178-191.	1.0	20
28	Two-dimensional modeling of a salt-gradient solar pond with wall shading effect and thermo-physical properties dependent on temperature and concentration. Journal of Thermal Science, 2011, 20, 362-370.	0.9	19
29	An efficient sensitivity analysis method for modified geometry of Macpherson suspension based on Pearson correlation coefficient. Vehicle System Dynamics, 2017, 55, 827-852.	2.2	18
30	An investigation of the effects of geometry design on refrigerant flow mal-distribution in parallel flow condenser using a hybrid method of finite element approach and CFD simulation. Applied Thermal Engineering, 2017, 112, 431-449.	3.0	18
31	Wear and mechanical properties of surface hybrid metal matrix composites on Al–Si aluminum alloys fabricated by friction stir processing. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2019, 233, 790-799.	0.7	18
32	Experimental and numerical crashworthiness investigation of combined circular and square sections. Journal of Mechanical Science and Technology, 2014, 28, 999-1006.	0.7	17
33	Inverse heat transfer problem of thermal contact conductance estimation in periodically contacting surfaces. Journal of Thermal Science, 2009, 18, 150-159.	0.9	16
34	Nonlinear dynamic response of FGM beams with Winkler–Pasternak foundation subject to noncentral low velocity impact in thermal field. Composite Structures, 2017, 167, 132-143.	3.1	16
35	Low-velocity impact response of functionally graded doubly curved panels with Winkler–Pasternak elastic foundation: An analytical approach. Composite Structures, 2017, 162, 351-364.	3.1	16
36	Vibration and buckling analysis of a rotary functionally graded piezomagnetic nanoshell embedded in viscoelastic media. Journal of Intelligent Material Systems and Structures, 2018, 29, 2344-2361.	1.4	15

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37	Thermal Contact Analysis Using Identification Method. Heat Transfer Engineering, 2008, 29, 85-96.	1.2	14
38	Nonlinear transient heat conduction analysis of hollow thick temperature-dependent 2D-FGM cylinders with finite length using numerical method. Journal of Mechanical Science and Technology, 2014, 28, 3825-3835.	0.7	14
39	Shape optimization of draft tubes for Agnew microhydro turbines. Energy Conversion and Management, 2014, 79, 681-689.	4.4	14
40	Shape design optimization of cylindrical tank using b-spline curves. Computers and Fluids, 2015, 109, 100-112.	1.3	14
41	Evaluating different types of artificial neural network structures for performance prediction of compact heat exchanger. Neural Computing and Applications, 2017, 28, 3953-3965.	3.2	14
42	Generalized thermoelastic analysis of layer interface excited by pulsed laser heating. Engineering Analysis With Boundary Elements, 2003, 27, 863-869.	2.0	13
43	Three-dimensional wave propagation on orthotropic cylindrical shells with arbitrary thickness considering state space method. Composite Structures, 2015, 132, 239-254.	3.1	13
44	Developing a hybrid procedure of one dimensional finite element method and CFD simulation for modeling refrigerant flow mal-distribution in parallel flow condenser. International Journal of Refrigeration, 2017, 73, 39-53.	1.8	12
45	Magnetic field effect on free vibration of smart rotary functionally graded nano/microplates: A comparative study on modified couple stress theory and nonlocal elasticity theory. Journal of Intelligent Material Systems and Structures, 2018, 29, 2492-2507.	1.4	12
46	Experimental and numerical investigation of the flap application in an airfoil in combination with a cross flow fan. International Journal of Numerical Methods for Heat and Fluid Flow, 2012, 22, 742-763.	1.6	11
47	A study on acoustic behavior of poroelastic media bonded between laminated composite panels. Latin American Journal of Solids and Structures, 2014, 11, 2379-2407.	0.6	11
48	Developing and Multi-Objective Optimization of a Combined Energy Absorber Structure Using Polynomial Neural Networks and Evolutionary Algorithms. Latin American Journal of Solids and Structures, 2016, 13, 2552-2572.	0.6	10
49	Multi-objective optimization of a natural aspirated three-cylinder spark ignition engine using modified non-dominated sorting genetic algorithm and multicriteria decision making. Journal of Renewable and Sustainable Energy, $2016, 8, .$	0.8	10
50	Numerical Simulation of the Thermal Performance of a Nanofluid-Filled Heat Pipe. Heat Transfer Engineering, 2016, 37, 220-231.	1.2	10
51	Optimal platform design using non-dominated sorting genetic algorithm II and technique for order of preference by similarity to ideal solution; application to automotive suspension system. Engineering Optimization, 2018, 50, 471-482.	1.5	10
52	Nonlinear Transient Heat Conduction Analysis for a Thick Hollow 2D-FGM Cylinder with Finite Length. Arabian Journal for Science and Engineering, 2014, 39, 9001-9014.	1.1	9
53	The Investigation of the Valve Spring Stiffness Influence on the Thermal Contact Conductance Between the Exhaust Valve and Its Seat. Heat Transfer Engineering, 2015, 36, 58-67.	1.2	9
54	Interactions between hybrid nanosized particles and convection melting inside an enclosure with partially active walls: 2D lattice Boltzmannâ€based numerical investigation. Heat Transfer, 2021, 50, 4908-4936.	1.7	9

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55	Sensitivity analysis and optimisation of suspension bushing using Taguchi method and grey relational analysis. Vehicle System Dynamics, 2019, 57, 855-873.	2.2	8
56	A New Method to Calculate Centrifugal Pump Performance Parameters for Industrial Oils. Journal of Applied Fluid Mechanics, 2015, 8, 673-681.	0.4	8
57	Vehicle dynamics control using an active third-axle system. Vehicle System Dynamics, 2014, 52, 1541-1562.	2.2	7
58	Multi-criteria decision making approach for selecting the best friction distribution in superplastic forming of a vehicle component. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 2016, 230, 146-157.	1.4	7
59	Optimal design and applicability of electric power steering system for automotive platform. Journal of Central South University, 2019, 26, 839-851.	1.2	7
60	Impact of Carbon Paper Anisotropy on Water Droplet Movement through the Electrodes of Proton-Exchange Membrane Fuel Cells. Energy & Energy & 10039-10049.	2.5	7
61	Sound transmission across orthotropic cylindrical shells using third-order shear deformation theory. Latin American Journal of Solids and Structures, 2014, 11, 2039-2072.	0.6	6
62	Investigation on the optimal simplified model of BIW structure using FEM. Latin American Journal of Solids and Structures, 2015, 12, 1972-1990.	0.6	6
63	Mathematical modeling of the complete thermodynamic cycle ofÂaÂnew Atkinson cycle gas engine. Applied Thermal Engineering, 2015, 91, 866-874.	3.0	6
64	Investigation on natural frequency of an optimized elliptical container using real-coded genetic algorithm. Latin American Journal of Solids and Structures, 2014, 11, 113-129.	0.6	5
65	An integrated vehicle dynamic control strategy for three-wheeled vehicles. Proceedings of the Institution of Mechanical Engineers, Part K: Journal of Multi-body Dynamics, 2015, 229, 225-244.	0.5	5
66	A family base optimization of a developed nonlinear vehicle suspension model using gray family design algorithm. Nonlinear Dynamics, 2017, 90, 649-669.	2.7	5
67	Parametric Modal Study and Optimization of the Floor Pan of a B-Segment Automotive Using a Hybrid Method of Taguchi and a Newly Developed MCDM Model. Latin American Journal of Solids and Structures, 2016, 13, 3039-3061.	0.6	4
68	Studying the Transient Thermal Contact Conductance Between the Exhaust Valve and Its Seat Using the Inverse Method. International Journal of Thermophysics, 2016, 37, 1.	1.0	4
69	Flame propagation model for a rotary Atkinson cycle SI engine. International Journal of Automotive Technology, 2018, 19, 9-25.	0.7	4
70	Experimental Study of the Heat Transfer Across Periodically Contacting Surfaces. Journal of Mechanics, 2009, 25, 307-311.	0.7	3
71	Taguchi optimization of micron sized lubricant oil droplet deposition on a hot plate. Journal of Mechanical Science and Technology, 2015, 29, 3277-3285.	0.7	2
72	Experimental study of redesigned draft tube of an Agnew microhydro turbine. Energy Conversion and Management, 2015, 105, 488-497.	4.4	2

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73	An Investigation of the Potential of Improving an R1234yf Parallel Flow Condenser Performance Using Modeling and Hybrid Procedure of the Modified NSGA-II and TOPSIS. Heat Transfer Engineering, 2018, 39, 1405-1422.	1.2	2
74	Optimum Design of 1st Gear Ratio for 4WD Vehicles Based on Vehicle Dynamic Behaviour. Advances in Mechanical Engineering, 2013, 5, 474872.	0.8	2
75	Numerical Study of Airflow around Vehicle A-pillar Region and Windnoise Generation Prediction. American Journal of Applied Sciences, 2009, 6, 276-284.	0.1	2
76	Investigation of engine oil micro-droplets deposition using a round impinging jet. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2016, 38, 721-734.	0.8	1
77	Steadyâ€state estimation of thermal contact conductance between sliding disk and stationary cylinder with similar/dissimilar materials under the isothermally heated boundary condition. Heat Transfer, 2021, 50, 8012-8034.	1.7	1
78	Effect of surface temperature on the impaction and deposition of micron-sized engine oil particles on a heated flat plate. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2019, 41, 1.	0.8	0