PaweÅ, OcÅ‚oÅ„

List of Publications by Year
in descending order

98 papers	1,720 citations	257101 24 h-index	329751 37 g-index
104 all docs	104 docs citations	104 times ranked	1313 citing authors

#	Article	IF	Citations
1	Municipal power plan optimisation accounting for environmental footprints. Energy Conversion and Management, 2022, 254, 115296.	4.4	9
2	Minimum environmental footprint charging of electric vehicles: A spatiotemporal scenario analysis. Energy Conversion and Management, 2022, 258, 115532.	4.4	8
3	Renewable energy systems for building heating, cooling and electricity production with thermal energy storage. Renewable and Sustainable Energy Reviews, 2022, 165, 112560.	8.2	70
4	Design optimization of a high-temperature fin-and-tube heat exchanger manifold â€“ A case study. Energy, 2021, 215, 119059.	4.5	24
5	Multiobjective optimization of underground power cable systems. Energy, 2021, 215, 119089.	4.5	18
6	Analysis of an application possibility of geopolymer materials as thermal backfill for underground power cable system. Clean Technologies and Environmental Policy, 2021, 23, 869-878.	2.1	9
7	Buoyancy-Induced Convection in Water From a Pair of Horizontal Heated Cylinders Enclosed in a Square Cooled Cavity. Heat Transfer Engineering, 2021, 42, 205-214.	1.2	0
8	Optimization of Underground Power Cable Systems. Lecture Notes in Energy, 2021, , 141-170.	0.2	0
9	Zero-Emission Building Heating System Using Thermal Energy Accumulation in the Ground. Lecture Notes in Energy, 2021, , 37-56.	0.2	0
10	Storage of Thermal Energy in the Ground. Lecture Notes in Energy, 2021, , 15-25.	0.2	0
11	Mathematical Modelling of the Resheat System. Lecture Notes in Energy, 2021, , 57-97.	0.2	0
12	Resheat System Optimization. Lecture Notes in Energy, 2021, , 99-106.	0.2	0
13	Solar-Assisted Heat Pumps. Lecture Notes in Energy, 2021, , 27-36.	0.2	0
14	Experimental and analytical evaluation of a gas-liquid energy storage (GLES) prototype. Energy, 2021, 224, 120061.	4.5	8
15	Location of the waste incineration plant with particular emphasis on the environmental criteria. Journal of Cleaner Production, 2021, 303, 126887.	4.6	11
16	Effect of mutual radiative exchange between the surfaces of a street canyon on the building thermal energy demand. Energy, 2021, 226, 120346.	4.5	9
17	A New Solar Assisted Heat Pump System with Underground Energy Storage: Modelling and Optimisation. Energies, 2021, 14, 5137.	1.6	8
18	Experimental investigation about the adoption of high reflectance materials on the envelope cladding on a scaled street canyon. Energy, 2021, 230, 120801.	4.5	9

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19	The effect of soil thermal conductivity and cable ampacity on the thermal performance and material costs of underground transmission line. Energy, 2021, 231, 120803.	4.5	13
20	Economic Analysis. Lecture Notes in Energy, 2021, , 131-136.	0.2	0
21	An adaptive multi-team perturbation-guiding Jaya algorithm for optimization and its applications. Engineering With Computers, 2020, 36, 391-419.	3.5	30
22	Design Optimization of Heat Exchangers with Advanced Optimization Techniques: A Review. Archives of Computational Methods in Engineering, 2020, 27, 517-548.	6.0	31
23	Thermal and economic analysis of preinsulated and twin-pipe heat network operation. Energy, 2020, 193, 116619.	4.5	9
24	Modeling and experimental validation and thermal performance assessment of a sun-tracked and cooled PVT system under low solar irradiation. Energy Conversion and Management, 2020, 222, 113289.	4.4	35
25	Comprehensive analysis of preparation strategies for phase change nanocomposites and nanofluids with brief overview of safety equipment. Journal of Cleaner Production, 2020, 274, 122963.	4.6	43
26	3D numerical simulation of condensation and condensate behaviors on textured structures using lattice Boltzmann method. International Journal of Heat and Mass Transfer, 2020, 160, 120198.	2.5	18
27	Experimental Validation of a Heat Transfer Model in Underground Power Cable Systems. Energies, 2020, 13, 1747.	1.6	18
28	Transient Natural Convection in a Thermally Insulated Annular Cylinder Exposed to a High Temperature from the Inner Radius. Energies, 2020, 13, 1291.	1.6	2
29	Multi-objective Design Optimization of Shell-and-Tube Heat Exchanger Using Multi-objective SAMP-Jaya Algorithm. Advances in Intelligent Systems and Computing, 2020, , 831-838.	0.5	2
30	Selected Papers from the XI International Conference on Computational Heat, Mass and Momentum Transfer (ICCHMT 2018). Energies, 2019, 12, 2259.	1.6	0
31	CFD model and experimental verification of water turbine integrated with electrical generator. Energy, 2019, 185, 875-883.	4.5	20
32	Numerical determination of temperature distribution in heating network. Energy, 2019, 183, 880-891.	4.5	7
33	Towards Efficient and Clean Process Integration: Utilisation of Renewable Resources and Energy-Saving Technologies. Energies, 2019, 12, 4092.	1.6	35
34	Buoyancy assist adaptive charging and discharging thermal storage tank. Energy Storage, 2019, 1, e287.	2.3	3
35	Investigation of flow non-uniformities in the cross-flow heat exchanger with elliptical tubes. E3S Web of Conferences, 2019, 108, 01009.	0.2	4
36	Natural convection in a differentially heated enclosure filled with low Prandtl number fluids with modified lattice Boltzmann method. International Journal of Heat and Mass Transfer, 2019, 143, 118562.	2.5	17

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37	Low impact energy saving strategies for individual heating systems in a modern residential building: A case study in Rome. Journal of Cleaner Production, 2019, 214, 791-802.	4.6	30
38	Model Predictive Control and energy optimisation in residential building with electric underfloor heating system. Energy, 2019, 182, 1028-1044.	4.5	22
39	Sensitivity analysis of hybrid combined heat and power plant on fuel and CO2 emission allowances price change. Energy Conversion and Management, 2019, 196, 127-148.	4.4	7
40	Natural convection in differentially heated enclosures subjected to variable temperature boundaries. International Journal of Numerical Methods for Heat and Fluid Flow, 2019, 29, 4130-4141.	1.6	7
41	Numerical analysis and parametric optimization on flow and heat transfer of a microchannel with longitudinal vortex generators. International Journal of Thermal Sciences, 2019, 141, 211-221.	2.6	51
42	Trombe Wall Utilization for Cold and Hot Climate Conditions. Energies, 2019, 12, 285.	1.6	24
43	Mathematical model of a supercritical power boiler for simulating rapid changes in boiler thermal loading. Energy, 2019, 175, 580-592.	4.5	41
44	Numerical investigation of semiempirical relations representing the local Nusselt number magnitude of a pin fin heat sink. Heat Transfer - Asian Research, 2019, 48, 1857-1888.	2.8	3
45	Computational investigation of a lifted hydrogen flame with LES and FGM. Energy, 2019, 173, 1172-1181.	4.5	13
46	Energy analysis of a thermal system composed by a heat pump coupled with a PVT solar collector. Energy, 2019, 174, 91-96.	4.5	38
47	The Wind Test on Heat Loss from Three Coil Cavity Receiver for a Parabolic Dish Collector. E3S Web of Conferences, 2019, 128, 01006.	0.2	3
48	A <italic>Posteriori</italic> Multiobjective Self-Adaptive Multipopulation Jaya Algorithm for Optimization of Thermal Devices and Cycles. IEEE Access, 2019, 7, 4113-4134.	2.6	17
49	Influence of the geometrical parameters of urban canyons on the convective heat transfer coefficient. Thermal Science, 2019, 23, 1211-1223.	0.5	3
50	Verification of applicability of the two-equation turbulence models for temperature distribution in transitional flow in an elliptical tube. Thermal Science, 2019, 23, 1113-1121.	0.5	1
51	Investigation of forced convective heat transfer from a block located staggered cavity with parallel and anti-parallel wall motion. Thermal Science, 2019, 23, 1281-1288.	0.5	0
52	Heat loss analysis of three coil cylindrical solar cavity receiver of parabolic dish for process heat. Thermal Science, 2019, 23, 1301-1310.	0.5	1
53	Numerical investigation of heat transfer from flow over square cylinder placed in a confined channel using Cu-water nanofluid. Thermal Science, 2019, 23, 1367-1380.	0.5	4
54	Heat flux and temperature determination in a cylindrical element with the use of Finite Volume Finite Element Method. International Journal of Thermal Sciences, 2018, 127, 142-157.	2.6	27

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55	Novel online simulation-ready models of conjugate heat transfer in combustion chamber waterwall tubes of supercritical power boilers. Energy, 2018, 148, 809-823.	4.5	20
56	Thermal performance optimization of the underground power cable system by using a modified Jaya algorithm. International Journal of Thermal Sciences, 2018, 123, 162-180.	2.6	57
57	Single- and Multi-Objective Design Optimization of Plate-Fin Heat Exchangers Using Jaya Algorithm. Heat Transfer Engineering, 2018, 39, 1201-1216.	1.2	19
58	Numerical study of air convection in a rectangular enclosure with two isothermal blocks and oscillating bottom wall temperature. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 103-117.	1.6	3
59	Selected Papers from the 9th International Conference on Computational Heat and Mass Transfer (ICCHMT2016). Heat Transfer Engineering, 2018, 39, 1101-1102.	1.2	0
60	Study of the Effect of Fin-and-Tube Heat Exchanger Fouling on its Structural Performance. Heat Transfer Engineering, 2018, 39, 1139-1155.	1.2	10
61	Energetical Analysis of Two Different Configurations of a Liquid-Gas Compressed Energy Storage. Energies, 2018, 11, 3405.	1.6	5
62	Simulation of water turbine integrated with electrical generator. MATEC Web of Conferences, 2018, 240, 05002.	0.1	3
63	Effect of baffle shape in heat transfer for jet impingement on a solid block. MATEC Web of Conferences, 2018, 240, 01025.	0.1	0
64	Tilt optimization of a double-glazed air solar collector prototype. MATEC Web of Conferences, 2018, 240, 04006.	0.1	4
65	Buoyancy-induced convection of water-based nanofluids from an enclosed heated cylinder. International Journal of Numerical Methods for Heat and Fluid Flow, 2018, 28, 2734-2755.	1.6	1
66	Computational and experimental investigation of the aerodynamics and aeroacoustics of a small wind turbine with quasi-3D optimization. Energy Conversion and Management, 2018, 177, 143-149.	4.4	16
67	Economic analysis of heat and electricity production in combined heat and power plant equipped with steam and water boilers and natural gas engines. Energy Conversion and Management, 2018, 176, 11-29.	4.4	25
68	Economic analysis of heat production in existing medium size combined heat and power plant, with respect to the CO2 allowances purchasing cost. Energy Conversion and Management, 2018, 171, 110-125.	4.4	6
69	NUMERICAL INVESTIGATION OF CONJUGATE HEAT TRANSFER FROM LAMINAR WALL JET FLOW OVER A SHALLOW CAVITY. Heat Transfer Research, 2018, 49, 1151-1170.	0.9	3
70	Experimental stand for investigation of fluid flow in heat exchangers with cross-flow arrangement. E3S Web of Conferences, 2017, 13, 02001.	0.2	5
71	Effects of radiative exchange in an urban canyon on building surfacesâ€™ loads and temperatures. Energy and Buildings, 2017, 149, 260-271.	3.1	22
72	Multi-objective optimization of thermo-acoustic devices using teaching-learning-based optimization algorithm. Science and Technology for the Built Environment, 2017, 23, 1244-1252.	0.8	13

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73	Thermal analysis of underground power cable system. Journal of Thermal Science, 2017, 26, 465-471.	0.9	46
74	The effect of soil and cable backfill thermal conductivity on the temperature distribution in underground cable system. E3S Web of Conferences, 2017, 13, 02004.	0.2	5
75	Numerical investigation of flow and heat transfer from a block placed in a cavity subject to different inlet conditions. Progress in Computational Fluid Dynamics, 2017, 17, 385.	0.1	0
76	Evaluation and selection of energy technologies using an integrated graph theory and analytic hierarchy process methods. Decision Science Letters, 2016, , 327-348.	0.5	6
77	Dimensional optimization of a micro-channel heat sink using Jaya algorithm. Applied Thermal Engineering, 2016, 103, 572-582.	3.0	150
78	Experimental and Numerical Investigation of Flow Distribution within the Heat Exchanger with Elliptical Tubes. Procedia Engineering, 2016, 157, 428-435.	1.2	12
79	The performance analysis of a new thermal backfill material for underground power cable system. Applied Thermal Engineering, 2016, 108, 233-250.	3.0	57
80	Optimal design of Stirling heat engine using an advanced optimization algorithm. Sadhana - Academy Proceedings in Engineering Sciences, 2016, 41, 1321-1331.	0.8	10
81	Fem-Based Thermal Analysis of Underground Power Cables Located in Backfills Made of Different Materials. Strength of Materials, 2015, 47, 770-780.	0.2	23
82	Numerical study on the effect of inner tube fouling on the thermal performance of high-temperature fin-and-tube heat exchanger. Progress in Computational Fluid Dynamics, 2015, 15, 290.	0.1	40
83	Computer-Aided Determination of the Air-Side Heat Transfer Coefficient and Thermal Contact Resistance for a Fin-and-Tube Heat Exchanger. , 2015, , .		2
84	Optimizing of the underground power cable bedding usingÂmomentum-type particle swarm optimization method. Energy, 2015, 92, 230-239.	4.5	30
85	A novel 1D/2D model for simulating conjugate heat transfer applied to flow boiling in tubes with external fins. Heat and Mass Transfer, 2015, 51, 553-566.	1.2	15
86	Numerical simulation of heat dissipation processes in underground power cable system situated in thermal backfill and buried in a multilayered soil. Energy Conversion and Management, 2015, 95, 352-370.	4.4	93
87	Simulation of fluid heating in combustion chamber waterwalls of boilers for supercritical steam parameters. Energy, 2015, 92, 117-127.	4.5	43
88	Numerical study of the effect of fouling on local heat transfer conditions in a high-temperature fin-and-tube heat exchanger. Energy, 2015, 92, 100-116.	4.5	41
89	Contribution to encyclopedia of thermal stresses. Journal of Thermal Science, 2015, 24, 215-220.	0.9	1
90	Monitoring of the Stress State in the Boiler Drum Using Finite Element Method. Advanced Materials Research, 2014, 875-877, 1176-1182.	0.3	4

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91	Multi-Function Device for Creep Testing at Elevated Temperature. Advanced Materials Research, 2014, 875-877, 462-466.	0.3	0
92	Determination of heat transfer formulas for gas flow in fin-and-tube heat exchanger with oval tubes using CFD simulations. Chemical Engineering and Processing: Process Intensification, 2014, 83, 1-11.	1.8	59
93	Simplified numerical study of evaporation processes inside vertical tubes. Journal of Thermal Science, 2014, 23, 177-186.	0.9	12
94	Thermal contact resistance in plate fin-and-tube heat exchangers, determined by experimental data and CFD simulations. International Journal of Thermal Sciences, 2014, 84, 309-322.	2.6	60
95	Comparative study of conjugate gradient algorithms performance on the example of steady-state axisymmetric heat transfer problem. Archives of Thermodynamics, 2013, 34, 15-44.	1.0	8
96	Numerical simulation of water evaporation inside vertical circular tubes. , 2013, , .		4
97	Investigation of the flow conditions in a high-performance heat exchanger. Archives of Thermodynamics, 2010, 31, 37-53.	1.0	15
98	The analysis of gradient algorithm effectiveness - two dimensional heat transfer problem. Archives of Thermodynamics, 2010, 31, 37-50.	1.0	7