Lingen Chen

List of Publications by Year
in descending order

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568 papers	18,610 citations	20817 60 h-index	49909 87 g-index
569 all docs	569 docs citations	569 times ranked	3861 citing authors

#	Article	IF	Citations
1	Finite Time Thermodynamic Optimization or Entropy Generation Minimization of Energy Systems. Journal of Non-Equilibrium Thermodynamics, 1999, 24, .	4.2	609
2	Thermoelectric cooler and thermoelectric generator devices: A review of present and potential applications, modeling and materials. Energy, 2019, 186, 115849.	8.8	344
3	Progress in study on constructal theory and its applications. Science China Technological Sciences, 2012, 55, 802-820.	4.0	221
4	A numerical model and comparative investigation of a thermoelectric generator with multi-irreversibilities. Energy, 2011, 36, 3513-3522.	8.8	146
5	Performance optimization of a two-stage semiconductor thermoelectric-generator. Applied Energy, 2005, 82, 300-312.	10.1	140
6	Progress in Finite Time Thermodynamic Studies for Internal Combustion Engine Cycles. Entropy, 2016, 18, 139.	2.2	136
7	Comprehensive exergy analysis of a ground-source heat pump system for both building heating and cooling modes. Applied Energy, 2009, 86, 2560-2565.	10.1	128
8	Thermodynamic analyses and optimization for thermoelectric devices: The state of the arts. Science China Technological Sciences, 2016, 59, 442-455.	4.0	128
9	A review on the utilized machine learning approaches for modeling the dynamic viscosity of nanofluids. Renewable and Sustainable Energy Reviews, 2019, 114, 109345.	16.4	127
10	Solar and ground source heat-pump system. Applied Energy, 2004, 78, 231-245.	10.1	125
11	Power, efficiency, entropy-generation rate and ecological optimization for a class of generalized irreversible universal heat-engine cycles. Applied Energy, 2007, 84, 512-525.	10.1	116
12	Effect of heat transfer law on the performance of a generalized irreversible Carnot engine. Journal Physics D: Applied Physics, 1999, 32, 99-105.	2.8	112
13	A review on the approaches applied for cooling fuel cells. International Journal of Heat and Mass Transfer, 2019, 139, 517-525.	4.8	111
14	Effect of heat transfer on the performance of thermoelectric generators. International Journal of Thermal Sciences, 2002, 41, 95-99.	4.9	108
15	Progress in entransy theory and its applications. Science Bulletin, 2012, 57, 4404-4426.	1.7	107
16	Generalized Thermodynamic Optimization for Iron and Steel Production Processes: Theoretical Exploration and Application Cases. Entropy, 2016, 18, 353.	2.2	106
17	Finite-time thermodynamic modelling and analysis of an irreversible Otto-cycle. Applied Energy, 2008, 85, 618-624.	10.1	103
18	Smart modeling by using artificial intelligent techniques on thermal performance of flatâ€plate solar collector using nanofluid. Energy Science and Engineering, 2019, 7, 1649-1658.	4.0	101

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19	Progress of constructal theory in China over the past decade. International Journal of Heat and Mass Transfer, 2019, 130, 393-419.	4.8	101
20	Thermodynamic optimization opportunities for the recovery and utilization of residual energy and heat in China's iron and steel industry: A case study. Applied Thermal Engineering, 2015, 86, 151-160.	6.0	100
21	Ecological optimization for generalized irreversible Carnot engines. Applied Energy, 2004, 77, 327-338.	10.1	99
22	Thermodynamic simulation of performance of an Otto cycle with heat transfer and variable specific heats of working fluid. International Journal of Thermal Sciences, 2005, 44, 506-511.	4.9	98
23	Theoretical analysis of the performance of a regenerative closed Brayton cycle with internal irreversibilities. Energy Conversion and Management, 1997, 38, 871-877.	9.2	94
24	Heat transfer effects on the net work output and efficiency characteristics for an air-standard Otto cycle. Energy Conversion and Management, 1998, 39, 643-648.	9.2	94
25	The area-point constructal optimization for discrete variable cross-section conducting path. Applied Energy, 2009, 86, 1111-1118.	10.1	91
26	Efficiency of an Atkinson engine at maximum power density. Energy Conversion and Management, 1998, 39, 337-341.	9.2	90
27	Optimization for entransy dissipation minimization in heat exchanger. Science Bulletin, 2009, 54, 3587-3595.	9.0	87
28	Neural-network based analysis and prediction of a compressorâ€™s characteristic performance map. Applied Energy, 2007, 84, 48-55.	10.1	86
29	Optimum performance of irreversible stirling engine with imperfect regeneration. Energy Conversion and Management, 1998, 39, 727-732.	9.2	84
30	Thermoelectric generator for industrial gas phase waste heat recovery. Energy, 2017, 135, 83-90.	8.8	84
31	Performance of a regenerative Brayton heat engine. Energy, 1996, 21, 71-76.	8.8	83
32	Constructal entransy dissipation rate minimization of a disc. International Journal of Heat and Mass Transfer, 2011, 54, 210-216.	4.8	82
33	Thermoelectric power generation driven by blast furnace slag flushing water. Energy, 2014, 66, 965-972.	8.8	82
34	Constructal thermodynamic optimization for ocean thermal energy conversion system with dual-pressure organic Rankine cycle. Energy Conversion and Management, 2020, 210, 112727.	9.2	82
35	Constructal entransy dissipation minimization for â€˜volume-pointâ€™ heat conduction. Journal Physics D: Applied Physics, 2008, 41, 195506.	2.8	81
36	Effects of heat transfer, friction and variable specific heats of working fluid on performance of an irreversible dual cycle. Energy Conversion and Management, 2006, 47, 3224-3234.	9.2	78

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37	Performance optimization of a class of combined thermoelectric heating devices. Science China Technological Sciences, 2020, 63, 2640-2648.	4.0	77
38	Multi-objective optimization for helium-heated reverse water gas shift reactor by using NSGA-II. International Journal of Heat and Mass Transfer, 2020, 148, 119025.	4.8	76
39	Ecological optimization for generalized irreversible Carnot refrigerators. Journal Physics D: Applied Physics, 2005, 38, 113-118.	2.8	75
40	On the â€œarea to pointâ€•flow problem based on constructal theory. Energy Conversion and Management, 2007, 48, 101-105.	9.2	73
41	Finite-time thermodynamic performance of a Dual cycle. International Journal of Energy Research, 1999, 23, 765-772.	4.5	72
42	Finite-time thermodynamic modeling and analysis for an irreversible Dual cycle. Mathematical and Computer Modelling, 2009, 50, 101-108.	2.0	71
43	Multi-objective optimization for membrane reactor for steam methane reforming heated by molten salt. Science China Technological Sciences, 2022, 65, 1396-1414.	4.0	70
44	Constructal thermodynamic optimization for dual-pressure organic Rankine cycle in waste heat utilization system. Energy Conversion and Management, 2021, 227, 113585.	9.2	69
45	Exergy loss minimization for a blast furnace with comparative analyses for energy flows and exergy flows. Energy, 2015, 93, 10-19.	8.8	68
46	Reciprocating heat-engine cycles. Applied Energy, 2005, 81, 397-408.	10.1	67
47	Optimum allocation of heat transfer surface area for cooling load and COP optimization of a thermoelectric refrigerator. Energy Conversion and Management, 2003, 44, 3197-3206.	9.2	66
48	Generalized model and optimum performance of an irreversible quantum Brayton engine with spin systems. Physical Review E, 2006, 73, 016103.	2.1	66
49	Exergy-based ecological optimization for a generalized irreversible Carnot heat-pump. Applied Energy, 2007, 84, 78-88.	10.1	66
50	Optimization of constructal volume-point conduction with variable cross section conducting path. Energy Conversion and Management, 2007, 48, 106-111.	9.2	66
51	Modeling and performance analysis of a two-stage thermoelectric energy harvesting system from blast furnace slag water waste heat. Energy, 2014, 77, 562-569.	8.8	66
52	Cooling load versus COP characteristics for an irreversible air refrigeration cycle. Energy Conversion and Management, 1998, 39, 117-125.	9.2	65
53	Effects of heat transfer and friction on the performance of an irreversible air-standard miller cycle. International Communications in Heat and Mass Transfer, 2005, 32, 1045-1056.	5.6	65
54	Performance optimization for a two-stage thermoelectric heat-pump with internal and external irreversibilities. Applied Energy, 2008, 85, 641-649.	10.1	65

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55	Total entropy generation rate minimization configuration of a membrane reactor of methanol synthesis via carbon dioxide hydrogenation. Science China Technological Sciences, 2022, 65, 657-678.	4.0	65
56	Heat-transfer effects on net work and/or power as functions of efficiency for air-standard diesel cycles. Energy, 1996, 21, 1201-1205.	8.8	64
57	Constructal optimization on T-shaped cavity based on entransy dissipation minimization. Science Bulletin, 2009, 54, 4418-4427.	9.0	64
58	Optimal performance of an irreversible dual-cycle. Applied Energy, 2004, 79, 3-14.	10.1	63
59	Progress in optimization of mass transfer processes based on mass entransy dissipation extremum principle. Science China Technological Sciences, 2014, 57, 2305-2327.	4.0	63
60	Ground heat exchanger temperature distribution analysis and experimental verification. Applied Thermal Engineering, 2002, 22, 183-189.	6.0	62
61	Finite-time exergoeconomic performance bound for a quantum Stirling engine. International Journal of Engineering Science, 2000, 38, 239-247.	5.0	61
62	Multi-disciplinary, multi-objective and multi-scale constructal optimizations for heat and mass transfer processes performed in Naval University of Engineering, a review. International Journal of Heat and Mass Transfer, 2017, 115, 86-98.	4.8	61
63	Power and efficiency optimizations of an irreversible regenerative organic Rankine cycle. Energy Conversion and Management, 2020, 220, 113079.	9.2	61
64	Optimization of steady flow heat pumps. Energy Conversion and Management, 1998, 39, 445-453.	9.2	60
65	Constructal optimization for geometry of cavity by taking entransy dissipation minimization as objective. Science in China Series D: Earth Sciences, 2009, 52, 3504-3513.	0.9	59
66	Geometry optimization of T-shaped cavities according to constructal theory. Mathematical and Computer Modelling, 2010, 52, 1538-1546.	2.0	59
67	Power optimization of open-cycle regenerator gas-turbine power-plants. Applied Energy, 2004, 78, 199-218.	10.1	58
68	Entransy dissipation minimization for liquid-solid phase change processes. Science China Technological Sciences, 2010, 53, 960-968.	4.0	58
69	Entropy generation minimization for CO2 hydrogenation to light olefins. Energy, 2018, 147, 187-196.	8.8	58
70	A generalized model of a real refrigerator and its performance. Applied Thermal Engineering, 1997, 17, 401-412.	6.0	57
71	The universal power and efficiency characteristics for irreversible reciprocating heat engine cycles. European Journal of Physics, 2003, 24, 359-366.	0.6	57
72	Performance of an Atkinson cycle with heat transfer, friction and variable specific-heats of the working fluid. Applied Energy, 2006, 83, 1210-1221.	10.1	57

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73	â€œVolume-Pointâ€•heat conduction constructal optimization with entransy dissipation minimization objective based on rectangular element. Science in China Series D: Earth Sciences, 2008, 51, 1283-1295.	0.9	57
74	Performance optimization for two-stage thermoelectric refrigerator system driven by two-stage thermoelectric generator. Cryogenics, 2009, 49, 57-65.	1.7	57
75	Constructal entropy generation rate minimization for cylindrical pin-fin heat sinks. International Journal of Thermal Sciences, 2017, 111, 168-174.	4.9	57
76	Constructal design for supercharged boiler superheater. Energy, 2020, 191, 116484.	8.8	57
77	Constructal entransy dissipation rate minimization for â€œdisc-to-pointâ€•heat conduction. Science Bulletin, 2011, 56, 102-112.	1.7	56
78	Effect of heat transfer on the performance of thermoelectric generator-driven thermoelectric refrigerator system. Cryogenics, 2012, 52, 58-65.	1.7	56
79	Constructal optimization for â€œdisc-pointâ€•heat conduction at micro and nanoscales. International Journal of Heat and Mass Transfer, 2013, 67, 704-711.	4.8	56
80	Constructal optimization of a sinter cooling process based on exergy output maximization. Applied Thermal Engineering, 2016, 96, 161-166.	6.0	56
81	Optimum distribution of heat exchanger inventory for power density optimization of an endoreversible closed Brayton cycle. Journal Physics D: Applied Physics, 2001, 34, 422-427.	2.8	55
82	Constructal design progress for eight types of heat sinks. Science China Technological Sciences, 2020, 63, 879-911.	4.0	55
83	Performance optimization of thermionic refrigerators based on van der Waals heterostructures. Science China Technological Sciences, 2021, 64, 1007-1016.	4.0	55
84	Constructal design of a shell-and-tube heat exchanger for organic fluid evaporation process. International Journal of Heat and Mass Transfer, 2019, 131, 750-756.	4.8	54
85	Modeling of heat transfer performance of carbon nanotube nanofluid in a tube with fixed wall temperature by using ANNâ€“GA. European Physical Journal Plus, 2020, 135, 1.	2.6	54
86	The effects of variable specific heats of working fluid on the performance of an irreversible Otto cycle. International Journal of Exergy, 2005, 2, 274.	0.4	53
87	Performance of an irreversible quantum Carnot engine with spin 1â•2. Journal of Chemical Physics, 2006, 124, 214702.	3.0	53
88	Constructal optimization of twice Y-shaped assemblies of fins by taking maximum thermal resistance minimization as objective. Science China Technological Sciences, 2010, 53, 2756-2764.	4.0	53
89	Optimal paths for minimizing entransy dissipation during heat transfer processes with generalized radiative heat transfer law. Applied Mathematical Modelling, 2010, 34, 2242-2255.	4.2	53
90	Four-Objective Optimizations for an Improved Irreversible Closed Modified Simple Brayton Cycle. Entropy, 2021, 23, 282.	2.2	53

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91	Performance comparison of an endoreversible closed variable temperature heat reservoir Brayton cycle under maximum power density and maximum power conditions. Energy Conversion and Management, 2002, 43, 33-43.	9.2	52
92	Optimal allocation of heat-exchanger area for refrigeration and air-conditioning plants. Applied Energy, 2004, 77, 339-354.	10.1	52
93	Power and efficiency optimization of open Maisotsenko-Brayton cycle and performance comparison with traditional open regenerated Brayton cycle. Energy Conversion and Management, 2020, 217, 113001.	9.2	52
94	Performance Optimization for a Multielement Thermoelectric Refrigerator with Linear Phenomenological Heat Transfer Law. Journal of Non-Equilibrium Thermodynamics, 2021, 46, 149-162.	4.2	52
95	Power Density Analysis and Multi-Objective Optimization for an Irreversible Dual Cycle. Journal of Non-Equilibrium Thermodynamics, 2022, 47, 289-309.	4.2	52
96	Optimization of the specific rate of refrigeration in combined refrigeration cycles. Energy, 1995, 20, 1049-1053.	8.8	50
97	Friction effect on the characteristic performance of Diesel engines. International Journal of Energy Research, 2002, 26, 965-971.	4.5	50
98	Optimal expansion of a heated working fluid with phenomenological heat transfer. Energy Conversion and Management, 1998, 39, 149-156.	9.2	49
99	Performance of chemical engines with a mass leak. Journal Physics D: Applied Physics, 1998, 31, 1595-1600.	2.8	49
100	Power optimization of an irreversible closed intercooled regenerated brayton cycle coupled to variable-temperature heat reservoirs. Applied Thermal Engineering, 2005, 25, 1097-1113.	6.0	49
101	Constructal optimization for â€œdisc-to-pointâ€•heat conduction without the premise of optimized last-order construct. International Journal of Thermal Sciences, 2011, 50, 1031-1036.	4.9	49
102	Power density analysis and multi-objective optimization for a modified endoreversible simple closed Brayton cycle with one isothermal heating process. Energy Reports, 2020, 6, 1648-1657.	5.1	49
103	Performance characteristic of isothermal chemical engines. Energy Conversion and Management, 1997, 38, 1841-1846.	9.2	48
104	Influences of additives on the gas hydrate cool storage process in a new gas hydrate cool storage system. Energy Conversion and Management, 2006, 47, 2974-2982.	9.2	48
105	â€œVolume-pointâ€•heat conduction constructal optimization based on entransy dissipation rate minimization with three-dimensional cylindrical element and rectangular and triangular elements on microscale and nanoscale. Science China Technological Sciences, 2012, 55, 779-794.	4.0	48
106	Constructal design of a blast furnace iron-making process based on multi-objective optimization. Energy, 2016, 109, 137-151.	8.8	48
107	Four-Objective Optimization of Irreversible Atkinson Cycle Based on NSGA-II. Entropy, 2020, 22, 1150.	2.2	48
108	Exergy-based ecological optimization of linear phenomenological heat-transfer law irreversible Carnot-engines. Applied Energy, 2006, 83, 573-582.	10.1	47

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109	Power output, thermal efficiency and exergy-based ecological performance optimizations of an irreversible KCS-34 coupled to variable temperature heat reservoirs. Energy Conversion and Management, 2020, 205, 112424.	9.2	47
110	Modeling of Irreversible Two-Stage Combined Thermal Brownian Refrigerators and Their Optimal Performance. Journal of Non-Equilibrium Thermodynamics, 2021, 46, 175-189.	4.2	47
111	Multi-objective optimal configurations of a membrane reactor for steam methane reforming. Energy Reports, 2022, 8, 527-538.	5.1	47
112	Thermoelectric-generator with linear phenomenological heat-transfer law. Applied Energy, 2005, 81, 358-364.	10.1	46
113	Optimal paths for minimizing entropy generation during heat transfer processes with a generalized heat transfer law. Journal of Applied Physics, 2009, 105, .	2.5	46
114	Power and efficiency optimization for combined Brayton and inverse Brayton cycles. Applied Thermal Engineering, 2009, 29, 2885-2894.	6.0	46
115	Theoretical and experimental studies of heat transfer in a double-pipe heat exchanger equipped with twisted tape and nanofluid. European Physical Journal Plus, 2020, 135, 1.	2.6	46
116	Performance analysis for a real closed regenerated Brayton cycle via methods of finite-time thermodynamics. International Journal of Ambient Energy, 1999, 20, 95-104.	2.5	45
117	Generalized irreversible heat-engine experiencing a complex heat-transfer law. Applied Energy, 2008, 85, 52-60.	10.1	45
118	Constructal entransy dissipation minimisation for 'volume-point' heat conduction without the premise of optimised last-order construct. International Journal of Exergy, 2010, 7, 627.	0.4	45
119	Thermodynamic analyses of different scenarios in a CCHP system with micro turbine â€“ Absorption chiller, and heat exchanger. Energy Conversion and Management, 2019, 198, 111919.	9.2	45
120	Effect ZOF heat transfer law on finite-time exergoeconomic performance of carnot heat pump. Energy Conversion and Management, 1998, 39, 579-588.	9.2	44
121	Performance analysis for an irreversible variable temperature heat reservoir closed intercooled regenerated Brayton cycle. Energy Conversion and Management, 2003, 44, 2713-2732.	9.2	44
122	Quantum degeneracy effect on performance of irreversible Otto cycle with ideal Bose gas. Energy Conversion and Management, 2006, 47, 3008-3018.	9.2	44
123	Constructal design for â€œ+â€•shaped high conductivity pathways over a square body. International Journal of Heat and Mass Transfer, 2015, 91, 162-169.	4.8	44
124	Thermodynamic performance optimization for an irreversible vacuum thermionic generator. European Physical Journal Plus, 2017, 132, 1.	2.6	44
125	Performance optimization of three-terminal energy selective electron generators. Science China Technological Sciences, 2021, 64, 1641-1652.	4.0	44
126	Pumping power minimization of an evaporator in ocean thermal energy conversion system based on constructal theory. Energy, 2019, 181, 974-984.	8.8	43

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127	Entropy generation rate minimization for steam methane reforming reactor heated by molten salt. Energy Reports, 2020, 6, 685-697.	5.1	43
128	Optimal configuration and performance for a generalized Carnot cycle assuming the heat-transfer law Qâˆ(Î”T)m. Applied Energy, 2004, 78, 305-313.	10.1	42
129	Heat-conduction optimization based on constructal theory. Applied Energy, 2007, 84, 39-47.	10.1	42
130	Ecological optimization of an irreversible harmonic oscillators Carnot heat engine. Science in China Series G: Physics, Mechanics and Astronomy, 2009, 52, 1976-1988.	0.2	42
131	Constructal optimization of discrete and continuous-variable cross-section conducting path based on entransy dissipation rate minimization. Science China Technological Sciences, 2010, 53, 1666-1677.	4.0	42
132	Thermodynamic analysis and optimization of an air Brayton cycle for recovering waste heat of blast furnace slag. Applied Thermal Engineering, 2015, 90, 742-748.	6.0	42
133	Comparative performance analyses of molten carbonate fuel cell-alkali metal thermal to electric converter and molten carbonate fuel cell-thermo-electric generator hybrid systems. Energy Reports, 2020, 6, 10-16.	5.1	42
134	Ecological optimization of an irreversible Diesel cycle. European Physical Journal Plus, 2021, 136, 1.	2.6	42
135	Optimal performance of an endoreversible Carnot heat pump. Energy Conversion and Management, 1997, 38, 1439-1443.	9.2	41
136	Thermal efficiency maximization for H- and X-shaped heat exchangers based on constructal theory. Applied Thermal Engineering, 2015, 91, 456-462.	6.0	41
137	Optimal power and efficiency of quantum Stirling heat engines. European Physical Journal Plus, 2017, 132, 1.	2.6	41
138	Performance optimization of an open simple-cycle gas turbine combined cooling, heating and power plant driven by basic oxygen furnace gas in China's steelmaking plants. Energy, 2020, 203, 117791.	8.8	41
139	Irreversible four-temperature-level absorption refrigerator. Solar Energy, 2006, 80, 347-360.	6.1	40
140	Performance Optimization of a Condenser in Ocean Thermal Energy Conversion (OTEC) System Based on Constructal Theory and a Multi-Objective Genetic Algorithm. Entropy, 2020, 22, 641.	2.2	40
141	Exergy-Based Ecological Optimization of an Irreversible Quantum Carnot Heat Pump with Spin-1/2 Systems. Journal of Non-Equilibrium Thermodynamics, 2021, 46, 61-76.	4.2	40
142	Effect of the heat transfer law on the finite-time, exergoeconomic performance of heat engines. Energy, 1996, 21, 1127-1134.	8.8	39
143	Performance of heat-transfer irreversible regenerated Brayton refrigerators. Journal Physics D: Applied Physics, 2001, 34, 830-837.	2.8	39
144	The effect of friction on the performance of an air standard dual cycle. Exergy an International Journal, 2002, 2, 340-344.	0.7	39

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145	Ecological Optimization Performance of An Irreversible Quantum Otto Cycle Working with an Ideal Fermi Gas. Open Systems and Information Dynamics, 2006, 13, 55-66.	1.2	39
146	Constructal entropy generation minimization for heat and mass transfer in a solidâ€“gas reactor based on triangular element. Journal Physics D: Applied Physics, 2007, 40, 3545-3550.	2.8	39
147	Constructal multidisciplinary optimization of electromagnet based on entransy dissipation minimization. Science in China Series D: Earth Sciences, 2009, 52, 2981-2989.	0.9	39
148	Constructal entransy dissipation rate and flow-resistance minimizations for cooling channels. Science China Technological Sciences, 2010, 53, 2458-2468.	4.0	39
149	Entropy generation minimization for charging and discharging processes in a gas-hydrate cool storage system. Applied Energy, 2010, 87, 1149-1157.	10.1	39
150	Generalized constructal optimization for solidification heat transfer process of slab continuous casting based on heat loss rate. Energy, 2014, 66, 991-998.	8.8	39
151	â€œDisc-pointâ€•heat and mass transfer constructal optimization for solidâ€“gas reactors based on entropy generation minimization. Energy, 2015, 83, 431-437.	8.8	39
152	Constructal optimization for a single tubular solid oxide fuel cell. Journal of Power Sources, 2015, 286, 406-413.	7.8	39
153	Influence of internal heat leak on the power versus efficiency characteristics of heat engines. Energy Conversion and Management, 1997, 38, 1501-1507.	9.2	38
154	Improvement of tree-like network constructal method for heat conduction optimization. Science in China Series D: Earth Sciences, 2006, 49, 332-341.	0.9	38
155	Constructal entransy dissipation rate minimization for variable cross-section insulation layer of the steel rolling reheating furnace wall. International Communications in Heat and Mass Transfer, 2014, 52, 26-32.	5.6	38
156	Constructal entransy dissipation rate minimization for triangular heat trees at micro and nanoscales. International Journal of Heat and Mass Transfer, 2015, 84, 848-855.	4.8	38
157	Exergy analysis and optimization of coking process. Energy, 2017, 139, 694-705.	8.8	38
158	Entropy Generation Minimization for Reverse Water Gas Shift (RWGS) Reactors. Entropy, 2018, 20, 415.	2.2	38
159	Power, Efficiency, Power Density and Ecological Function Optimization for an Irreversible Modified Closed Variable-Temperature Reservoir Regenerative Brayton Cycle with One Isothermal Heating Process. Energies, 2020, 13, 5133.	3.1	38
160	Multi-objective optimization of Stirling heat engine with various heat and mechanical losses. Energy, 2022, 256, 124699.	8.8	38
161	Heat transfer effect on the specific heating load of heat pumps. Applied Thermal Engineering, 1997, 17, 103-110.	6.0	37
162	Power optimization of an endoreversible closed intercooled regenerated Brayton cycle. International Journal of Thermal Sciences, 2005, 44, 89-94.	4.9	37

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163	Performance analysis for two-stage TEC system driven by two-stage TEG obeying Newtonâ€™s heat transfer law. Mathematical and Computer Modelling, 2010, 52, 586-595.	2.0	37
164	Constructal optimization for H-shaped multi-scale heat exchanger based on entransy theory. Science China Technological Sciences, 2013, 56, 299-307.	4.0	37
165	Progresses in generalized thermodynamic dynamic-optimization of irreversible processes. Zhongguo Kexue Jishu Kexue/Scientia Sinica Technologica, 2019, 49, 981-1022.	0.5	37
166	Effect of heat transfer on the performance of two-stage semiconductor thermoelectric refrigerators. Journal of Applied Physics, 2005, 98, 034507.	2.5	36
167	Constructal entransy dissipation minimization of an electromagnet. Journal of Applied Physics, 2009, 105, .	2.5	36
168	Ecological optimization of energy selective electron (ESE) heat engine. Applied Mathematical Modelling, 2011, 35, 276-284.	4.2	36
169	Thermal insulation constructal optimization for steel rolling reheating furnace wall based on entransy dissipation extremum principle. Science China Technological Sciences, 2012, 55, 3322-3333.	4.0	36
170	Constructal design for blast furnace wall based on the entransy theory. Applied Thermal Engineering, 2016, 100, 798-804.	6.0	36
171	Constructal designs for insulation layers of steel rolling reheating furnace wall with convective and radiative boundary conditions. Applied Thermal Engineering, 2016, 100, 925-931.	6.0	36
172	Constructal design of nonuniform heat generating area based on triangular elements: A case of entropy generation minimization. International Journal of Thermal Sciences, 2019, 139, 403-412.	4.9	36
173	Power density characteristic analysis and multi-objective optimization of an irreversible porous medium engine cycle. Case Studies in Thermal Engineering, 2022, 35, 102154.	5.7	36
174	Heat transfer effect on the specific cooling load of refrigerators. Applied Thermal Engineering, 1996, 16, 989-997.	6.0	35
175	Optimal configuration of a two-heat-reservoir heat-engine with heat-leak and finite thermal-capacity. Applied Energy, 2006, 83, 71-81.	10.1	35
176	Optimal configuration for a finite high-temperature source heat engine cycle with the complex heat transfer law. Science in China Series G: Physics, Mechanics and Astronomy, 2009, 52, 587-592.	0.2	35
177	The optimal path of piston motion for Otto cycle with linear phenomenological heat transfer law. Science in China Series G: Physics, Mechanics and Astronomy, 2009, 52, 708-719.	0.2	35
178	Constructal entransy dissipation rate minimization for umbrella-shaped assembly of cylindrical fins. Science China Technological Sciences, 2011, 54, 211-219.	4.0	35
179	Constructal entransy dissipation rate minimization for tree-shaped assembly of fins. International Journal of Heat and Mass Transfer, 2013, 67, 506-513.	4.8	35
180	Analysis and optimization with ecological objective function of irreversible single resonance energy selective electron heat engines. Energy, 2016, 111, 306-312.	8.8	35

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181	Maximum production rate optimization for sulphuric acid decomposition process in tubular plug-flow reactor. Energy, 2016, 99, 152-158.	8.8	35
182	Power, efficiency, ecological function and ecological coefficient of performance of an irreversible Dual-Miller cycle (DMC) with nonlinear variable specific heat ratio of working fluid. European Physical Journal Plus, 2017, 132, 1.	2.6	35
183	Constructal design for an iron and steel production process based on the objectives of steel yield and useful energy. International Journal of Heat and Mass Transfer, 2017, 111, 1192-1205.	4.8	35
184	Entropy generation minimization for isothermal crystallization processes with a generalized mass diffusion law. International Journal of Heat and Mass Transfer, 2018, 116, 1-8.	4.8	35
185	Optimal design of dual-pressure turbine in OTEC system based on constructal theory. Energy Conversion and Management, 2019, 201, 112179.	9.2	35
186	Constructal design of a shell-and-tube evaporator with ammonia-water working fluid. International Journal of Heat and Mass Transfer, 2019, 135, 541-547.	4.8	35
187	Multi-objective constructal design for a marine boiler considering entropy generation rate and power consumption. Energy Reports, 2022, 8, 1519-1527.	5.1	35
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