

Dieter Boer

List of Publications by Year in descending order

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73
papers

2,909
citations

126907
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168389
53
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73
all docs

73
docs citations

73
times ranked

2948
citing authors

#	ARTICLE	IF	CITATIONS
1	Self-consumption possibilities by rooftop PV and building retrofit requirements for a regional building stock: The case of Catalonia. Solar Energy, 2022, 238, 150-161.	6.1	14
2	Systematic combination of insulation biomaterials to enhance energy and environmental efficiency in buildings. Construction and Building Materials, 2021, 267, 120973.	7.2	13
3	A real-time diagnostic tool for evaluating the thermal performance of nearly zero energy buildings. Applied Energy, 2021, 281, 116091.	10.1	14
4	A framework for sustainable evaluation of thermal energy storage in circular economy. Renewable Energy, 2021, 175, 686-701.	8.9	13
5	Techno-economic analysis of control strategies for heat pumps integrated into solar district heating systems. Journal of Energy Storage, 2021, 42, 103011.	8.1	12
6	Circular economy in the building and construction sector: A scientific evolution analysis. Journal of Building Engineering, 2021, 44, 102704.	3.4	122
7	Sustainability insights on emerging solar district heating technologies to boost the nearly zero energy building concept. Renewable Energy, 2021, 180, 893-913.	8.9	12
8	Targeting Energy Efficiency through Air Conditioning Operational Modes for Residential Buildings in Tropical Climates, Assisted by Solar Energy and Thermal Energy Storage. Case Study Brazil. Sustainability, 2021, 13, 12831.	3.2	1
9	Solar-driven absorption cycle for space heating and cooling. Applied Thermal Engineering, 2020, 168, 114836.	6.0	21
10	Approach for the analysis of TES technologies aiming towards a circular economy: Case study of building-like cubicles. Renewable Energy, 2020, 150, 589-597.	8.9	21
11	Cost-Effective Processes of Solar District Heating System Based on Optimal Artificial Neural Network. Computer Aided Chemical Engineering, 2020, 48, 403-408.	0.5	1
12	Flexible heat pump integration to improve sustainable transition toward 4th generation district heating. Energy Conversion and Management, 2020, 225, 113379.	9.2	39
13	A framework for the optimal integration of solar assisted district heating in different urban sized communities: A robust machine learning approach incorporating global sensitivity analysis. Applied Energy, 2020, 267, 114903.	10.1	25
14	A bibliometric analysis of trends in solar cooling technology. Solar Energy, 2020, 199, 100-114.	6.1	44
15	A Multicriteria Approach to Evaluate Solar Assisted District Heating in the German Market. , 2020, , .		0
16	Sustainability Aspects of Thermal Energy Storage Systems. , 2020, , .		1
17	Life cycle assessment (LCA) of a pneumatic municipal waste collection system compared to traditional truck collection. Sensitivity study of the influence of the energy source. Journal of Cleaner Production, 2019, 231, 1122-1135.	9.3	25
18	Framework for a Systematic Parametric Analysis to Maximize Energy Output of PV Modules Using an Experimental Design. Sustainability, 2019, 11, 2992.	3.2	5

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19	Economic Optimization of the Energy Supply for a Logistics Center Considering Variable-Rate Energy Tariffs and Integration of Photovoltaics. Applied Sciences (Switzerland), 2019, 9, 4711.	2.5	6
20	Economic and environmental potential for solar assisted central heating plants in the EU residential sector: Contribution to the 2030 climate and energy EU agenda. Applied Energy, 2019, 236, 318-339.	10.1	33
21	Life cycle costing as a bottom line for the life cycle sustainability assessment in the solar energy sector: A review. Solar Energy, 2019, 192, 238-262.	6.1	42
22	Optimized demand side management (DSM) of peak electricity demand by coupling low temperature thermal energy storage (TES) and solar PV. Applied Energy, 2018, 211, 604-616.	10.1	113
23	Systematic generation of insulation materials via DEA and Building modelling. Computer Aided Chemical Engineering, 2018, 43, 457-462.	0.5	0
24	Multi-objective optimisation of bio-based thermal insulation materials in building envelopes considering condensation risk. Applied Energy, 2018, 224, 602-614.	10.1	60
25	Material flow analysis of the residential building stock at the city of Rio de Janeiro. Journal of Cleaner Production, 2017, 149, 1249-1267.	9.3	64
26	Reducing the Life Cycle Environmental Impact of Buildings Following a Simulation-Optimization Approach. , 2017, , 823-839.		4
27	Price-Based Demand Side Management (DSM) Coupled with Cold Thermal Energy Storage (TES) and Solar PV for Peak-Load Reduction. , 2017, , .		0
28	Modelling and optimization framework for the multi-objective design of buildings. Computer Aided Chemical Engineering, 2016, , 883-888.	0.5	1
29	Systematic approach for the life cycle multi-objective optimization of buildings combining objective reduction and surrogate modeling. Energy and Buildings, 2016, 130, 506-518.	6.7	38
30	Enhanced thermal energy supply via central solar heating plants with seasonal storage: A multi-objective optimization approach. Applied Energy, 2016, 181, 549-561.	10.1	78
31	Eco-costs evaluation for the optimal design of buildings with lower environmental impact. Energy and Buildings, 2016, 119, 189-199.	6.7	18
32	Optimization of Time-Of-Use Tariffs Demand Side Management Coupled with Cold Thermal Energy Storage (TES) and Solar PV to Reduce On-Peak Demand. , 2016, , .		0
33	An Inquiry into the Life Cycle of Systems of Inner Walls: Comparison of Masonry and Drywall. Sustainability, 2015, 7, 7904-7925.	3.2	13
34	Embodied energy in thermal energy storage (TES) systems for high temperature applications. Applied Energy, 2015, 137, 793-799.	10.1	56
35	On the use of filters to facilitate the post-optimal analysis of the Pareto solutions in multi-objective optimization. Computers and Chemical Engineering, 2015, 74, 48-58.	3.8	38
36	Uncertainty propagation and sensitivity analysis of thermo-physical properties of phase change materials (PCM) in the energy demand calculations of a test cell with passive latent thermal storage. Applied Thermal Engineering, 2015, 90, 596-608.	6.0	30

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37	Multi-objective optimization of thermal modelled cubicles considering the total cost and life cycle environmental impact. Energy and Buildings, 2015, 88, 335-346.	6.7	56
38	Reducing the cost, environmental impact and energy consumption of biofuel processes through heat integration. Chemical Engineering Research and Design, 2015, 93, 203-212.	5.6	20
39	Life Cycle Inventory for Lead Azide Manufacture. Journal of Aerospace Technology and Management, 2014, 6, 53-60.	0.3	5
40	Life cycle assessment of a ventilated facade with PCM in its air chamber. Solar Energy, 2014, 104, 115-123.	6.1	47
41	Environmental performance of recycled rubber as drainage layer in extensive green roofs. A comparative Life Cycle Assessment. Building and Environment, 2014, 74, 22-30.	6.9	72
42	Life Cycle Impact Assessment of masonry system as inner walls: A case study in Brazil. Construction and Building Materials, 2014, 70, 141-147.	7.2	39
43	Multi-objective optimization coupled with life cycle assessment for retrofitting buildings. Energy and Buildings, 2014, 82, 92-99.	6.7	83
44	Evaluation of the environmental impact of experimental buildings with different constructive systems using Material Flow Analysis and Life Cycle Assessment. Applied Energy, 2013, 109, 544-552.	10.1	67
45	Optimization of three new compositions of stabilized rammed earth incorporating PCM: Thermal properties characterization and LCA. Construction and Building Materials, 2013, 47, 872-878.	7.2	45
46	Life Cycle Assessment of experimental cubicles including PCM manufactured from natural resources (esters): A theoretical study. Renewable Energy, 2013, 51, 398-403.	8.9	57
47	Life Cycle Assessment of alveolar brick construction system incorporating phase change materials (PCMs). Applied Energy, 2013, 101, 600-608.	10.1	65
48	Uncovering relationships between environmental metrics in the multi-objective optimization of energy systems: A case study of a thermal solar Rankine reverse osmosis desalination plant. Energy, 2013, 51, 50-60.	8.8	29
49	Multi-objective design of reverse osmosis plants integrated with solar Rankine cycles and thermal energy storage. Applied Energy, 2013, 102, 1137-1147.	10.1	56
50	Minimization of the LCA impact of thermodynamic cycles using a combined simulation-optimization approach. Applied Thermal Engineering, 2012, 48, 367-377.	6.0	34
51	Combined simulation-optimization methodology for the design of environmental conscious absorption systems. Computers and Chemical Engineering, 2012, 46, 205-216.	3.8	19
52	Stabilized rammed earth incorporating PCM: Optimization and improvement of thermal properties and Life Cycle Assessment. Energy Procedia, 2012, 30, 461-470.	1.8	28
53	Evaluation of the environmental impact of experimental cubicles using Life Cycle Assessment: A highlight on the manufacturing phase. Applied Energy, 2012, 92, 534-544.	10.1	62
54	Multi-objective optimization of solar Rankine cycles coupled with reverse osmosis desalination considering economic and life cycle environmental concerns. Desalination, 2012, 286, 358-371.	8.2	106

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55	Comparative life cycle assessment of thermal energy storage systems for solar power plants. Renewable Energy, 2012, 44, 166-173.	8.9	134
56	Solar assisted absorption cooling cycles for reduction of global warming: A multi-objective optimization approach. Solar Energy, 2012, 86, 2083-2094.	6.1	37
57	Integrating process simulation and MINLP methods for the optimal design of absorption cooling systems. Computer Aided Chemical Engineering, 2011, , 301-305.	0.5	0
58	Exergy analysis of multi-effect water-LiBr absorption systems: From half to triple effect. Renewable Energy, 2010, 35, 1773-1782.	8.9	139
59	Optimum heat exchanger area estimation using coefficients of structural bonds: Application to an absorption chiller. International Journal of Refrigeration, 2010, 33, 529-537.	3.4	26
60	Integrated gasification combined cycle (IGCC) process simulation and optimization. Computers and Chemical Engineering, 2010, 34, 331-338.	3.8	172
61	Life Cycle Assessment of the inclusion of phase change materials (PCM) in experimental buildings. Energy and Buildings, 2010, 42, 1517-1523.	6.7	128
62	A systematic tool for the minimization of the life cycle impact of solar assisted absorption cooling systems. Energy, 2010, 35, 3849-3862.	8.8	63
63	Multi-objective optimization of solar assisted absorption cooling system. Computer Aided Chemical Engineering, 2010, , 1033-1038.	0.5	3
64	Design of environmentally friendly absorption cooling systems via multi-objective optimization and life cycle assessment. Computer Aided Chemical Engineering, 2009, 26, 1099-1103.	0.5	2
65	What, if Anything, is a Chemical Engineer?. Computer Aided Chemical Engineering, 2009, , 2121-2126.	0.5	1
66	Design of environmentally conscious absorption cooling systems via multi-objective optimization and life cycle assessment. Applied Energy, 2009, 86, 1712-1722.	10.1	180
67	Economic performance optimization of an absorption cooling system under uncertainty. Applied Thermal Engineering, 2009, 29, 3491-3500.	6.0	34
68	Absorption of organic fluid mixtures in plate heat exchangers. International Journal of Thermal Sciences, 2003, 42, 85-94.	4.9	9
69	Industrial heat recovery by absorption/compression heat pump using TFE-H ₂ O-TEGDME working mixture. Applied Thermal Engineering, 2000, 20, 355-369.	6.0	26
70	Performance of double effect absorption compression cycles for air-conditioning using methanol-TEGDME and TFE-TEGDME systems as working pairs. International Journal of Refrigeration, 1998, 21, 542-555.	3.4	47
71	Densities, viscosities, and enthalpies of mixing of the binary system methanol + polyethylene glycol 250 dimethyl ether at 303.15 K. Journal of Chemical & Engineering Data, 1994, 39, 767-769.	1.9	32
72	Life Cycle Assessment: A Comparison of Ceramic Brick Inventories to Subsidize the Development of Databases in Brazil. Applied Mechanics and Materials, 0, 431, 370-377.	0.2	7

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73	Quality Indicators for Life Cycle Inventory: Real Cases Exploratory Application. Applied Mechanics and Materials, 0, 431, 350-355.	0.2	2