Heimo Walter

List of Publications by Year
in descending order

45	415	933447	752698
papers	citations	10	20
		h-index	g-index

48	48	48	431
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Micro Encapsulated Phase Change Material for the Application in Thermal Energy Storage. Journal of Energy Resources Technology, Transactions of the ASME, 2022, 144, .	2.3	1
2	Partial cycle operation of latent heat storage with finned tubes. Applied Energy, 2020, 280, 115893.	10.1	13
3	FP-TES: Fluidization Based Particle Thermal Energy Storage, Part II: Experimental Investigations. Energies, 2020, 13, 4302.	3.1	3
4	FP-TES: A Fluidisation-Based Particle Thermal Energy Storage, Part I: Numerical Investigations and Bulk Heat Conductivity. Energies, 2020, 13, 4298.	3.1	4
5	Numerical investigation on the flow behavior of a novel fluidization based particle thermal energy storage (FP-TES). Energy, 2020, 200, 117528.	8.8	8
6	Heat Transfer in Latent High-Temperature Thermal Energy Storage Systemsâ€"Experimental Investigation. Energies, 2019, 12, 1264.	3.1	10
7	Comparison of a physical and a data-driven model of a Packed Bed Regenerator for industrial applications. Journal of Energy Storage, 2019, 23, 558-578.	8.1	8
8	MILP model for a packed bed sensible thermal energy storage. Computers and Chemical Engineering, 2019, 125, 40-53.	3.8	7
9	New approximation algorithms for the state functions of water and steam for the application of transient processes and fast on-line applications. Energy, 2018, 164, 1079-1096.	8.8	4
10	Mathematical Modeling of a Biomass Steam Gasifierâ€"A Modified Equilibrium Approach. Journal of Energy Resources Technology, Transactions of the ASME, 2018, 140, .	2.3	1
11	Experimental characterization and simulation of a hybrid sensible-latent heat storage. Applied Energy, 2017, 189, 506-519.	10.1	47
12	System analysis of central receiver concepts with high temperature thermal energy storages: Receiver technologies and storage cycles. AIP Conference Proceedings, 2017, , .	0.4	5
13	Influence of the Mushy Zone Constant on the Numerical Simulation of the Melting and Solidification Process of Phase Change Materials. Computer Aided Chemical Engineering, 2016, 38, 439-444.	0.5	21
14	Comparison of Different Heat Exchanger Tube Designs used in Latent Heat Thermal Energy Storage Systems - a Numerical Study. Computer Aided Chemical Engineering, 2016, 38, 277-282.	0.5	0
15	Transient Numerical Simulation of the Melting and Solidification Behavior of NaNO3 Using a Wire Matrix for Enhancing the Heat Transfer. Energies, 2016, 9, 205.	3.1	16
16	Experimental characterization and simulation of a fin-tube latent heat storage using high density polyethylene as PCM. Applied Energy, 2016, 179, 237-246.	10.1	77
17	Increasing Load Flexibility and Plant Dynamics of Thermal Power via the Implementation of Thermal Energy Storages. , 2016, , .		1
18	Active Fluidized Bed Technology Used for Thermal Energy Storage. , 2016, , .		5

#	Article	IF	Citations
19	Kinetic modeling of a combined tar removal and methanation reactor for biogenous synthesis gas at medium temperature conditions. Fuel Processing Technology, 2016, 141, 159-166.	7.2	4
20	Fluidized Bed Particle Heat Exchanger for Supercritical Carbon Dioxide Power Cycles. , 2016, , .		3
21	Transient Analysis of an Improved Finned Tube Heat Exchanger for Thermal Energy Storage System. , 2015, , .		7
22	New Design of a Bimetallic Finned Tube for the Use in Latent Heat Thermal Energy Storage Units. , 2015, , .		2
23	Transient Numerical Analysis of Different Finned Tube Designs for Use in Latent Heat Thermal Energy Storage Devices. , 2015, , .		3
24	Modeling and Sensitivity Analysis of a Medium-Temperature Gas Cleaning Process of Biogenous Synthesis Gas. Computer Aided Chemical Engineering, 2015, 37, 527-532.	0.5	0
25	Influence of the Fin Design on the Melting and Solidification Process of NaNO3 in a Thermal Energy Storage System. Journal of Energy and Power Engineering, 2015, 9, .	0.2	2
26	Experimental Investigation of a Finned Mono Tube â€" Latent Heat Thermal Energy Storage (LHTES). , 2014, , .		0
27	Comparison Between Numerical and Experimental Gas Side Heat Transfer and Pressure Drop of a Tube Bank With Solid and Segmented Circular I-Fins. , 2012, , .		1
28	The agnion Heatpipe-Reformerâ€"operating experiences and evaluation of fuel conversion and syngas composition. Biomass Conversion and Biorefinery, 2012, 2, 207-215.	4.6	28
29	Biomass steam gasification for production of SNG â€“ Process design and sensitivity analysis. Applied Energy, 2012, 97, 451-461.	10.1	62
30	Experimental and Numerical Investigation of the Gas Side Heat Transfer and Pressure Drop of Finned Tubesâ€"Part I: Experimental Analysis. Journal of Thermal Science and Engineering Applications, 2012, 4, .	1.5	7
31	Experimental and Numerical Investigation of the Gas Side Heat Transfer and Pressure Drop of Finned Tubesâ€"Part II: Numerical Analysis. Journal of Thermal Science and Engineering Applications, 2012, 4, .	1.5	5
32	Simulation der Feuerung und GasstrÃ¶mung. , 2012, , 321-457.		0
33	How can the heat transfer correlations for finned-tubes influence the numerical simulation of the dynamic behavior of a heat recovery steam generator?. Applied Thermal Engineering, 2011, 31, 405-417.	6.0	20
34	Simulation der Feuerung und GasstrÃ¶mung. , 2009, , 241-367.		0
35	Numerische Methoden. , 2009, , 159-240.		0
36	Density Wave Oscillation in a Vertical Type Natural Circulation Heat Recovery Steam Generator: A Numerical Study. , 2008, , .		0

#	Article	IF	Citations
37	Development of Nomograms for the Calculation of the Temperature Distribution in a Membrane Wall. , 2008, , .		0
38	Dynamic simulation of natural circulation steam generators with the use of finite-volume-algorithms â€“ A comparison of four algorithms. Simulation Modelling Practice and Theory, 2007, 15, 565-588.	3.8	21
39	Investigation of the stability of a natural circulation two-pass boiler. Heat and Mass Transfer, 2006, 42, 562-568.	2.1	6
40	Flow Reversal in a Horizontal Type Natural Circulation Heat Recovery Steam Generator. , 2006, , 731.		4
41	Flow Stability of Heat Recovery Steam Generators. Journal of Engineering for Gas Turbines and Power, 2006, 128, 840-848.	1.1	6
42	Flow Stability of Heat Recovery Steam Generators. , 2004, , 479.		2
43	Dynamic Behaviour of a Vertical Natural Circulation Two Pressure Stage HRSG Behind a Heavy Duty Gas Turbine. , 2000, , .		0
44	Experimental and Numerical Investigation on a Fixed Bed Regenerator. , 0, , .		1
45	Transient Numerical Analysis of a Finned Tube Design with Combined Longitudinal and Transversal Fins for Latent Thermal Energy Storage Devices. , 0, , .		0