Piotr Dzierwa

List of Publications by Year in descending order

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46 papers	547 citations	759233 12 h-index	677142 22 g-index
46 all docs	46 docs citations	46 times ranked	258 citing authors

#	Article	IF	Citations
1	Optimization of the boiler start-up taking into account thermal stresses. Energy, 2015, 92, 160-170.	8.8	60
2	Determination of start-up curves for a boiler with natural circulation based on the analysis of stress distribution in critical pressure components. Energy, 2015, 92, 153-159.	8.8	58
3	The use of pressure hot water storage tanks to improve the energy flexibility of the steam power unit. Energy, 2019, 173, 926-936.	8.8	45
4	Numerical simulation of convective superheaters in steam boilers. International Journal of Thermal Sciences, 2018, 129, 320-333.	4.9	43
5	Monitoring of thermal stresses in pressure components based on the wall temperature measurement. Energy, 2018, 160, 500-519.	8.8	32
6	Thermal stress monitoring in thick walled pressure components of steam boilers. Energy, 2019, 175, 645-666.	8.8	29
7	Optimum heating of pressure components of steam boilers with regard to thermal stresses. Journal of Thermal Stresses, 2016, 39, 874-886.	2.0	25
8	A new method for optimum heating of steam boiler pressure components. International Journal of Energy Research, 2011, 35, 897-908.	4.5	22
9	A new form of a σ-inverse for nonsquare polynomial matrices. , 2013, , .		22
10	An application of a new matrix inverse in stabilizing state-space perfect control of nonsquare LTI MIMO systems. , 2014, , .		15
11	Optimum Heating of Pressure Vessels With Holes. Journal of Pressure Vessel Technology, Transactions of the ASME, 2015, 137, .	0.6	15
12	Monitoring of transient thermal stresses in pressure components of steam boilers using an innovative technique for measuring the fluid temperature. Energy, 2019, 175, 139-150.	8.8	15
13	Determination of Transient Fluid Temperature and Thermal Stresses in Pressure Thick-Walled Elements Using a New Design Thermometer. Energies, 2019, 12, 222.	3.1	15
14	Optimum heating of thick-walled pressure components assuming a quasi-steady state of temperature distribution. Journal of Thermal Science, 2016, 25, 380-388.	1.9	12
15	Numerical modeling of transient heat transfer in heat storage unit with channel structure. Applied Thermal Engineering, 2019, 149, 841-853.	6.0	12
16	Optimum heating of pressure components of large steam boilers. Forschung Im Ingenieurwesen/Engineering Research, 2009, 73, 183-192.	1.6	11
17	Monitoring of transient 3D temperature distribution and thermal stress in pressure elements based on the wall temperature measurement. Journal of Thermal Stresses, 2019, 42, 698-724.	2.0	11
18	Mathematical modeling of heat storage unit for air heating of the building. Renewable Energy, 2019, 141, 988-1004.	8.9	10

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19	Thermal stress monitoring in thick-walled pressure components based on the solutions of the inverse heat conduction problems. Journal of Thermal Stresses, 2018, 41, 1501-1524.	2.0	9
20	New technique of the local heat flux measurement in combustion chambers of steam boilers. Archives of Thermodynamics, 2011, 32, 103-116.	1.0	8
21	Optimum Heating of Boiler Evaporator. Heat Transfer Engineering, 2018, 39, 1217-1226.	1.9	8
22	Optimum Heating of Thick Wall Pressure Components of Steam Boilers. , 2014, , .		7
23	Evaporator Heating with Optimum Fluid Temperature Changes. Procedia Engineering, 2016, 157, 29-37.	1.2	7
24	Allowable Rates of Fluid Temperature Variations and Thermal Stress Monitoring in Pressure Elements of Supercritical Boilers. Heat Transfer Engineering, 2019, 40, 1430-1441.	1.9	7
25	Increase the flexibility of steam boilers by optimisation of critical pressure component heating. Energy, 2022, 250, 123855.	8.8	7
26	Transient CFD simulation of charging hot water tank. Energy, 2022, 239, 122241.	8.8	6
27	Optimum heating of cylindrical pressure vessels. Forschung Im Ingenieurwesen/Engineering Research, 2015, 79, 163-173.	1.6	5
28	Improving flexibility characteristics of 200 MW unit. Archives of Thermodynamics, 2017, 38, 75-90.	1.0	5
29	A new software program for monitoring the energy distribution in a thermal waste treatment plant system. Renewable Energy, 2022, 184, 1055-1073.	8.9	5
30	Optimisation of heating and cooling of pressure thick-walled components operating in the saturated steam area. Energy, 2021, 231, 120917.	8.8	4
31	Modeling of Superheater Operation in a Steam Boiler. , 2014, , .		3
32	Optimum Heating of Pressure Components of Complex Shape. , 2014, , 3532-3543.		3
33	Assessment of the Superheater Ash Fouling Using a Numerical Model of the Superheater. Heat Transfer Engineering, 2019, 40, 1419-1429.	1.9	2
34	New method for determining the optimum fluid temperature when heating pressure thick-walled components with openings. Energy, 2020, 200, 117527.	8.8	2
35	Quasi-Steady-State Approach for Solving Transient Heat Conduction Problems. , 2014, , 4083-4092.		2
36	The influence of compaction and saturation on the compressibility of colliery waste. Thermal Science, 2019, 23, 1345-1355.	1.1	2

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37	Shortening start-up and an extension of the power unit load range. E3S Web of Conferences, 2017, 14, 01022.	0.5	1
38	New start-up curves for a 200 MW steam boiler with natural circulation. MATEC Web of Conferences, 2018, 240, 05007.	0.2	1
39	Determination of Boiler Startup Curves Due to Stresses in Critical Pressure Elements. Heat Transfer Engineering, 2021, 42, 337-346.	1.9	1
40	Determining Optimum Temperature Changes During Heating of Pressure Vessels With Holes. , 2013, , .		0
41	Thermal Performance and Stress Monitoring of Power Boiler. , 2016, , .		0
42	Heating of Components with Non-Uniform Circumferential Temperature Distribution Using the Quasiâ€“Steady State Theory. Procedia Engineering, 2016, 157, 38-43.	1.2	0
43	The use of a solution of the inverse heat conduction problem to monitor thermal stresses. E3S Web of Conferences, 2019, 108, 01003.	0.5	0
44	New method for determining the optimum fluid temperature when heating pressure thick-walled components with openings. E3S Web of Conferences, 2019, 128, 01025.	0.5	0
45	Optimum heating of cylindrical pressure components weakened by holes. Archives of Thermodynamics, 2012, 33, 106-116.	1.0	0
46	Transient numerical analysis of charging a heat accumulator in a combined heat and power plant. E3S Web of Conferences, 2021, 323, 00009.	0.5	0