

Janusz Badur

List of Publications by Year in descending order

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Version: 2024-02-01

41
papers

662
citations

567281

15
h-index

580821

25
g-index

41
all docs

41
docs citations

41
times ranked

369
citing authors

#	ARTICLE	IF	CITATIONS
1	Finite rotations in the description of continuum deformation. <i>International Journal of Engineering Science</i> , 1983, 21, 1097-1115.	5.0	79
2	On low-grade waste heat utilization from a supercritical steam power plant using an ORC-bottoming cycle coupled with two sources of heat. <i>Energy Conversion and Management</i> , 2017, 146, 158-173.	9.2	51
3	Zero-dimensional robust model of an SOFC with internal reforming for hybrid energy cycles. <i>Energy</i> , 2018, 158, 128-138.	8.8	50
4	Energy and exergy analysis of hydrogen production combined with electric energy generation in a nuclear cogeneration cycle. <i>Energy Conversion and Management</i> , 2019, 198, 111805.	9.2	47
5	On energy, exergy, and environmental aspects of a combined gas-steam cycle for heat and power generation undergoing a process of retrofitting by steam injection. <i>Energy Conversion and Management</i> , 2019, 192, 374-384.	9.2	38
6	An approach for estimation of water wall degradation within pulverized-coal boilers. <i>Energy</i> , 2015, 92, 142-152.	8.8	34
7	Thermodynamic Analysis of Negative CO ₂ Emission Power Plant Using Aspen Plus, Aspen Hysys, and Epsilon Software. <i>Energies</i> , 2021, 14, 6304.	3.1	28
8	Comprehensive thermodynamic analysis of the CAES system coupled with the underground thermal energy storage taking into account global, central and local level of energy conversion. <i>Renewable Energy</i> , 2021, 169, 379-403.	8.9	26
9	Exergy Losses in the Szewalski Binary Vapor Cycle. <i>Entropy</i> , 2015, 17, 7242-7265.	2.2	24
10	An energetic analysis of a gas turbine with regenerative heating using turbine extraction at intermediate pressure - Brayton cycle advanced according to Szewalski's idea. <i>Energy</i> , 2019, 185, 763-786.	8.8	23
11	Thermal utilization of meat-and-bone meal using the rotary kiln pyrolyzer and the fluidized bed boiler – The performance of pilot-scale installation. <i>Renewable Energy</i> , 2021, 164, 1447-1456.	8.9	23
12	Thermal failure of a second rotor stage in heavy duty gas turbine. <i>Engineering Failure Analysis</i> , 2020, 115, 104672.	4.0	22
13	Different design aspects of an Organic Rankine Cycle turbine for electricity production using a geothermal binary power plant. <i>Energy Conversion and Management</i> , 2021, 246, 114672.	9.2	22
14	A theoretical, numerical and experimental verification of the Reynolds thermal transpiration law. <i>International Journal of Numerical Methods for Heat and Fluid Flow</i> , 2018, 28, 64-80.	2.8	20
15	Mathematical modelling of gasification process of sewage sludge in reactor of negative CO ₂ emission power plant. <i>Energy</i> , 2022, 244, 122601.	8.8	18
16	On the mass and momentum transport in the Navier–Stokes slip layer. <i>Microfluidics and Nanofluidics</i> , 2011, 11, 439.	2.2	16
17	On the angular velocity slip in nano-flows. <i>Microfluidics and Nanofluidics</i> , 2015, 19, 191-198.	2.2	16
18	Comparative study of a bottoming SRC and ORC for Joule–Brayton cycle cooling modular HTR exergy losses, fluid-flow machinery main dimensions, and partial loads. <i>Energy</i> , 2020, 206, 118072.	8.8	15

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19	An alternative two-equation turbulent heat diffusivity closure. International Journal of Heat and Mass Transfer, 2005, 48, 2013-2022.	4.8	14
20	Accelerated start-up of the steam turbine by means of controlled cooling steam injection. Energy, 2019, 173, 1242-1255.	8.8	14
21	Influence of strength differential effect on material effort of a turbine guide vane based on thermoelastoplastic analysis. Journal of Thermal Stresses, 2017, 40, 1368-1385.	2.0	12
22	Heat exchange enhancement of jet impingement cooling with the novel humped-cone heat sink. Case Studies in Thermal Engineering, 2021, 28, 101445.	5.7	12
23	On a comparison of Huber-Mises-Hencky with Burzynski-Pecherski equivalent stresses for glass body during nonstationary thermal load. AIP Conference Proceedings, 2017, , .	0.4	11
24	Assessment of the Effective Variants Leading to Higher Efficiency for the Geothermal Doublet, Using Numerical Analysis – Case Study from Poland (Szczecin Trough). Energies, 2020, 13, 2174.	3.1	10
25	Validation plastic model with hardening of St12t. AIP Conference Proceedings, 2019, , .	0.4	7
26	Exergy analysis of the Szewalski cycle with a waste heat recovery system. Archives of Thermodynamics, 2015, 36, 25-48.	1.0	5
27	Compact High Efficiency and Zero-Emission Gas-Fired Power Plant with Oxy-Combustion and Carbon Capture. Energies, 2022, 15, 2590.	3.1	5
28	Thermodynamic analysis of the Compressed Air Energy Storage system coupled with the Underground Thermal Energy Storage. E3S Web of Conferences, 2019, 137, 01023.	0.5	4
29	Neoclassical Navier – Stokes Equations Considering the Gyftopoulos – Beretta Exposition of Thermodynamics. Energies, 2020, 13, 1656.	3.1	4
30	Extremal thermal loading of a bifurcation pipe. AIP Conference Proceedings, 2019, , .	0.4	3
31	The thermal effort during marine steam turbine flooding with water. AIP Conference Proceedings, 2019, , .	0.4	2
32	On the Burzyński stress effort during thermomechanical loading of a turbine blade. AIP Conference Proceedings, 2020, , .	0.4	2
33	Pure gauge theory of the cosserat surface. International Journal of Engineering Science, 1993, 31, 41-59.	5.0	1
34	Issues to improve the safety of 18K370 steam turbine operation. E3S Web of Conferences, 2017, 13, 04003.	0.5	1
35	Practical Methods for Online Calculation of Thermoelastic Stresses in Steam Turbine Components. , 2018, , .		1
36	Revalorisation of the Szewalski – TM's concept of the law of varying the last-stage blade retraction in a gas-steam turbine. E3S Web of Conferences, 2021, 323, 00034.	0.5	1

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37	A study of jet impingement cooling enhancement by concave and convex heat sink shape modifications. E3S Web of Conferences, 2021, 323, 00010.	0.5	1
38	A Yang-Mills type of equation for the compatibility conditions. International Journal of Engineering Science, 1989, 27, 1439-1442.	5.0	0
39	On a comparison of Huber-Mises-Hencky with Zawadzki equivalent stress for a steam turbine blade during nonstationary thermal load. AIP Conference Proceedings, 2020, , .	0.4	0
40	The Staged Combustion of Meat-and-Bone Meal: The Characteristics of Conversion Sub-processes and Large-Scale Process Outputs. , 2021, , 415-454.		0
41	Duhem and Natanson: Two Mathematical Approaches to Thermodynamics. Energies, 2022, 15, 1881.	3.1	0