Ryszard Bialecki

List of Publications by Year
in descending order

76 papers	**1,687** citations	304743 **22** h-index	330143 **37** g-index
78 all docs	**78** docs citations	**78** times ranked	**1149** citing authors

#	Article	IF	Citations
1	Application of numerical procedure for thermal diagnostics of the delamination of strengthening material at concrete construction. International Journal of Numerical Methods for Heat and Fluid Flow, 2020, 30, 2655-2668.	2.8	5
2	The protocol for using elastic wall model in modeling blood flow within human artery. European Journal of Mechanics, B/Fluids, 2019, 77, 273-280.	2.5	13
3	Multiphase simulation of blood flow within main thoracic arteries of 8-year-old child with coarctation of the aorta. Heat and Mass Transfer, 2018, 54, 2405-2413.	2.1	10
4	A method for retrieving char oxidation kinetic data from reacting particle trajectories in a novel test facility. Fuel, 2018, 212, 240-255.	6.4	10
5	Generation of data sets for semi-empirical models of circulated fluidized bed boilers using hybrid Euler-Lagrange technique. Energy, 2018, 143, 219-240.	8.8	23
6	Numerical simulation of a dense solid particle flow inside a cyclone separator using the hybrid Euler–Lagrange approach. Particuology, 2017, 31, 170-180.	3.6	58
7	Measuring thermal conductivity tensor of orthotropic solid bodies. Measurement: Journal of the International Measurement Confederation, 2017, 101, 93-102.	5.0	18
8	Nondestructive technique of measuring heat conductivity of thermal barrier coatings. International Journal of Heat and Mass Transfer, 2017, 111, 442-450.	4.8	23
9	Numerical and experimental investigation of heat transfer process in electromagnetically driven flow within a vacuum induction furnace. Applied Thermal Engineering, 2017, 124, 1003-1013.	6.0	30
10	CFD modeling and thermodynamic analysis of a concept of a MILD-OXY combustion large scale pulverized coal boiler. Energy, 2017, 140, 1305-1315.	8.8	52
11	Design of the experimental rig for retrieving kinetic data of char particles. Fuel Processing Technology, 2017, 156, 178-184.	7.2	9
12	Visualization system for the measurement of size and sphericity of char particles under combustion conditions. Powder Technology, 2016, 301, 141-152.	4.2	12
13	Retrieving thermal conductivities of isotropic and orthotropic materials. Applied Mathematical Modelling, 2016, 40, 3410-3421.	4.2	19
14	Effect Of Turbulence Modelling In Numerical Analysis Of Melting Process In An Induction Furnace. Archives of Metallurgy and Materials, 2015, 60, 1575-1580.	0.6	9
15	Numerical simulations of the industrial circulating fluidized bed boiler under air- and oxy-fuel combustion. Applied Thermal Engineering, 2015, 87, 127-136.	6.0	43
16	3D CFD modeling of natural draft wet-cooling tower with flue gas injection. Applied Thermal Engineering, 2015, 91, 824-833.	6.0	44
17	Can natural gas warm the climate more than coal?. Fuel, 2014, 136, 341-348.	6.4	24
18	Comparison of the standard Euler–Euler and hybrid Euler–Lagrange approaches for modeling particle transport in a pilot-scale circulating fluidized bed. Particuology, 2014, 15, 129-137.	3.6	63

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19	Modeling of particle transport and combustion phenomena in a large-scale circulating fluidized bed boiler using a hybrid Euler–Lagrange approach. Particuology, 2014, 16, 29-40.	3.6	78
20	Modeling oxy-fuel combustion in a 3D circulating fluidized bed using the hybrid Euler–Lagrange approach. Applied Thermal Engineering, 2014, 71, 266-275.	6.0	55
21	Decoupled numerical simulation of a solid fuel fired retort boiler. Applied Thermal Engineering, 2014, 73, 794-804.	6.0	18
22	Heat integration and exergy analysis for a supercritical high-ash coal-fired power plant integrated with a post-combustion carbon capture process. Fuel, 2014, 134, 126-139.	6.4	68
23	The Inverse Reconstruction of the Heat Transfer Coefficient for the Free Surface Water Jet. Numerical Heat Transfer; Part A: Applications, 2013, 64, 879-901.	2.1	1
24	In Situ Measurement of Thermal Diffusivity in Anisotropic Media. International Journal of Thermophysics, 2013, 34, 467-485.	2.1	26
25	An inverse POD-RBF network approach to parameter estimation in mechanics. Inverse Problems in Science and Engineering, 2012, 20, 749-767.	1.2	33
26	Direct and Inverse Methods for an Air Jet Impingement. Numerical Heat Transfer; Part A: Applications, 2012, 61, 547-568.	2.1	9
27	Retrieving the heat transfer coefficient for jet impingement from transient temperature measurements. International Journal of Heat and Fluid Flow, 2011, 32, 1024-1035.	2.4	14
28	The heat transfer coefficient spatial distribution reconstruction by an inverse technique. Inverse Problems in Science and Engineering, 2011, 19, 117-126.	1.2	8
29	A novel approach of evaluating absorption line black body distribution function employing proper orthogonal decomposition. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 309-317.	2.3	16
30	CFD Two-Scale Model of a Wet Natural Draft Cooling Tower. Numerical Heat Transfer; Part A: Applications, 2010, 57, 119-137.	2.1	14
31	Solution of heat and mass transfer in counterflow wet-cooling tower fills. International Communications in Heat and Mass Transfer, 2009, 36, 547-553.	5.6	54
32	Application of the inverse analysis for boundary condition retrieval. Inverse Problems in Science and Engineering, 2009, 17, 829-853.	1.2	10
33	Temperature in a disk brake, simulation and experimental verification. International Journal of Numerical Methods for Heat and Fluid Flow, 2008, 18, 387-400.	2.8	16
34	Solving inverse heat conduction problems using trained POD-RBF network inverse method. Inverse Problems in Science and Engineering, 2008, 16, 39-54.	1.2	69
35	BEM SOLUTION OF THE RADIATIVE HEAT TRANSFER WITHIN NATURAL GAS FIRED COMBUSTION CHAMBER. Combustion Science and Technology, 2006, 178, 1413-1440.	2.3	2
36	SELECTED PRESENTATIONS FROM THE XVIII INTERNATIONAL SYMPOSIUM ON COMBUSTION PROCESSES. Combustion Science and Technology, 2006, 178, 1411-1412.	2.3	0

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37	Reconstruction of time-dependent boundary heat flux by a BEM-based inverse algorithm. Engineering Analysis With Boundary Elements, 2006, 30, 767-773.	3.7	16
38	Evolutionary shape optimization of thermoelastic bodies exchanging heat by convection and radiation. Computer Methods in Applied Mechanics and Engineering, 2005, 194, 1839-1859.	6.6	13
39	Proper orthogonal decomposition and modal analysis for acceleration of transient FEM thermal analysis. International Journal for Numerical Methods in Engineering, 2005, 62, 774-797.	2.8	94
40	Estimation of constant thermal conductivity by use of Proper Orthogonal Decomposition. Computational Mechanics, 2005, 37, 52-59.	4.0	50
41	An inverse estimation of multi-dimensional load distributions in thermoelasticity problems via dual reciprocity BEM. Computational Mechanics, 2005, 37, 86-95.	4.0	6
42	Solving Transient Nonlinear Heat Conduction Problems by Proper Orthogonal Decomposition and the Finite-Element Method. Numerical Heat Transfer, Part B: Fundamentals, 2005, 48, 103-124.	0.9	67
43	Solution of conjugate radiation convection problems by a BEM FVM technique. Journal of Quantitative Spectroscopy and Radiative Transfer, 2004, 84, 539-550.	2.3	10
44	Explicit calculation of smoothed sensitivity coefficients for linear problems. International Journal for Numerical Methods in Engineering, 2003, 57, 143-167.	2.8	12
45	Analysis of fluid flow and energy transport in Czochralski's process. Computers and Fluids, 2003, 32, 85-95.	2.5	5
46	Reduction of the Dimensionality of Transient FEM Solutions Using Proper Orthogonal Decomposition. , 2003, , .		7
47	Optimization of a window frame by BEM and genetic algorithm. International Journal of Numerical Methods for Heat and Fluid Flow, 2003, 13, 565-580.	2.8	8
48	Application of the Proper Orthogonal Decomposition in Steady State Inverse Problems. , 2003, , 3-12.		5
49	Coupling of conductive, convective and radiative heat transfer in Czochralski crystal growth process. Computational Materials Science, 2002, 25, 570-576.	3.0	6
50	Cubic Bezier splines for BEM heat transfer analysis of the 2-D continuous casting problems. Computational Mechanics, 2002, 28, 282-290.	4.0	16
51	Dual reciprocity BEM without matrix inversion for transient heat conduction. Engineering Analysis With Boundary Elements, 2002, 26, 227-236.	3.7	25
52	An iterative BEM/FVM protocol for steady-state multi-dimensional conjugate heat transfer in compressible flows. Engineering Analysis With Boundary Elements, 2002, 26, 447-454.	3.7	16
53	Coupling BEM, FEM and analytic solutions in steady-state potential problems. Engineering Analysis With Boundary Elements, 2002, 26, 597-611.	3.7	14
54	Boundary-Element Solution of Coupled Heat Conduction-Radiation Problems in the Presence of Shadow Zones. Numerical Heat Transfer, Part B: Fundamentals, 2001, 39, 451-478.	0.9	14

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55	A Dual Reciprocity Boundary Element Formulation for Transient Non-Linear Conduction-Radiation Problems. , 2001, , 1-11.		0
56	Heat transfer analysis of the continuous casting process by the front tracking BEM. Engineering Analysis With Boundary Elements, 2000, 24, 215-223.	3.7	27
57	Transient non-linear heat conduction-radiation problems?a boundary element formulation. International Journal for Numerical Methods in Engineering, 1999, 46, 1865-1882.	2.8	16
58	Iterative solution of large-scale 3D-BEM industrial problems. Engineering Analysis With Boundary Elements, 1998, 22, 183-197.	3.7	20
59	IN- AND OUT-OF-CORE BEM EQUATION SOLVER WITH PARALLEL AND NON-LINEAR OPTIONS. International Journal for Numerical Methods in Engineering, 1996, 39, 4215-4242.	2.8	17
60	Frictional, diathermal flow of steam in a pipeline. Chemical Engineering Science, 1996, 51, 4369-4378.	3.8	11
61	Weakly singular 2D quadratures for some fundamental solutions. Engineering Analysis With Boundary Elements, 1996, 18, 333-336.	3.7	4
62	Coarse division transform based preconditioner for boundary element problems. International Journal for Numerical Methods in Engineering, 1995, 38, 2115-2129.	2.8	10
63	Self-adapting algorithm for evaluation of weakly singular integrals arising in the boundary element method. Engineering Analysis With Boundary Elements, 1994, 14, 285-292.	3.7	11
64	Boundary element solution of heat conduction problems in multizone bodies of non-linear material. International Journal for Numerical Methods in Engineering, 1993, 36, 799-809.	2.8	33
65	New application of hypersingular equations in the boundary element method. Computer Methods in Applied Mechanics and Engineering, 1993, 103, 399-416.	6.6	11
66	Minimum distance calculation between a source point and a boundary element. Engineering Analysis With Boundary Elements, 1993, 12, 211-218.	3.7	13
67	Applying BEM to modelling of uptaking pollutants in clouds or fog drops. Advances in Engineering Software, 1992, 14, 157-161.	3.8	0
68	Identification of the boundary surfaces in 3D finite element codes. Advances in Engineering Software, 1992, 14, 33-39.	3.8	4
69	Identification of the boundary curves in 2D finite elements codes. Advances in Engineering Software and Workstations, 1991, 13, 73-83.	0.2	2
70	APPLYING THE BOUNDARY ELEMENT TECHNIQUE TO THE SOLUTION OF HEAT RADIATION PROBLEMS IN CAVITIES FILLED BY A NONGRAY EMITTING-ABSORBING MEDIUM. Numerical Heat Transfer; Part A: Applications, 1991, 20, 41-64.	2.1	4
71	Some remarks on transformation techniques for transient nonlinear problems. Engineering Analysis With Boundary Elements, 1990, 7, 145-146.	3.7	1
72	SOLVING NONLINEAR STEADY-STATE POTENTIAL PROBLEMS IN INHOMOGENOUS BODIES USING THE BOUNDARY-ELEMENT METHOD. Numerical Heat Transfer, Part B: Fundamentals, 1990, 16, 79-96.	0.9	14

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73	Evaluating eigenvalues for boundary value problems of heat conduction in rectangular and cylindrical co-ordinate systems. International Journal for Numerical Methods in Engineering, 1987, 24, 419-445.	2.8	2
74	Applying the boundary element method to electrochemical calculations of primary current distribution. Electrochimica Acta, 1984, 29, 905-910.	5.2	14
75	A new method of numerical evaluation of singular integrals occurring in two-dimensional BIEM. Applied Mathematical Modelling, 1983, 7, 169-172.	4.2	4
76	Boundary value problems in heat conduction with nonlinear material and nonlinear boundary conditions. Applied Mathematical Modelling, 1981, 5, 417-421.	4.2	111