Peter J Witt

List of Publications by Year
in descending order

48 papers	869 citations	394421 19 h-index	501196 28 g-index
54 all docs	54 docs citations	54 times ranked	682 citing authors

#	Article	IF	Citations
1	CFD simulation of a cold flow model of inter-connected three fluidized reactors applied to chemical looping hydrogen production. Energy Reports, 2022, 8, 1112-1117.	5.1	1
2	An efficient method for computational flow-based simulation of heat transfer in a rotary kiln with pilot scale validation. Applied Thermal Engineering, 2022, 214, 118894.	6.0	5
3	Numerical investigations into the effect of turbulence on collision efficiency in flotation. Minerals Engineering, 2021, 163, 106744.	4.3	7
4	Numerical study of the solid flow behavior in a rotating drum based on a multiphase CFD model accounting for solid frictional viscosity and wall friction. Powder Technology, 2020, 361, 87-98.	4.2	21
5	Sensitivity analysis of particle contact parameters for DEM simulation in a rotating drum using response surface methodology. Powder Technology, 2020, 362, 604-614.	4.2	22
6	Numerical analysis of size-induced particle segregation in rotating drums based on Eulerian continuum approach. Powder Technology, 2020, 376, 80-92.	4.2	14
7	Experimental observations of bubble–particle collisional interaction relevant to froth flotation, and calculation of the associated forces. Minerals Engineering, 2020, 151, 106335.	4.3	16
8	A CFD study of particle–bubble collision efficiency in froth flotation. Minerals Engineering, 2019, 141, 105855.	4.3	27
9	Mitigation of scale formation in unbaffled stirred tanks-experimental assessment and quantification. Chemical Engineering Research and Design, 2019, 146, 11-21.	5.6	8
10	A hierarchical simulation methodology for rotary kilns including granular flow and heat transfer. Minerals Engineering, 2018, 119, 244-262.	4.3	22
11	Numerical Modeling of Flow Dynamics in The Aluminum Smelting Process: Comparison Between Air–Water and CO2–Cryolite Systems. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1200-1216.	2.1	17
12	Numerical Simulations of Solid Circulation Characteristics in an Internally Circulating Elevated Fluidized Bed. Chemical Engineering and Technology, 2017, 40, 769-777.	1.5	3
13	Towards a coupled multi-scale, multi-physics simulation framework for aluminium electrolysis. Applied Mathematical Modelling, 2017, 44, 3-24.	4.2	32
14	Preface to special issue of selected papers from the Eleventh International Conference on CFD in the Minerals and Process Industries (CFD2015). Chemical Engineering Science, 2017, 169, 187.	3.8	0
15	Numerical Modelling of Pulverised Coal Combustion. , 2017, , 1-35.		1
16	Investigation of Slot-Burner Aerodynamics with Recessed-Type Nozzle Geometry. Fluids, 2016, 1, 10.	1.7	0
17	Numerical modelling of unsteady flow behaviour in the rectangular jets with oblique opening. AEJ - Alexandria Engineering Journal, 2016, 55, 2309-2320.	6.4	5
18	Numerical investigation of solid circulation flux in an internally circulating fluidized bed with different gas distributor designs. Powder Technology, 2016, 301, 1103-1111.	4.2	24

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19	Numerical Modelling of Pulverised Coal Combustion. , 2016, , 1-36.		0
20	Carbothermal Production of Magnesium: Csiroâ€™s Magsonicâ„¢ Process. , 2016, , 127-131.		0
21	Simulation of an internally circulating fluidized bed using a multiphase particle-in-cell method. Powder Technology, 2015, 274, 123-134.	4.2	32
22	Numerical study of the effect of operation parameters on particle segregation in a coal beneficiation fluidized bed by a TFMâ€“DEM hybrid model. Chemical Engineering Science, 2015, 131, 256-270.	3.8	23
23	Numerical study of particle segregation in a coal beneficiation fluidized bed by a TFMâ€“DEM hybrid model: Influence of coal particle size and density. Chemical Engineering Journal, 2015, 260, 240-257.	12.7	51
24	CFD Modelling of the Effects of Operating Parameters on the Spreading of Liquids on a Spinning Disc. Journal of Computational Multiphase Flows, 2014, 6, 49-64.	0.8	19
25	The swirling flow structure in supersonic separators for natural gas dehydration. RSC Advances, 2014, 4, 52967-52972.	3.6	23
26	A numerical assessment of bubble-induced electric resistance in aluminium electrolytic cells. Journal of Applied Electrochemistry, 2014, 44, 1081-1092.	2.9	15
27	Modelling supersonic quenching of magnesium vapour in a Laval nozzle. Chemical Engineering Science, 2013, 87, 23-39.	3.8	14
28	Numerical investigation of solid mixing in a fluidized bed coating process. , 2013, , .		1
29	Combustion of Predried Brown Coal in a Tangentially Fired Furnace under Different Operating Conditions. Energy & Fuels, 2012, 26, 1044-1053.	5.1	23
30	CFD modeling of gasâ€“solid flow in an internally circulating fluidized bed. Powder Technology, 2012, 219, 78-85.	4.2	49
31	Carbothermal Production of Magnesium: Csiroâ€™s Magsonicâ„¢ Process. , 2012, , 31-35.		6
32	Numerical simulation and validation of gas-particle rectangular jets in crossflow. Computers and Chemical Engineering, 2011, 35, 595-605.	3.8	11
33	Preface to special issue of selected papers from CFD in the minerals and process industries. Applied Mathematical Modelling, 2011, 35, 2051.	4.2	0
34	Modeling Issues in CFD Simulation of Brown Coal Combustion in a Utility Furnace. Journal of Computational Multiphase Flows, 2010, 2, 73-88.	0.8	9
35	Measurements and numerical predictions of gas vortices formed by single bubble eruptions in the freeboard of a fluidised bed. Chemical Engineering Science, 2010, 65, 5808-5820.	3.8	15
36	Extension of the kinetic theory of granular flow to include dense quasi-static stresses. Powder Technology, 2010, 204, 11-20.	4.2	36

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37	CFD simulation of free surface flow and heat transfer of liquid slag on a spinning disc for a novel dry slag granulation process. Progress in Computational Fluid Dynamics, 2010, 10, 292.	0.2	38
38	Numerical Modeling of Victorian Brown Coal Combustion in a Tangentially Fired Furnace. Energy & Fuels, 2010, 24, 4971-4979.	5.1	39
39	Aerodynamics of an isolated slot-burner from a tangentially-fired boiler. Applied Mathematical Modelling, 2009, 33, 3756-3767.	4.2	26
40	Comparison of Two-Equation Turbulence Models in Simulation of a Non-Swirl Coal Flame in a Pilot-Scale Furnace. Combustion Science and Technology, 2009, 181, 954-983.	2.3	14
41	Optimising the design of fume extraction hoods using a combination of engineering and CFD modelling. Applied Mathematical Modelling, 2006, 30, 1167-1179.	4.2	17
42	The carbothermic route to magnesium. Jom, 2006, 58, 51-55.	1.9	69
43	An unequal granular temperature kinetic theory: description of granular flow with multiple particle classes. Powder Technology, 2003, 138, 82-92.	4.2	55
44	Tube erosion modelling in a fluidised bed. Applied Mathematical Modelling, 2002, 26, 191-201.	4.2	11
45	Prediction of dust loss from conveyors using computational fluid dynamics modelling. Applied Mathematical Modelling, 2002, 26, 297-309.	4.2	20
46	Numerical analysis of the flow characteristics of rotary blood pump. Journal of Artificial Organs, 2001, 4, 54-60.	0.9	3
47	Computational aspects of premixing modelling. Nuclear Engineering and Design, 1999, 189, 179-189.	1.7	3
48	Numerical studies of multiphase mixing with application to some small-scale experiments. Nuclear Engineering and Design, 1996, 166, 135-145.	1.7	16