

# Peter J Witt

## List of Publications by Year in descending order

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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	The carbothermic route to magnesium. <i>Jom</i> , 2006, 58, 51-55.	1.9	69
2	An unequal granular temperature kinetic theory: description of granular flow with multiple particle classes. <i>Powder Technology</i> , 2003, 138, 82-92.	4.2	55
3	Numerical study of particle segregation in a coal beneficiation fluidized bed by a TFM&#x2013;DEM hybrid model: Influence of coal particle size and density. <i>Chemical Engineering Journal</i> , 2015, 260, 240-257.	12.7	51
4	CFD modeling of gas&#x2013;solid flow in an internally circulating fluidized bed. <i>Powder Technology</i> , 2012, 219, 78-85.	4.2	49
5	Numerical Modeling of Victorian Brown Coal Combustion in a Tangentially Fired Furnace. <i>Energy &amp; Fuels</i> , 2010, 24, 4971-4979.	5.1	39
6	CFD simulation of free surface flow and heat transfer of liquid slag on a spinning disc for a novel dry slag granulation process. <i>Progress in Computational Fluid Dynamics</i> , 2010, 10, 292.	0.2	38
7	Extension of the kinetic theory of granular flow to include dense quasi-static stresses. <i>Powder Technology</i> , 2010, 204, 11-20.	4.2	36
8	Simulation of an internally circulating fluidized bed using a multiphase particle-in-cell method. <i>Powder Technology</i> , 2015, 274, 123-134.	4.2	32
9	Towards a coupled multi-scale, multi-physics simulation framework for aluminium electrolysis. <i>Applied Mathematical Modelling</i> , 2017, 44, 3-24.	4.2	32
10	A CFD study of particle&#x2013;bubble collision efficiency in froth flotation. <i>Minerals Engineering</i> , 2019, 141, 105855.	4.3	27
11	Aerodynamics of an isolated slot-burner from a tangentially-fired boiler. <i>Applied Mathematical Modelling</i> , 2009, 33, 3756-3767.	4.2	26
12	Numerical investigation of solid circulation flux in an internally circulating fluidized bed with different gas distributor designs. <i>Powder Technology</i> , 2016, 301, 1103-1111.	4.2	24
13	Combustion of Predried Brown Coal in a Tangentially Fired Furnace under Different Operating Conditions. <i>Energy &amp; Fuels</i> , 2012, 26, 1044-1053.	5.1	23
14	The swirling flow structure in supersonic separators for natural gas dehydration. <i>RSC Advances</i> , 2014, 4, 52967-52972.	3.6	23
15	Numerical study of the effect of operation parameters on particle segregation in a coal beneficiation fluidized bed by a TFM&#x2013;DEM hybrid model. <i>Chemical Engineering Science</i> , 2015, 131, 256-270.	3.8	23
16	A hierarchical simulation methodology for rotary kilns including granular flow and heat transfer. <i>Minerals Engineering</i> , 2018, 119, 244-262.	4.3	22
17	Sensitivity analysis of particle contact parameters for DEM simulation in a rotating drum using response surface methodology. <i>Powder Technology</i> , 2020, 362, 604-614.	4.2	22
18	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. <i>Powder Technology</i> , 2020, 361, 87-98.	4.2	21

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19	Prediction of dust loss from conveyors using computational fluid dynamics modelling. Applied Mathematical Modelling, 2002, 26, 297-309.	4.2	20
20	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
21	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
22	Numerical Modeling of Flow Dynamics in The Aluminum Smelting Process: Comparison Between Air-Water and CO <sub>2</sub> -Cryolite Systems. Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science, 2017, 48, 1200-1216.	2.1	17
23	Numerical studies of multiphase mixing with application to some small-scale experiments. Nuclear Engineering and Design, 1996, 166, 135-145.	1.7	16
24	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
25	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
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	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
28	Modelling supersonic quenching of magnesium vapour in a Laval nozzle. Chemical Engineering Science, 2013, 87, 23-39.	3.8	14
29	Numerical analysis of size-induced particle segregation in rotating drums based on Eulerian continuum approach. Powder Technology, 2020, 376, 80-92.	4.2	14
30	Tube erosion modelling in a fluidised bed. Applied Mathematical Modelling, 2002, 26, 191-201.	4.2	11
31	Numerical simulation and validation of gas-particle rectangular jets in crossflow. Computers and Chemical Engineering, 2011, 35, 595-605.	3.8	11
32	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
33	Mitigation of scale formation in unbaffled stirred tanks-experimental assessment and quantification. Chemical Engineering Research and Design, 2019, 146, 11-21.	5.6	8
34	Numerical investigations into the effect of turbulence on collision efficiency in flotation. Minerals Engineering, 2021, 163, 106744.	4.3	7
35	Carbothermal Production of Magnesium: CSIRO's Magsonic <sup>™</sup> , Process. , 2012, , 31-35.		6
36	Numerical modelling of unsteady flow behaviour in the rectangular jets with oblique opening. AEJ - Alexandria Engineering Journal, 2016, 55, 2309-2320.	6.4	5

#	ARTICLE	IF	CITATIONS
37	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
38	Computational aspects of premixing modelling. Nuclear Engineering and Design, 1999, 189, 179-189.	1.7	3
39	Numerical analysis of the flow characteristics of rotary blood pump. Journal of Artificial Organs, 2001, 4, 54-60.	0.9	3
40	Numerical Simulations of Solid Circulation Characteristics in an Internally Circulating Elevated Fluidized Bed. Chemical Engineering and Technology, 2017, 40, 769-777.	1.5	3
41	Numerical investigation of solid mixing in a fluidized bed coating process. , 2013, , .		1
42	Numerical Modelling of Pulverised Coal Combustion. , 2017, , 1-35.		1
43	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
44	Preface to special issue of selected papers from CFD in the minerals and process industries. Applied Mathematical Modelling, 2011, 35, 2051.	4.2	0
45	Investigation of Slot-Burner Aerodynamics with Recessed-Type Nozzle Geometry. Fluids, 2016, 1, 10.	1.7	0
46	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
47	Numerical Modelling of Pulverised Coal Combustion. , 2016, , 1-36.		0
48	Carbothermal Production of Magnesium: Csiro's Magsonicâ„¢ Process. , 2016, , 127-131.		0