

# Paul W Cleary

## List of Publications by Citations

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239  
papers

9,147  
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52  
h-index

86  
g-index

247  
ext. papers

10,130  
ext. citations

3.5  
avg, IF

6.91  
L-index

#	Paper	IF	Citations
239	DEM modelling of industrial granular flows: 3D case studies and the effect of particle shape on hopper discharge. <i>Applied Mathematical Modelling</i> , <b>2002</b> , 26, 89-111	4.5	458
238	Conduction Modelling Using Smoothed Particle Hydrodynamics. <i>Journal of Computational Physics</i> , <b>1999</b> , 148, 227-264	4.1	389
237	Large scale industrial DEM modelling. <i>Engineering Computations</i> , <b>2004</b> , 21, 169-204	1.4	257
236	Modelling confined multi-material heat and mass flows using SPH. <i>Applied Mathematical Modelling</i> , <b>1998</b> , 22, 981-993	4.5	237
235	Predicting charge motion, power draw, segregation and wear in ball mills using discrete element methods. <i>Minerals Engineering</i> , <b>1998</b> , 11, 1061-1080	4.9	228
234	The contribution of DEM to the science of comminution. <i>Powder Technology</i> , <b>2013</b> , 248, 3-24	5.2	206
233	Large-scale landslide simulations: Global deformation, velocities and basal friction. <i>Journal of Geophysical Research</i> , <b>1995</b> , 100, 8267-8283		203
232	An investigation of the comparative behaviour of alternative contact force models during inelastic collisions. <i>Powder Technology</i> , <b>2013</b> , 233, 30-46	5.2	150
231	Recent advances in dem modelling of tumbling mills. <i>Minerals Engineering</i> , <b>2001</b> , 14, 1295-1319	4.9	150
230	Industrial particle flow modelling using discrete element method. <i>Engineering Computations</i> , <b>2009</b> , 26, 698-743	1.4	146
229	DEM prediction of industrial and geophysical particle flows. <i>Particuology</i> , <b>2010</b> , 8, 106-118	2.8	142
228	The packing properties of superellipsoids. <i>Europhysics Letters</i> , <b>2010</b> , 89, 34002	1.6	135
227	Dynamics of gas/solid fluidised beds with non-spherical particle geometry. <i>Chemical Engineering Science</i> , <b>2010</b> , 65, 1584-1596	4.4	134
226	The effect of particle shape on simple shear flows. <i>Powder Technology</i> , <b>2008</b> , 179, 144-163	5.2	131
225	Charge behaviour and power consumption in ball mills: sensitivity to mill operating conditions, liner geometry and charge composition. <i>International Journal of Mineral Processing</i> , <b>2001</b> , 63, 79-114		129
224	Prediction of screw conveyor performance using the Discrete Element Method (DEM). <i>Powder Technology</i> , <b>2009</b> , 193, 274-288	5.2	127
223	Smooth particle hydrodynamics: status and future potential. <i>Progress in Computational Fluid Dynamics</i> , <b>2007</b> , 7, 70	0.7	127

222	DEM simulation of industrial particle flows: case studies of dragline excavators, mixing in tumblers and centrifugal mills. <i>Powder Technology</i> , <b>2000</b> , 109, 83-104	5.2	124
221	Discrete-element modelling and smoothed particle hydrodynamics: potential in the environmental sciences. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2004</b> , 362, 2003-30	3	115
220	An investigation of the comparative behaviour of alternative contact force models during elastic collisions. <i>Powder Technology</i> , <b>2011</b> , 210, 189-197	5.2	114
219	The influence of particle shape on flow modes in pneumatic conveying. <i>Chemical Engineering Science</i> , <b>2011</b> , 66, 231-240	4.4	100
218	Comparison of DEM and experiment for a scale model SAG mill. <i>International Journal of Mineral Processing</i> , <b>2003</b> , 68, 129-165		98
217	Flow modelling in casting processes. <i>Applied Mathematical Modelling</i> , <b>2002</b> , 26, 171-190	4.5	97
216	How well do discrete element granular flow models capture the essentials of mixing processes?. <i>Applied Mathematical Modelling</i> , <b>1998</b> , 22, 995-1008	4.5	96
215	3D SPH flow predictions and validation for high pressure die casting of automotive components. <i>Applied Mathematical Modelling</i> , <b>2006</b> , 30, 1406-1427	4.5	96
214	Modelling comminution devices using DEM. <i>International Journal for Numerical and Analytical Methods in Geomechanics</i> , <b>2001</b> , 25, 83-105	4	96
213	Separation performance of double deck banana screens [Part 1: Flow and separation for different accelerations. <i>Minerals Engineering</i> , <b>2009</b> , 22, 1218-1229	4.9	94
212	Using SPH one-way coupled to DEM to model wet industrial banana screens. <i>Minerals Engineering</i> , <b>2011</b> , 24, 741-753	4.9	89
211	Self-lubrication for Long Runout Landslides: Examination by computer simulation. <i>Journal of Geophysical Research</i> , <b>1993</b> , 98, 21911-21924		86
210	Assessing mixing characteristics of particle-mixing and granulation devices. <i>Particuology</i> , <b>2008</b> , 6, 419-448	4.8	80
209	Effect of rock shapes on brittle fracture using Smoothed Particle Hydrodynamics. <i>Theoretical and Applied Fracture Mechanics</i> , <b>2010</b> , 53, 47-60	3.7	79
208	Analysis of stirred mill performance using DEM simulation: Part 1 [Media motion, energy consumption and collisional environment. <i>Minerals Engineering</i> , <b>2006</b> , 19, 1537-1550	4.9	78
207	Prediction of slurry transport in SAG mills using SPH fluid flow in a dynamic DEM based porous media. <i>Minerals Engineering</i> , <b>2006</b> , 19, 1517-1527	4.9	76
206	DEM modelling of non-spherical particle breakage and flow in an industrial scale cone crusher. <i>Minerals Engineering</i> , <b>2015</b> , 74, 112-122	4.9	75
205	Separation performance of double deck banana screens [Part 2: Quantitative predictions. <i>Minerals Engineering</i> , <b>2009</b> , 22, 1230-1244	4.9	72

204	Centrifugal mill charge motion and power draw: comparison of DEM predictions with experiment. <i>International Journal of Mineral Processing</i> , <b>2000</b> , 59, 131-148		72
203	Simulation of particle flows and breakage in crushers using DEM: Part 1 [Compression crushers. <i>Minerals Engineering</i> , <b>2015</b> , 74, 178-197	4.9	71
202	Granular flow during hopper discharge. <i>Physical Review E</i> , <b>2011</b> , 84, 011307	2.4	69
201	DEM prediction of particle flows in grinding processes. <i>International Journal for Numerical Methods in Fluids</i> , <b>2008</b> , 58, 319-353	1.9	68
200	Using DEM to model ore breakage within a pilot scale SAG mill. <i>Minerals Engineering</i> , <b>2004</b> , 17, 1117-1124	4.9	68
199	Novel applications of smoothed particle hydrodynamics (SPH) in metal forming. <i>Journal of Materials Processing Technology</i> , <b>2006</b> , 177, 41-48	5.3	65
198	Simulations of dolphin kick swimming using smoothed particle hydrodynamics. <i>Human Movement Science</i> , <b>2012</b> , 31, 604-19	2.4	64
197	Effect of screw design on hopper drawdown of spherical particles in a horizontal screw feeder. <i>Chemical Engineering Science</i> , <b>2011</b> , 66, 5585-5601	4.4	64
196	Testing the validity of the spherical DEM model in simulating real granular screening processes. <i>Chemical Engineering Science</i> , <b>2012</b> , 68, 215-226	4.4	61
195	Towards a virtual comminution machine. <i>Minerals Engineering</i> , <b>2008</b> , 21, 770-781	4.9	61
194	Prediction of coupled particle and fluid flows using DEM and SPH. <i>Minerals Engineering</i> , <b>2015</b> , 73, 85-99	4.9	60
193	Three-dimensional wave impact on a rigid structure using smoothed particle hydrodynamics. <i>International Journal for Numerical Methods in Fluids</i> , <b>2012</b> , 68, 1471-1496	1.9	58
192	Defining random loose packing for nonspherical grains. <i>Physical Review E</i> , <b>2011</b> , 83, 051305	2.4	56
191	Extension of SPH to predict feeding, freezing and defect creation in low pressure die casting. <i>Applied Mathematical Modelling</i> , <b>2010</b> , 34, 3189-3201	4.5	56
190	Predicting breakage and the evolution of rock size and shape distributions in Ag and SAG mills using DEM. <i>Minerals Engineering</i> , <b>2013</b> , 50-51, 132-139	4.9	54
189	Particulate mixing in a plough share mixer using DEM with realistic shaped particles. <i>Powder Technology</i> , <b>2013</b> , 248, 103-120	5.2	53
188	Granular Convection and Transport due to Horizontal Shaking. <i>Physical Review Letters</i> , <b>1997</b> , 79, 4574-4576	4.6	53
187	Bubbling and frothing liquids. <i>ACM Transactions on Graphics</i> , <b>2007</b> , 26, 97	7.6	51

186	DEM modelling of particulate flow in a screw feeder Model description. <i>Progress in Computational Fluid Dynamics</i> , <b>2007</b> , 7, 128	0.7	49
185	Analysis of stirred mill performance using DEM simulation: Part 2 [Coherent flow structures, liner stress and wear, mixing and transport. <i>Minerals Engineering</i> , <b>2006</b> , 19, 1551-1572	4.9	48
184	Investigating the relationships between peristaltic contraction and fluid transport in the human colon using Smoothed Particle Hydrodynamics. <i>Computers in Biology and Medicine</i> , <b>2012</b> , 42, 492-503	7	47
183	Short shots and industrial case studies: Understanding fluid flow and solidification in high pressure die casting. <i>Applied Mathematical Modelling</i> , <b>2010</b> , 34, 2018-2033	4.5	47
182	Ball motion, axial segregation and power consumption in a full scale two chamber cement mill. <i>Minerals Engineering</i> , <b>2009</b> , 22, 809-820	4.9	46
181	Comparisons of PEPT derived charge features in wet milling environments with a friction-adjusted DEM model. <i>Chemical Engineering Science</i> , <b>2013</b> , 97, 162-175	4.4	44
180	Understanding fine ore breakage in a laboratory scale ball mill using DEM. <i>Minerals Engineering</i> , <b>2011</b> , 24, 352-366	4.9	44
179	Raceway formation in laterally gas-driven particle beds. <i>Chemical Engineering Science</i> , <b>2012</b> , 80, 306-316	4.4	43
178	Insights from simulations into mechanisms for density segregation of granular mixtures in rotating cylinders. <i>Granular Matter</i> , <b>2011</b> , 13, 53-74	2.6	43
177	Comminution mechanisms, particle shape evolution and collision energy partitioning in tumbling mills. <i>Minerals Engineering</i> , <b>2016</b> , 86, 75-95	4.9	42
176	Modelling of industrial particle and multiphase flows. <i>Powder Technology</i> , <b>2017</b> , 314, 232-252	5.2	42
175	Analysis of cone crusher performance with changes in material properties and operating conditions using DEM. <i>Minerals Engineering</i> , <b>2017</b> , 100, 49-70	4.9	41
174	Prediction of 3D slurry flow within the grinding chamber and discharge from a pilot scale SAG mill. <i>Minerals Engineering</i> , <b>2012</b> , 39, 184-195	4.9	41
173	Peristaltic transport of a particulate suspension in the small intestine. <i>Applied Mathematical Modelling</i> , <b>2017</b> , 44, 143-159	4.5	39
172	High pressure die casting simulation using smoothed particle hydrodynamics. <i>International Journal of Cast Metals Research</i> , <b>2000</b> , 12, 335-355	1	39
171	Non-universal Voronoi cell shapes in amorphous ellipsoid packs. <i>Europhysics Letters</i> , <b>2015</b> , 111, 24002	1.6	38
170	Analysis of mixing in a Twin Cam mixer using smoothed particle hydrodynamics. <i>AIChE Journal</i> , <b>2008</b> , 54, 1987-1998	3.6	38
169	On elastic-plastic normal contact force models, with and without adhesion. <i>Powder Technology</i> , <b>2017</b> , 315, 339-346	5.2	37

168	Modelling of metal forging using SPH. <i>Applied Mathematical Modelling</i> , <b>2012</b> , 36, 3836-3855	4.5	37
167	Rogue wave impact on a tension leg platform: The effect of wave incidence angle and mooring line tension. <i>Ocean Engineering</i> , <b>2013</b> , 61, 123-138	3.9	36
166	Flow and mixing performance in helical ribbon mixers. <i>Chemical Engineering Science</i> , <b>2012</b> , 84, 382-398	4.4	36
165	Forces in piles of granular material: an analytic and 3D DEM study. <i>Granular Matter</i> , <b>2001</b> , 3, 165-176	2.6	36
164	Comparison of non-cohesive resolved and coarse grain DEM models for gas flow through particle beds. <i>Applied Mathematical Modelling</i> , <b>2014</b> , 38, 4197-4214	4.5	35
163	Comparative study by PEPT and DEM for flow and mixing in a ploughshare mixer. <i>Powder Technology</i> , <b>2012</b> , 228, 171-186	5.2	35
162	Modelling spray coating using a combined CFD-DEM and spherical harmonic formulation. <i>Chemical Engineering Science</i> , <b>2013</b> , 99, 141-160	4.4	35
161	Application of a mesh-free continuum method for simulation of rock caving processes. <i>International Journal of Rock Mechanics and Minings Sciences</i> , <b>2011</b> , 48, 703-711	6	35
160	Towards modelling of fluid flow and food breakage by the teeth in the oral cavity using smoothed particle hydrodynamics (SPH). <i>European Food Research and Technology</i> , <b>2014</b> , 238, 185-215	3.4	34
159	An investigation and optimization of the DLDS Elevator using Discrete Element Modeling. <i>Powder Technology</i> , <b>2009</b> , 193, 216-234	5.2	34
158	Challenges in computational modelling of food breakdown and flavour release. <i>Food and Function</i> , <b>2014</b> , 5, 2792-805	6.1	33
157	Computational Modeling of Food Oral Breakdown Using Smoothed Particle Hydrodynamics. <i>Journal of Texture Studies</i> , <b>2014</b> , 45, 97-109	3.6	33
156	Is media shape important for grinding performance in stirred mills?. <i>Minerals Engineering</i> , <b>2011</b> , 24, 138-151	4.9	33
155	Using DEM to compare the energy efficiency of pilot scale ball and tower mills. <i>Minerals Engineering</i> , <b>2009</b> , 22, 665-672	4.9	33
154	Comparison of SPH simulations of high pressure die casting with the experiments and VOF simulations of Schmid and Klein. <i>International Journal of Cast Metals Research</i> , <b>2000</b> , 12, 409-418	1	33
153	Temperature and strain rate effects in cold spray investigated by smoothed particle hydrodynamics. <i>Surface and Coatings Technology</i> , <b>2014</b> , 254, 121-130	4.4	32
152	Radial segregation of multi-component granular media in a rotating tumbler. <i>Granular Matter</i> , <b>2013</b> , 15, 705-724	2.6	31
151	A mesh-free approach for fracture modelling of gravity dams under earthquake. <i>International Journal of Fracture</i> , <b>2013</b> , 179, 9-33	2.3	31

150	Screw conveyor performance: comparison of discrete element modelling with laboratory experiments. <i>Progress in Computational Fluid Dynamics</i> , <b>2010</b> , 10, 327	0.7	31
149	Streak patterns in binary granular media in a rotating drum. <i>Applied Mathematical Modelling</i> , <b>2011</b> , 35, 1638-1646	4.5	30
148	Modelling the impact of dam failure scenarios on flood inundation using SPH. <i>Applied Mathematical Modelling</i> , <b>2014</b> , 38, 5515-5534	4.5	29
147	Quasi-static fall of planar granular columns: comparison of 2D and 3D discrete element modelling with laboratory experiments. <i>Geomechanics and Geoengineering</i> , <b>2009</b> , 4, 55-77	1.4	29
146	Prediction of mill liner shape evolution and changing operational performance during the liner life cycle: Case study of a Hicom mill. <i>International Journal for Numerical Methods in Engineering</i> , <b>2010</b> , 81, 1157-1179	2.4	29
145	Simulation of particle flows and breakage in crushers using DEM: Part 2 □ Impact crushers. <i>Minerals Engineering</i> , <b>2015</b> , 74, 163-177	4.9	28
144	Prediction of industrial, biophysical and extreme geophysical flows using particle methods. <i>Engineering Computations</i> , <b>2013</b> , 30, 157-196	1.4	27
143	Elastoplastic deformation during projectile□wall collision. <i>Applied Mathematical Modelling</i> , <b>2010</b> , 34, 266-283	4.5	27
142	Axial transport in dry ball mills. <i>Applied Mathematical Modelling</i> , <b>2006</b> , 30, 1343-1355	4.5	27
141	Segregation of combined size and density varying binary granular mixtures in a slowly rotating tumbler. <i>Granular Matter</i> , <b>2014</b> , 16, 711-732	2.6	26
140	Simulation of suspension of solids in a liquid in a mixing tank using SPH and comparison with physical modelling experiments. <i>Progress in Computational Fluid Dynamics</i> , <b>2007</b> , 7, 91	0.7	26
139	Combined DEM and SPH simulation of overflow ball mill discharge and trommel flow. <i>Minerals Engineering</i> , <b>2017</b> , 108, 93-108	4.9	24
138	Computational prediction of performance for a full scale Isamill: Part 1 □Media motion and energy utilisation in a dry mill. <i>Minerals Engineering</i> , <b>2015</b> , 79, 220-238	4.9	24
137	Flow analysis and validation of numerical modelling for a thin walled high pressure die casting using SPH. <i>Computational Particle Mechanics</i> , <b>2014</b> , 1, 229-243	3	24
136	Dust modelling using a combined CFD and discrete element formulation. <i>International Journal for Numerical Methods in Fluids</i> , <b>2013</b> , 72, 528-549	1.9	24
135	The Potential for SPH Modelling of Solid Deformation and Fracture. <i>IUTAM Symposium on Cellular, Molecular and Tissue Mechanics</i> , <b>2008</b> , 287-296	0.3	24
134	Modelling comminution patterns within a pilot scale AG/SAG mill. <i>Minerals Engineering</i> , <b>2006</b> , 19, 1505-1516	4.5	24
133	A multiscale method for including fine particle effects in DEM models of grinding mills. <i>Minerals Engineering</i> , <b>2015</b> , 84, 88-99	4.9	23

132	Slurry flow in a tower mill. <i>Minerals Engineering</i> , <b>2011</b> , 24, 152-159	4.9	23
131	The influence of mooring system in rogue wave impact on an offshore platform. <i>Ocean Engineering</i> , <b>2016</b> , 115, 168-181	3.9	22
130	The effect of particle shape on mixing in a high shear mixer. <i>Computational Particle Mechanics</i> , <b>2016</b> , 3, 477-504	3	21
129	SPH modelling of fluid at the grain level in a porous medium. <i>Applied Mathematical Modelling</i> , <b>2011</b> , 35, 1666-1675	4.5	21
128	Validation of DEM prediction for granular avalanches on irregular terrain. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2015</b> , 120, 1724-1742	3.8	20
127	The Role of the Hand During Freestyle Swimming. <i>Journal of Biomechanical Engineering</i> , <b>2015</b> , 137, 11100-11107	4.7	20
126	Investigating mixing and emptying for aqueous liquid content from the stomach using a coupled biomechanical-SPH model. <i>Food and Function</i> , <b>2018</b> , 9, 3202-3219	6.1	20
125	The relationship between charge shape characteristics and fill level and lifter height for a SAG mill. <i>Minerals Engineering</i> , <b>2015</b> , 83, 19-32	4.9	19
124	Effect of particle cohesion on flow and separation in industrial vibrating screens. <i>Minerals Engineering</i> , <b>2018</b> , 119, 191-204	4.9	19
123	Accuracy analysis of SPH for flow in a model extruder with a kneading element. <i>Chemical Engineering Science</i> , <b>2018</b> , 187, 256-268	4.4	19
122	Segregation due to particle shape of a granular mixture in a slowly rotating tumbler. <i>Granular Matter</i> , <b>2017</b> , 19, 1	2.6	18
121	An efficient computational approach to characterize DSC-MRI signals arising from three-dimensional heterogeneous tissue structures. <i>PLoS ONE</i> , <b>2014</b> , 9, e84764	3.7	18
120	Incremental damage and particle size reduction in a pilot SAG mill: DEM breakage method extension and validation. <i>Minerals Engineering</i> , <b>2018</b> , 128, 56-68	4.9	18
119	Three-dimensional modelling of coupled flow dynamics, heat transfer and residual stress generation in arc welding processes using the mesh-free SPH method. <i>Journal of Computational Science</i> , <b>2016</b> , 16, 200-216	3.4	17
118	Application of Smoothed Particle Hydrodynamics for modelling gated spillway flows. <i>Applied Mathematical Modelling</i> , <b>2014</b> , 38, 4308-4322	4.5	17
117	Effect of operating condition changes on the collisional environment in a SAG mill. <i>Minerals Engineering</i> , <b>2019</b> , 132, 297-315	4.9	17
116	Evaluation of Accuracy and Stability of the Classical SPH Method Under Uniaxial Compression. <i>Journal of Scientific Computing</i> , <b>2015</b> , 64, 858-897	2.3	16
115	The influence of cam geometry and operating conditions on chaotic mixing of viscous fluids in a twin cam mixer. <i>AIChE Journal</i> , <b>2011</b> , 57, 581-598	3.6	16



114	Effect of rock shape representation in DEM on flow and energy utilisation in a pilot SAG mill. <i>Computational Particle Mechanics</i> , <b>2019</b> , 6, 461-477	3	15
113	How to account for operating condition variability when predicting liner operating life with DEM □ A case study. <i>Minerals Engineering</i> , <b>2015</b> , 73, 53-68	4.9	15
112	The effect of particle shape on the packed bed effective thermal conductivity based on DEM with polyhedral particles on the GPU. <i>Chemical Engineering Science</i> , <b>2020</b> , 219, 115584	4.4	15
111	A coupled biomechanical-Smoothed Particle Hydrodynamics model for predicting the loading on the body during elite platform diving. <i>Applied Mathematical Modelling</i> , <b>2016</b> , 40, 3812-3831	4.5	15
110	Modelling highly deformable metal extrusion using SPH. <i>Computational Particle Mechanics</i> , <b>2015</b> , 2, 19-38		15
109	Modelling of metal flow and oxidation during furnace emptying using smoothed particle hydrodynamics. <i>Journal of Materials Processing Technology</i> , <b>2009</b> , 209, 3396-3407	5.3	15
108	Using distributed contacts in DEM. <i>Applied Mathematical Modelling</i> , <b>2011</b> , 35, 1904-1914	4.5	15
107	Optimisation of ingot casting wheel design using SPH simulations. <i>Progress in Computational Fluid Dynamics</i> , <b>2007</b> , 7, 101	0.7	15
106	Three-dimensional smoothed particle hydrodynamics simulation of high pressure die casting of light metal components. <i>Journal of Light Metals</i> , <b>2002</b> , 2, 169-183		15
105	Toward a realistic three-body problem. <i>Astrophysical Journal</i> , <b>1990</b> , 349, 150	4.7	15
104	Using two-way coupled DEM-SPH to model an industrial scale Stirred Media Detritor. <i>Minerals Engineering</i> , <b>2019</b> , 137, 259-276	4.9	14
103	Computational prediction of performance for a full scale Isamill: Part 2 □Wet models of charge and slurry transport. <i>Minerals Engineering</i> , <b>2015</b> , 79, 239-260	4.9	14
102	A hierarchical simulation methodology for rotary kilns including granular flow and heat transfer. <i>Minerals Engineering</i> , <b>2018</b> , 119, 244-262	4.9	14
101	Forces during front crawl swimming at different stroke rates. <i>Sports Engineering</i> , <b>2018</b> , 21, 63-73	1.4	14
100	Using smooth particle hydrodynamics to investigate femoral cortical bone remodelling at the Haversian level. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , <b>2013</b> , 29, 129-43	2.6	14
99	Novel application of DEM to modelling comminution processes. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2010</b> , 10, 012099	0.4	14
98	Combining digital terrain and surface textures with large-scale particle-based computational models to predict dam collapse and landslide events. <i>International Journal of Image and Data Fusion</i> , <b>2010</b> , 1, 337-357	1.8	14
97	Vibration-induced arching in a deep granular bed. <i>Granular Matter</i> , <b>2009</b> , 11, 345-364	2.6	14

96	Bubbling and frothing liquids <b>2007</b> ,		14
95	Using DEM to understand scale-up for a HICOM <sup>®</sup> mill. <i>Minerals Engineering</i> , <b>2016</b> , 92, 86-109	4.9	14
94	A scenario-based risk framework for determining consequences of different failure modes of earth dams. <i>Natural Hazards</i> , <b>2015</b> , 75, 1489-1530	3	13
93	Pitching effects of buoyancy during four competitive swimming strokes. <i>Journal of Applied Biomechanics</i> , <b>2014</b> , 30, 609-18	1.2	13
92	Modelling rock fracturing caused by magma intrusion using the smoothed particle hydrodynamics method. <i>Computational Geosciences</i> , <b>2014</b> , 18, 927-947	2.7	13
91	Particle methods for modelling in mineral processing. <i>International Journal of Computational Fluid Dynamics</i> , <b>2009</b> , 23, 137-146	1.2	13
90	Three dimensional modelling of high pressure die casting. <i>International Journal of Cast Metals Research</i> , <b>2000</b> , 12, 357-365	1	13
89	A new approach to boiling simulation using a discrete particle based method. <i>Computers and Graphics</i> , <b>2015</b> , 53, 118-126	1.8	12
88	Comparison of permeability of model porous media between SPH and LB. <i>Progress in Computational Fluid Dynamics</i> , <b>2012</b> , 12, 176	0.7	12
87	The conditions for sampling of particulate materials to be unbiased Investigation using granular flow modelling. <i>Minerals Engineering</i> , <b>1999</b> , 12, 1101-1118	4.9	12
86	Workspace: A workflow platform for supporting development and deployment of modelling and simulation. <i>Mathematics and Computers in Simulation</i> , <b>2020</b> , 175, 25-61	3.3	12
85	Effect of particle shape on structure of the charge and nature of energy utilisation in a SAG mill. <i>Minerals Engineering</i> , <b>2019</b> , 132, 48-68	4.9	12
84	Development of models relating charge shape and power draw to SAG mill operating parameters and their use in devising mill operating strategies to account for liner wear. <i>Minerals Engineering</i> , <b>2018</b> , 117, 42-62	4.9	12
83	Multiscale model for predicting shear zone structure and permeability in deforming rock. <i>Computational Particle Mechanics</i> , <b>2016</b> , 3, 179-199	3	11
82	Comparison of Kinetic Theory and Discrete Element Schemes for Modelling Granular Couette Flows. <i>Journal of Computational Physics</i> , <b>1999</b> , 155, 1-25	4.1	11
81	Quantitative structural analysis of simulated granular packings of non-spherical particles. <i>Granular Matter</i> , <b>2014</b> , 16, 457-468	2.6	10
80	Extreme wave interaction with a floating oil rig: prediction using SPH. <i>Progress in Computational Fluid Dynamics</i> , <b>2009</b> , 9, 332	0.7	10
79	Effect of lobe pumping on human albumin: development of a lobe pump simulator using smoothed particle hydrodynamics. <i>Biotechnology and Applied Biochemistry</i> , <b>2006</b> , 43, 113-20	2.8	10

78	Dynamic simulation of flat water kayaking using a coupled biomechanical-smoothed particle hydrodynamics model. <i>Human Movement Science</i> , <b>2019</b> , 64, 252-273	2.4	10
77	Inclusion of incremental damage breakage of particles and slurry rheology into a particle scale multiphase model of a SAG mill. <i>Minerals Engineering</i> , <b>2018</b> , 128, 92-105	4.9	10
76	Modelling food digestion <b>2015</b> , 255-305		9
75	Effect of liner design on performance of a HICOM mill over the predicted liner life cycle. <i>International Journal of Mineral Processing</i> , <b>2015</b> , 134, 11-22		9
74	Studying the effects of asymmetry on freestyle swimming using smoothed particle hydrodynamics. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , <b>2020</b> , 23, 271-284	2.1	9
73	Prediction of fluid flow through and jet formation from a high pressure nozzle using Smoothed Particle Hydrodynamics. <i>Chemical Engineering Science</i> , <b>2018</b> , 178, 12-26	4.4	9
72	Understanding factors leading to bias for falling-stream cutters using discrete element modelling with non-spherical particles. <i>Chemical Engineering Science</i> , <b>2008</b> , 63, 5681-5695	4.4	9
71	Fundamental relations between particle shape and the properties of granular packings <b>2009</b> ,		8
70	Dynamic simulation of dam-break scenarios for risk analysis and disaster management. <i>International Journal of Image and Data Fusion</i> , <b>2012</b> , 3, 333-363	1.8	8
69	Modeling of cast systems using smoothed-particle hydrodynamics. <i>Jom</i> , <b>2004</b> , 56, 67-70	2.1	8
68	Lyapunov exponents as a measure of the size of chaotic regions. <i>Journal of Mathematical Physics</i> , <b>1989</b> , 30, 689-695	1.2	8
67	A coupled discrete droplet and SPH model for predicting spray impingement onto surfaces and into fluid pools. <i>Applied Mathematical Modelling</i> , <b>2019</b> , 69, 301-329	4.5	8
66	Effect of geometry and fill level on the transport and mixing behaviour of a co-rotating twin screw extruder. <i>Computational Particle Mechanics</i> , <b>2019</b> , 6, 227-247	3	8
65	Novel application of the mesh-free SPH method for modelling thermo-mechanical responses in arc welding. <i>International Journal of Mechanics and Materials in Design</i> , <b>2015</b> , 11, 337-355	2.5	7
64	Advanced comminution modelling: Part 1 [Crushers. <i>Applied Mathematical Modelling</i> , <b>2020</b> , 88, 238-265	4.5	7
63	Discrete element modelling of a bucket elevator head pulley transition zone. <i>Granular Matter</i> , <b>2011</b> , 13, 169-174	2.6	7
62	The effect of rotational shear on granular discharge rates. <i>Physics of Fluids</i> , <b>2010</b> , 22, 071701	4.4	7
61	Three dimensional modelling of lava flow using Smoothed Particle Hydrodynamics. <i>Applied Mathematical Modelling</i> , <b>2011</b> , 35, 3021-3035	4.5	7

60	Effect of rotor blade angle and clearance on blood flow through a non-pulsatile, axial, heart pump. <i>Progress in Computational Fluid Dynamics</i> , <b>2010</b> , 10, 300	0.7	7
59	Evaluation of cross-stream sample cutters using three-dimensional discrete element modelling. <i>Chemical Engineering Science</i> , <b>2008</b> , 63, 2980-2993	4.4	7
58	Simulation of high pressure die filling of a moderately complex industrial object using smoothed particle hydrodynamics. <i>International Journal of Cast Metals Research</i> , <b>2005</b> , 18, 81-92	1	7
57	A Coupled DEM/SPH Computational Model to Simulate Microstructure Evolution in Ti-6Al-4V Laser Powder Bed Fusion Processes. <i>Metals</i> , <b>2021</b> , 11, 858	2.3	7
56	SPH method applied to compression of solid materials for a variety of loading conditions. <i>Applied Mathematical Modelling</i> , <b>2017</b> , 44, 72-90	4.5	6
55	De-mixing of binary particle mixtures during unloading of a V-blender. <i>Chemical Engineering Science</i> , <b>2013</b> , 94, 93-107	4.4	6
54	Interpreting manometric signals for propulsion in the gut. <i>Computational Particle Mechanics</i> , <b>2015</b> , 2, 273-282	3	6
53	Large Scale Simulation of Industrial, Engineering and Geophysical Flows Using Particle Methods. <i>Computational Methods in Applied Sciences (Springer)</i> , <b>2011</b> , 89-111	0.4	6
52	Simulating Brittle Fracture of Rocks using Smoothed Particle Hydrodynamics <b>2009</b> ,		6
51	Axial pressure distribution, flow behaviour and breakage within a HPGR investigation using DEM. <i>Minerals Engineering</i> , <b>2021</b> , 163, 106769	4.9	6
50	Application of SPH to Single and Multiphase Geophysical, Biophysical and Industrial Fluid Flows. <i>International Journal of Computational Fluid Dynamics</i> , <b>2021</b> , 35, 22-78	1.2	6
49	Sampling of cohesive bulk materials by falling stream cutters. <i>Chemical Engineering Science</i> , <b>2011</b> , 66, 3991-4003	4.4	5
48	Density segregation of granular material in a rotating cylindrical tumbler <b>2008</b> ,		5
47	A MULTISCALE METHOD FOR GEOPHYSICAL FLOW EVENTS. <i>International Journal for Multiscale Computational Engineering</i> , <b>2012</b> , 10, 375-390	2.4	5
46	Periodic orbits in the Schwarzschild galactic potential. <i>Astrophysical Journal</i> , <b>1989</b> , 337, 108	4.7	5
45	Particulate and water mixing in the feed box for a screen. <i>Minerals Engineering</i> , <b>2017</b> , 109, 109-125	4.9	4
44	Effect of port configuration on discharge from a HICOM mill. <i>Minerals Engineering</i> , <b>2014</b> , 69, 113-119	4.9	4
43	Analysis of Vezin sampler performance. <i>Chemical Engineering Science</i> , <b>2011</b> , 66, 2385-2397	4.4	4

42	Validation of SPH predictions of oxide generated during Al melt transfer. <i>Progress in Computational Fluid Dynamics</i> , <b>2010</b> , 10, 319	0.7	4
41	Computational Studies of the Locomotion of Dolphins and Sharks Using Smoothed Particle Hydrodynamics. <i>IFMBE Proceedings</i> , <b>2010</b> , 22-25	0.2	4
40	Prediction of slurry grinding due to media and coarse rock interactions in a 3D pilot SAG mill using a coupled DEM + SPH model. <i>Minerals Engineering</i> , <b>2020</b> , 159, 106614	4.9	4
39	The influence of faceted particle shapes on material dynamics in screw conveying. <i>Chemical Engineering Science</i> , <b>2021</b> , 243, 116654	4.4	4
38	How arterial pressures affect the consideration of internal carotid artery angle as a risk factor for carotid atherosclerotic disease. <i>Progress in Computational Fluid Dynamics</i> , <b>2015</b> , 15, 87	0.7	3
37	Unitary stick-slip motion in granular beds <b>2013</b> ,		3
36	Modelling hypervelocity impact fracture of ceramic panels using a mesh-free method. <i>IOP Conference Series: Materials Science and Engineering</i> , <b>2010</b> , 10, 012058	0.4	3
35	Nonexistence and existence of various order integrals for two- and three-dimensional polynomial potentials. <i>Journal of Mathematical Physics</i> , <b>1990</b> , 31, 1351-1355	1.2	3
34	Chaos and the topology of orbits. <i>Physical Review A</i> , <b>1990</b> , 41, 2924-2931	2.6	3
33	Application of a mesh-free method to modelling brittle fracture and fragmentation of a concrete column during projectile impact. <i>Computers and Concrete</i> , <b>2015</b> , 16, 933-961		3
32	Improving Understanding of Human Swimming Using Smoothed Particle Hydrodynamics. <i>IFMBE Proceedings</i> , <b>2010</b> , 174-177	0.2	3
31	A particle-based modelling approach to food processing operations. <i>Food and Bioprocess Processing</i> , <b>2021</b> , 127, 14-57	4.9	3
30	Geometric analysis of cone crusher liner shape: Geometric measures, methods for their calculation and linkage to crusher behaviour. <i>Minerals Engineering</i> , <b>2021</b> , 160, 106701	4.9	3
29	Coupled gas-particulate discharge from a bucket elevator. <i>Powder Technology</i> , <b>2017</b> , 314, 203-217	5.2	2
28	Dive Mechanic: Bringing 3D virtual experimentation using biomechanical modelling to elite level diving with the Workspace workflow engine. <i>Mathematics and Computers in Simulation</i> , <b>2020</b> , 175, 202-217	3.7	2
27	Understanding performance variation of a HICOM mill with operating conditions and media attributes. <i>International Journal of Mineral Processing</i> , <b>2016</b> , 155, 13-31		2
26	Fluid flow in a spiral device used for irradiation of biological fluids. <i>Biotechnology Progress</i> , <b>2013</b> , 29, 359-67	2.8	2
25	SPH Modeling of the Effect of Crucible Tipping Rate on Oxide Formation. <i>Materials Science Forum</i> , <b>2011</b> , 693, 54-62	0.4	2

24	Granular flows: fundamentals and applications. <i>World Scientific Lecture Notes in Complex Systems</i> , <b>2007</b> , 141-168		2
23	Integrability and orbits in quartic polynomial potentials. <i>Journal of Mathematical Physics</i> , <b>1989</b> , 30, 2214-2225		2
22	Strain Reduction between Cortical Pore Structures Leads to Bone Weakening and Fracture Susceptibility: An Investigation Using Smooth Particle Hydrodynamics. <i>IFMBE Proceedings</i> , <b>2010</b> , 784-787 <sup>0.2</sup>		2
21	Advanced comminution modelling: Part 2 - Mills. <i>Applied Mathematical Modelling</i> , <b>2020</b> , 88, 307-348	4.5	2
20	Collisional SPH: A method to model frictional collisions with SPH. <i>Applied Mathematical Modelling</i> , <b>2021</b> , 94, 13-35	4.5	2
19	Modeling Food Digestion in the Oral Cavity <b>2016</b> ,		2
18	Progress towards a Complete Model of Metal Additive Manufacturing. <i>Materials Science Forum</i> , <b>2016</b> , 1031-1038	0.4	2
17	A Coupled Biomechanical-Smoothed Particle Hydrodynamics Model for Horse Racing Tracks.. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2022</b> , 10, 766748	5.8	2
16	Dispersion of finite-size particles probing inhomogeneous and anisotropic turbulence. <i>European Journal of Mechanics, B/Fluids</i> , <b>2020</b> , 84, 93-109	2.4	1
15	The role of inter-grain friction in determining the mechanical and structural properties of superellipsoid packings <b>2013</b> ,		1
14	Application of SPH for Modelling Heat Transfer and Residual Stress Generation in Arc Welding. <i>Materials Science Forum</i> , <b>2010</b> , 654-656, 2751-2754	0.4	1
13	Computational modelling of free surface flows for offshore application. <i>Marine Systems and Ocean Technology</i> , <b>2007</b> , 3, 113-122	1.3	1
12	Landslide Modelling on Real Topography <b>2002</b> , 355		1
11	Elastoplastic frictional collisions with Collisional-SPH. <i>Tribology International</i> , <b>2022</b> , 168, 107438	4.9	1
10	Chromitite layers indicate the existence of large, long-lived, and entirely molten magma chambers.. <i>Scientific Reports</i> , <b>2022</b> , 12, 4092	4.9	1
9	Predicting Rebound of Ellipsoidal Granules Using SPH. <i>Lecture Notes in Mechanical Engineering</i> , <b>2021</b> , 673-691	0.4	0
8	Developments in the Use of DEM as a Tool for Improving the Design and Operation of Industrial Granulation Processes <b>2002</b> , 397		
7	Large Scale Industrial DEM Modeling <b>2002</b> , 361		

- 6 Orbits and chaos in dynamical systems. *Bulletin of the Australian Mathematical Society*, **1988**, 37, 477-478. 0.4
- 5 Integrability of Motions in Galactic Potentials. *Publications of the Astronomical Society of Australia*, **1986**, 6, 453-458 5.5
- 4 Combining Statistical Design with Deterministic Modelling to Assess the Effect of Site-Specific Factors on the Extent of Landslides. *Rock Mechanics and Rock Engineering*, 1 5.7
- 3 3-Dimensional SPH Simulations of High Pressure Die Casting **2003**, 179-184
- 2 Implications for Experimental Design from Numerical Modelling of Natural Convective Heat Transfer **1993**, 839-846
- 1 From discrete element simulation data to process insights. *EPJ Web of Conferences*, **2021**, 249, 15001 0.3