Nick Croft

List of Publications by Year
in descending order

62 papers	943 citations	471509 17 h-index	501196 28 g-index
63 all docs	63 docs citations	63 times ranked	891 citing authors

#	Article	IF	Citations
1	Heap Leaching: Modelling and Forecasting Using CFD Technology. Minerals (Basel, Switzerland), 2018, 8, 9.	2.0	15
2	Computational prediction of pressure change in the vicinity of tidal stream turbines and the consequences for fish survival rate. Renewable Energy, 2017, 101, 1141-1156.	8.9	22
3	An enhanced disk averaged CFD model for the simulation of horizontal axis tidal turbines. Renewable Energy, 2017, 101, 67-81.	8.9	34
4	An evaluation of sampling methods and supporting techniques for tackling lead in drinking water in Alberta Province. Journal of Water Supply: Research and Technology - AQUA, 2016, 65, 373-383.	1.4	6
5	An investigation of micro-mechanisms in hydrogen induced cracking in nickel-based superalloy 718. Journal of Alloys and Compounds, 2016, 664, 664-681.	5.5	83
6	Modeling the hydrodynamics of heap leaching in sub-zero temperatures. Minerals Engineering, 2016, 90, 77-88.	4.3	23
7	Computational Fluid Dynamics and Visualisation of Coastal Flows in Tidal Channels Supporting Ocean Energy Development. Energies, 2015, 8, 5997-6012.	3.1	10
8	Multiscale multiphysics model for hydrogen embrittlement in polycrystalline nickel. Journal of Alloys and Compounds, 2015, 645, S500-S504.	5.5	21
9	Modelling the influence of microstructural morphology and triple junctions on hydrogen transport in nanopolycrystalline nickel. Composites Part B: Engineering, 2015, 75, 104-118.	12.0	14
10	Coupled macroscale-microscale model for hydrogen embrittlement in polycrystalline materials. International Journal of Hydrogen Energy, 2015, 40, 2882-2889.	7.1	13
11	Meso-microstructural computational simulation of the hydrogen permeation test to calculate intergranular, grain boundary and effective diffusivities. Journal of Alloys and Compounds, 2015, 645, S247-S251.	5.5	14
12	Multi-phase modelling of intergranular hydrogen segregation/trapping for hydrogen embrittlement. International Journal of Hydrogen Energy, 2015, 40, 15105-15123.	7.1	34
13	Performance assessment of a vertical axis turbine in a marine current flume tank and CFD modelling. International Journal of Marine Energy, 2015, 12, 35-45.	1.8	4
14	Optimization of a CFD â€“ Heap leach model and sensitivity analysis of process operation. Minerals Engineering, 2014, 63, 57-64.	4.3	14
15	Influence of grain boundary misorientation on hydrogen embrittlement in bi-crystal nickel. International Journal of Hydrogen Energy, 2014, 39, 20671-20688.	7.1	36
16	Aspects of tidal stream turbine modelling in the natural environment using a coupled BEMâ€“CFD model. International Journal of Marine Energy, 2014, 7, 20-42.	1.8	31
17	Finite element microstructural homogenization techniques and intergranular, intragranular microstructural effects on effective diffusion coefficient of heterogeneous polycrystalline composite media. Composite Structures, 2014, 108, 555-564.	5.8	23
18	Comparison of underwater background noise during Spring and Neap tide in a high tidal current site: Ramsey Sound. Proceedings of Meetings on Acoustics, 2014, , .	0.3	1

#	Article	IF	Citations
19	Computational Modelling of Metallurgical Processes: Achievements and Challenges. , 2014, , 357-366.		0
20	Computational Modelling of Metallurgical Processes: Achievements and Challenges. , 2014, , 359-366.		1
21	Incorporating dust lift-off into a CFD model of a blast furnace gravity dust-catcher. Applied Mathematical Modelling, 2013, 37, 7891-7904.	4.2	7
22	Benchmark experiments for simulations of a vertical axis wind turbine. Applied Energy, 2013, 111, 1183-1194.	10.1	23
23	Complex free surface flows in centrifugal casting: Computational modelling and validation experiments. Computers and Fluids, 2013, 82, 63-72.	2.5	19
24	Development of a radial ventricular assist device using numerical predictions and experimental haemolysis. Medical Engineering and Physics, 2013, 35, 1197-1203.	1.7	5
25	A CFD model for the prediction of haemolysis in micro axial left ventricular assist devices. Applied Mathematical Modelling, 2013, 37, 4199-4207.	4.2	18
26	Simulations technique for the design of a vertical axis wind turbine device with experimental validation. Applied Energy, 2013, 111, 1195-1203.	10.1	45
27	Simulation based aerosol can design under pressure and buckling loads and comparison with experimental trials. Materials & Design, 2013, 52, 214-224.	5.1	3
28	Performance comparison of a single and triple tangential inlet gas separation cyclone: A CFD Study. Powder Technology, 2013, 235, 520-531.	4.2	60
29	A coupled blade element momentum â€“ Computational fluid dynamics model for evaluating tidal stream turbine performance. Applied Mathematical Modelling, 2013, 37, 3006-3020.	4.2	76
30	Modelling and validation: Casting of Al and TiAl alloys in gravity and centrifugal casting processes. Applied Mathematical Modelling, 2013, 37, 7633-7643.	4.2	31
31	Performance comparison of a blast furnace gravity dust-catcher vs. tangential triple inlet gas separation cyclone using computational fluid dynamics. Separation and Purification Technology, 2013, 115, 205-215.	7.9	15
32	Visualization of flow past a marine turbine: the information-assisted search for sustainable energy. Computing and Visualization in Science, 2013, 16, 89-103.	1.2	1
33	Geometry optimisation of a gravity dust-catcher using computational fluid dynamics simulation. Chemical Engineering and Processing: Process Intensification, 2012, 62, 137-144.	3.6	7
34	Mesh-Driven Vector Field Clustering and Visualization: An Image-Based Approach. IEEE Transactions on Visualization and Computer Graphics, 2012, 18, 283-298.	4.4	19
35	Automatic Stream Surface Seeding: A Feature Centered Approach. Computer Graphics Forum, 2012, 31, 1095-1104.	3.0	24
36	Level-set method for the modelling of liquid bridge formation and break-up. Computers and Fluids, 2011, 40, 42-51.	2.5	9

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37	Numerical simulation of dynamic contact angle using a force based formulation. Journal of Non-Newtonian Fluid Mechanics, 2011, 166, 900-907.	2.4	15
38	Tidal turbine deployment in the Bristol Channel: a case study. Proceedings of Institution of Civil Engineers: Energy, 2010, 163, 93-105.	0.6	14
39	A mixed Eulerianâ€“Lagrangian method for modelling metal extrusion processes. Computer Methods in Applied Mechanics and Engineering, 2010, 199, 2123-2134.	6.6	9
40	Combined BEM-CFD Modelling of Tidal Stream Turbines using Site Data. Renewable Energy and Power Quality Journal, 2010, 1, 1560-1565.	0.2	6
41	Multi-component free surface flows and rotating devices in the context of minerals processing. International Journal of Computational Fluid Dynamics, 2009, 23, 93-107.	1.2	2
42	CFD analysis of an induration cooler on an iron ore grate-kiln pelletising process. Minerals Engineering, 2009, 22, 859-873.	4.3	12
43	A coupled finite volume method for the computational modelling of mould filling in very complex geometries. Computers and Fluids, 2008, 37, 170-180.	2.5	16
44	A twoâ€dimensional prototype multiâ€physics model of the right ventricle of the heart. International Journal for Numerical Methods in Fluids, 2008, 57, 583-600.	1.6	2
45	A coupled finite volume method for the solution of flow processes on complex geometries. International Journal for Numerical Methods in Fluids, 2007, 53, 81-104.	1.6	6
46	An alternative mixed Eulerian Lagrangian approach to high speed collision between solid structures on parallel clusters. Advances in Engineering Software, 2007, 38, 244-255.	3.8	4
47	Computational modelling of bubbles, droplets and particles in metals reduction and refining. Applied Mathematical Modelling, 2006, 30, 1445-1458.	4.2	20
48	A group based solution strategy for multi-physics simulations in parallel. Applied Mathematical Modelling, 2006, 30, 656-674.	4.2	4
49	Computational modeling of reactive multi-phase flows in porous media: Applications to metals extraction and environmental recovery processes. Minerals Engineering, 2006, 19, 1098-1108.	4.3	37
50	Assessing the Scalability of Multiphysics Tools for Modeling Solidification and Melting Processes on Parallel Clusters. International Journal of High Performance Computing Applications, 2005, 19, 1-27.	3.7	12
51	Computational modelling of metal extrusion and forging processes. Journal of Materials Processing Technology, 2002, 125-126, 573-582.	6.3	14
52	Parallel Performance in Multi-physics Simulation. Lecture Notes in Computer Science, 2002, , 806-815.	1.3	2
53	Parallel Computational Fluid Dynamics: Not without its Challenges. , 0, , .		1
54	Computational Modelling of Thermal-Fluid-Structure Interaction Processes. Computational Science, Engineering and Technology Series, 0, , 111-126.	0.2	1

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55	Using Mixed Discretisation Schemes in Multi-Physics Simulation. Computational Science, Engineering and Technology Series, 0, , 309-324.	0.2	1
56	Dynamic Fluid Structure Interaction in Parallel: A Challenge for Scalability. Computational Science, Engineering and Technology Series, 0, , 329-350.	0.2	4
57	Computational Modelling of Flows through Rotating Systems. Computational Science, Engineering and Technology Series, 0, , 131-148.	0.2	0
58	Issues in the Design of Computational Software Technology for the Simulation of Closely Coupled Multi-Physics Processes on Parallel Systems. Computational Science, Engineering and Technology Series, 0, , 205-217.	0.2	0
59	Dynamic Fluid Structure Interaction on Parallel Clusters. , 0, , .		0
60	A Mixed Eulerian Lagrangian Approach to High Speed Collision between Solid Structures on Parallel Clusters. , 0, , .		0
61	Using Mixed Discretisation Schemes in Multi-Physics Simulation. , 0, , .		0
62	Computational Modelling of Reactive Porous Media in Hydrometallurgy. Computational Science, Engineering and Technology Series, 0, , 151-171.	0.2	0