James E Hilton

List of Publications by Year
in descending order

56 papers	1,514 citations	304368 22 h-index	329751 37 g-index
56 all docs	56 docs citations	56 times ranked	1647 citing authors

#	Article	IF	Citations
1	A probability-based risk metric for operational wildfire risk management. Environmental Modelling and Software, 2022, 148, 105286.	1.9	4
2	RADAR-Vegetation Structural Perpendicular Index (R-VSPI) for the Quantification of Wildfire Impact and Post-Fire Vegetation Recovery. Remote Sensing, 2022, 14, 3132.	1.8	6
3	Rapid wind–terrain correction for wildfire simulations. International Journal of Wildland Fire, 2021, 30, 410.	1.0	5
4	Effect of fuel spatial resolution on predictive wildfire models. International Journal of Wildland Fire, 2021, 30, 776-789.	1.0	9
5	A Surrogate Model for Rapidly Assessing the Size of a Wildfire over Time. Fire, 2021, 4, 20.	1.2	7
6	Anterior Cerebral Artery Stroke: Role of Collateral Systems on Infarct Topography. Stroke, 2021, 52, 2930-2938.	1.0	8
7	Global sensitivity analysis for uncertainty quantification in fire spread models. Environmental Modelling and Software, 2021, 143, 105110.	1.9	8
8	Radiant heat flux modelling for wildfires. Mathematics and Computers in Simulation, 2020, 175, 62-80.	2.4	10
9	An evidence based approach to evaluating flood adaptation effectiveness including climate change considerations for coastal cities: City of Port Phillip, Victoria, Australia. Journal of Flood Risk Management, 2020, 13, .	1.6	5
10	Workspace: A workflow platform for supporting development and deployment of modelling and simulation. Mathematics and Computers in Simulation, 2020, 175, 25-61.	2.4	14
11	An efficient framework for ensemble of natural disaster simulations as a service. Geoscience Frontiers, 2020, 11, 1859-1873.	4.3	8
12	Computer Modeling of Clot Retrieval—Circle of Willis. Frontiers in Neurology, 2020, 11, 773.	1.1	6
13	A cloud-based framework for sensitivity analysis of natural hazard models. Environmental Modelling and Software, 2020, 134, 104800.	1.9	13
14	Effect of weather forecast errors on fire growth model projections. International Journal of Wildland Fire, 2020, 29, 983.	1.0	8
15	Modeling Vorticity-Driven Wildfire Behavior Using Near-Field Techniques. Frontiers in Mechanical Engineering, 2020, 5, .	0.8	8
16	River reconstruction using a conformal mapping method. Environmental Modelling and Software, 2019, 119, 197-213.	1.9	9
17	Cloud Computing in natural hazard modeling systems: Current research trends and future directions. International Journal of Disaster Risk Reduction, 2019, 38, 101188.	1.8	37
18	The Vegetation Structure Perpendicular Index (VSPI): A forest condition index for wildfire predictions. Remote Sensing of Environment, 2019, 224, 167-181.	4.6	24

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19	Estimation of Forest Structure with the Vegetation Structure Perpendicular Index (VSPI) for Dynamic Fire Spread Simulations. , 2019, , .		0
20	Investigation of the effects of interactions of intersecting oblique fire lines with and without wind in a combustion wind tunnel. International Journal of Wildland Fire, 2019, 28, 704.	1.0	12
21	Assessing sea level-rise risks to coastal floodplains in the Kakadu Region, northern Australia, using a tidally driven hydrodynamic model. Marine and Freshwater Research, 2018, 69, 1064.	0.7	26
22	The Vegetation Structure Perpendicular Index for Wildfire Severity and Forest Recovery Monitoring. , 2018, , .		3
23	SparkCloud: A Cloud-Based Elastic Bushfire Simulation Service. Remote Sensing, 2018, 10, 74.	1.8	5
24	Incorporating convective feedback in wildfire simulations using pyrogenic potential. Environmental Modelling and Software, 2018, 107, 12-24.	1.9	23
25	Coupled gas-particulate discharge from a bucket elevator. Powder Technology, 2017, 314, 203-217.	2.1	3
26	Impact of mechanical thinning on forest carbon, fuel hazard and simulated fire behaviour in Eucalyptus delegatensis forest of south-eastern Australia. Forest Ecology and Management, 2017, 405, 92-100.	1.4	20
27	Modelling of industrial particle and multiphase flows. Powder Technology, 2017, 314, 232-252.	2.1	60
28	Curvature effects in the dynamic propagation of wildfires. International Journal of Wildland Fire, 2016, 25, 1238.	1.0	26
29	A power series formulation for two-dimensional wildfire shapes. International Journal of Wildland Fire, 2016, 25, 970.	1.0	5
30	Rain-triggered lahar susceptibility using a shallow landslide and surface erosion model. Geomorphology, 2016, 273, 168-177.	1.1	24
31	Effects of spatial and temporal variation in environmental conditions on simulation of wildfire spread. Environmental Modelling and Software, 2015, 67, 118-127.	1.9	45
32	Non-universal Voronoi cell shapes in amorphous ellipsoid packs. Europhysics Letters, 2015, 111, 24002.	0.7	47
33	SPARK â€" A Bushfire Spread Prediction Tool. IFIP Advances in Information and Communication Technology, 2015, , 262-271.	0.5	21
34	Computer Modeling of Anterior Circulation Stroke: Proof of Concept in Cerebrovascular Occlusion. Frontiers in Neurology, 2014, 5, 176.	1.1	13
35	Comparison of non-cohesive resolved and coarse grain DEM models for gas flow through particle beds. Applied Mathematical Modelling, 2014, 38, 4197-4214.	2.2	52
36	Stick-slip and force chain evolution in a granular bed in response to a grain intruder. Physical Review E, 2014, 89, 042207.	0.8	24

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37	Modelling spray coating using a combined CFD–DEM and spherical harmonic formulation. Chemical Engineering Science, 2013, 99, 141-160.	1.9	46
38	Dust modelling using a combined CFD and discrete element formulation. International Journal for Numerical Methods in Fluids, 2013, 72, 528-549.	0.9	31
39	Drag force on a spherical intruder in a granular bed at low Froude number. Physical Review E, 2013, 88, 062203.	0.8	39
40	The role of inter-grain friction in determining the mechanical and structural properties of superellipsoid packings. , 2013, , .		1
41	Unitary stick-slip motion in granular beds. , 2013, , .		3
42	Carotid Artery Anatomy and Geometry as Risk Factors for Carotid Atherosclerotic Disease. Stroke, 2012, 43, 1596-1601.	1.0	104
43	Raceway formation in laterally gas-driven particle beds. Chemical Engineering Science, 2012, 80, 306-316.	1.9	54
44	An adjustable linear Halbach array. Journal of Magnetism and Magnetic Materials, 2012, 324, 2051-2056.	1.0	35
45	A MULTISCALE METHOD FOR GEOPHYSICAL FLOW EVENTS. International Journal for Multiscale Computational Engineering, 2012, 10, 375-390.	0.8	5
46	Defining random loose packing for nonspherical grains. Physical Review E, 2011, 83, 051305.	0.8	68
47	Does the principle of minimum work apply at the carotid bifurcation: a retrospective cohort study. BMC Medical Imaging, 2011, 11, 17.	1.4	8
48	The influence of particle shape on flow modes in pneumatic conveying. Chemical Engineering Science, 2011, 66, 231-240.	1.9	122
49	Granular flow during hopper discharge. Physical Review E, 2011, 84, 011307.	0.8	88
50	Dynamics of gas–solid fluidised beds with non-spherical particle geometry. Chemical Engineering Science, 2010, 65, 1584-1596.	1.9	168
51	The effect of rotational shear on granular discharge rates. Physics of Fluids, 2010, 22, 071701.	1.6	8
52	Dynamics of charged hemispherical soap bubbles. Europhysics Letters, 2009, 86, 24003.	0.7	8
53	Design and application of a magnetic field gradient electrode. Electrochemistry Communications, 2007, 9, 155-158.	2.3	30
54	In vivo EPR for dosimetry. Radiation Measurements, 2007, 42, 1075-1084.	0.7	64

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55	Levitation in paramagnetic liquids. Journal of Magnetism and Magnetic Materials, 2007, 316, 273-276.	1.0	23
56	Halbach Cylinders With Improved Field Homogeneity and Tailored Gradient Fields. IEEE Transactions on Magnetics, 2007, 43, 1898-1902.	1.2	11