James Brasington

List of Publications by Year in descending order

51 papers	8,023 citations	117625 34 h-index	182427 51 g-index
57 all docs	57 docs citations	57 times ranked	7718 citing authors

#	Article	IF	Citations
1	â€˜Structure-from-Motionâ€™ photogrammetry: A low-cost, effective tool for geoscience applications. Geomorphology, 2012, 179, 300-314.	2.6	2,743
2	Modeling the topography of shallow braided rivers using Structure-from-Motion photogrammetry. Geomorphology, 2014, 213, 166-182.	2.6	523
3	Accounting for uncertainty in DEMs from repeat topographic surveys: improved sediment budgets. Earth Surface Processes and Landforms, 2010, 35, 136-156.	2.5	474
4	Methodological sensitivity of morphometric estimates of coarse fluvial sediment transport. Geomorphology, 2003, 53, 299-316.	2.6	426
5	Monitoring and modelling morphological change in a braided gravel-bed river using high resolution GPS-based survey. Earth Surface Processes and Landforms, 2000, 25, 973-990.	2.5	365
6	Object-based land cover classification using airborne LiDAR. Remote Sensing of Environment, 2008, 112, 2988-2998.	11.0	333
7	Modeling river bed morphology, roughness, and surface sedimentology using high resolution terrestrial laser scanning. Water Resources Research, 2012, 48, .	4.2	250
8	Modelling outburst floods from moraine-dammed glacial lakes. Earth-Science Reviews, 2014, 134, 137-159.	9.1	206
9	Geomorphic dynamics of floodplains: ecological implications and a potential modelling strategy. Freshwater Biology, 2002, 47, 559-579.	2.4	183
10	Morphodynamic signatures of braiding mechanisms as expressed through change in sediment storage in a gravelâ€bed river. Journal of Geophysical Research F: Earth Surface, 2013, 118, 759-779.	2.8	146
11	Hyperscale terrain modelling of braided rivers: fusing mobile terrestrial laser scanning and optical bathymetric mapping. Earth Surface Processes and Landforms, 2014, 39, 167-183.	2.5	139
12	Analysing laserâ€scanned digital terrain models of gravel bed surfaces: linking morphology to sediment transport processes and hydraulics. Sedimentology, 2009, 56, 2024-2043.	3.1	137
13	Reduced complexity strategies for modelling urban floodplain inundation. Geomorphology, 2007, 90, 226-243.	2.6	111
14	Coupling agent-based models of subsistence farming with individual-based forest models and dynamic models of water distribution. Environmental Modelling and Software, 2009, 24, 173-190.	4.5	104
15	Linking geomorphic changes to salmonid habitat at a scale relevant to fish. River Research and Applications, 2010, 26, 469-486.	1.7	101
16	Linking the spatial distribution of bed load transport to morphological change during highâ€flow events in a shallow braided river. Journal of Geophysical Research F: Earth Surface, 2015, 120, 604-622.	2.8	98
17	Small-catchment perspective on Himalayan weathering fluxes. Geology, 2002, 30, 355.	4.4	96
18	Turbidity and suspended sediment dynamics in small catchments in the Nepal Middle Hills. Hydrological Processes, 2000, 14, 2559-2574.	2.6	94

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19	In situ characterization of grainâ€scale fluvial morphology using Terrestrial Laser Scanning. Earth Surface Processes and Landforms, 2009, 34, 954-968.	2.5	92
20	Interactions between model predictions, parameters and DTM scales for topmodel. Computers and Geosciences, 1998, 24, 299-314.	4.2	88
21	Assessment of a numerical model to reproduce eventâ€scale erosion and deposition distributions in a braided river. Water Resources Research, 2016, 52, 6621-6642.	4.2	88
22	Numerical Modelling of Braided River Morphodynamics: Review and Future Challenges. Geography Compass, 2016, 10, 102-127.	2.7	84
23	Hydraulic validation of two-dimensional simulations of braided river flow with spatially continuous aDcp data. Water Resources Research, 2013, 49, 5183-5205.	4.2	83
24	Accuracy assessment of aerial photographs acquired using lighterâ€thanâ€air blimps: lowâ€cost tools for mapping river corridors. River Research and Applications, 2009, 25, 985-1000.	1.7	78
25	Close range digital photogrammetric analysis of experimental drainage basin evolution. Earth Surface Processes and Landforms, 2003, 28, 231-247.	2.5	76
26	Computational and methodological aspects of terrestrial surface analysis based on point clouds. Computers and Geosciences, 2012, 42, 64-70.	4.2	76
27	Patterns of topographic change in sub-humid badlands determined by high resolution multi-temporal topographic surveys. Catena, 2014, 120, 164-176.	5.0	74
28	Monitoring and modelling particle and reach-scale morphological change in gravel-bed rivers: Applications and challenges. Geomorphology, 2008, 93, 40-54.	2.6	73
29	Determining leaf area index and leafy tree roughness using terrestrial laser scanning. Water Resources Research, 2010, 46, .	4.2	67
30	Endâ€toâ€end flood risk assessment: A coupled model cascade with uncertainty estimation. Water Resources Research, 2008, 44, .	4.2	51
31	Reconstructing historic Glacial Lake Outburst Floods through numerical modelling and geomorphological assessment: Extreme events in the Himalaya. Earth Surface Processes and Landforms, 2014, 39, 1675-1692.	2.5	45
32	Monitoring Braided River Change Using Terrestrial Laser Scanning and Optical Bathymetric Mapping. Developments in Earth Surface Processes, 2011, 15, 507-532.	2.8	41
33	Leafless roughness of complex tree morphology using terrestrial lidar. Water Resources Research, 2009, 45, .	4.2	38
34	Numerical modelling of glacial lake outburst floods using physically based dam-breach models. Earth Surface Dynamics, 2015, 3, 171-199.	2.4	32
35	Numerical Modelling of Braided Rivers with Structureâ€fromâ€Motionâ€Derived Terrain Models. River Research and Applications, 2016, 32, 1071-1081.	1.7	32
36	Discrete-element, individual-based and agent-based models: Tools for interdisciplinary enquiry in geography?. Geoforum, 2008, 39, 625-642.	2.5	30

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37	Analysis of reachâ€scale elevation distribution in braided rivers: Definition of a new morphologic indicator and estimation of mean quantities. Water Resources Research, 2016, 52, 5951-5970.	4.2	29
38	Hydropeaked rivers need attention. Environmental Research Letters, 2021, 16, 021001.	5.2	29
39	Burrowing Invasive Species: An Unquantified Erosion Risk at the Aquaticâ€Terrestrial Interface. Reviews of Geophysics, 2019, 57, 1018-1036.	23.0	28
40	Retrieval of vegetative fluid resistance terms for rigid stems using airborne lidar. Journal of Geophysical Research, 2008, 113, .	3.3	27
41	A physically-based bedload transport model developed for 3-D reach-scale cellular modelling. Geomorphology, 2007, 90, 244-262.	2.6	23
42	Geomorphic impact and assessment of flexible barriers using multi-temporal LiDAR data: The PortainÃ© mountain catchment (Pyrenees). Engineering Geology, 2018, 237, 168-180.	6.3	22
43	Let's get connected: A new graph theoryâ€based approach and toolbox for understanding braided river morphodynamics. Wiley Interdisciplinary Reviews: Water, 2018, 5, e1296.	6.5	19
44	Monitoring gravel framework dilation using a new digital particle tracking method. Computers and Geosciences, 2000, 26, 329-340.	4.2	14
45	Geomorphology of the Rees Valley, Otago, New Zealand. Journal of Maps, 2014, 10, 136-150.	2.0	10
46	Modelling braided river morphodynamics using a particle travel length framework. Earth Surface Dynamics, 2019, 7, 247-274.	2.4	9
47	River research and applications across borders. River Research and Applications, 2019, 35, 768-775.	1.7	7
48	Topological structures of river networks and their regionalâ€scale controls: A multivariate classification approach. Earth Surface Processes and Landforms, 2020, 45, 2869-2883.	2.5	6
49	Mean flow and turbulence structure over exposed roots on a forested floodplain: Insights from a controlled laboratory experiment. PLoS ONE, 2020, 15, e0229306.	2.5	3
50	Monitoring and modelling morphological change in a braided gravelâ€bed river using high resolution GPSâ€based survey. Earth Surface Processes and Landforms, 2000, 25, 973-990.	2.5	2
51	<title>Sensitivity of morphometric estimates of sediment transport in large gravel-bed rivers</title>. , 2002, , .		0