

James L Best

List of Publications by Citations

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231
papers

10,642
citations

57
h-index

94
g-index

247
ext. papers

12,118
ext. citations

5
avg, IF

6.86
L-index

#	Paper	IF	Citations
231	Anthropogenic stresses on the world's big rivers. <i>Nature Geoscience</i> , 2019 , 12, 7-21	18.3	378
230	The fluid dynamics of river dunes: A review and some future research directions. <i>Journal of Geophysical Research</i> , 2005 , 110, n/a-n/a		326
229	Sediment transport and bed morphology at river channel confluences. <i>Sedimentology</i> , 1988 , 35, 481-498	3.3	301
228	Mean flow and turbulence structure over fixed, two-dimensional dunes: implications for sediment transport and bedform stability. <i>Sedimentology</i> , 1995 , 42, 491-513	3.3	300
227	Separation Zone at Open-Channel Junctions. <i>Journal of Hydraulic Engineering</i> , 1984 , 110, 1588-1594	1.8	223
226	Morphological evolution and dynamics of a large, sand braid-bar, Jamuna River, Bangladesh. <i>Sedimentology</i> , 2000 , 47, 533-555	3.3	180
225	Scour in large braided rivers and the recognition of sequence stratigraphic boundaries. <i>Nature</i> , 1997 , 387, 275-277	50.4	179
224	Effects of Bed Discordance on Flow Dynamics at Open Channel Confluences. <i>Journal of Hydraulic Engineering</i> , 1996 , 122, 676-682	1.8	167
223	Three-Dimensional Sedimentary Architecture of a Large, Mid-Channel Sand Braid Bar, Jamuna River, Bangladesh. <i>Journal of Sedimentary Research</i> , 2003 , 73, 516-530	2.1	164
222	Morphology and flow fields of three-dimensional dunes, Rio ParanArgentina: Results from simultaneous multibeam echo sounding and acoustic Doppler current profiling. <i>Journal of Geophysical Research</i> , 2005 , 110, n/a-n/a		162
221	Three-dimensional structure of flow at a confluence of river channels with discordant beds. <i>Geomorphology</i> , 1999 , 26, 313-335	4.3	162
220	Mixing-layer distortion at the confluence of channels of different depth. <i>Nature</i> , 1991 , 350, 411-413	50.4	157
219	Flow, sediment transport and bedform dynamics over the transition from dunes to upper-stage plane beds: implications for the formation of planar laminae. <i>Sedimentology</i> , 1988 , 35, 753-763	3.3	151
218	Fluvial sediment supply to a mega-delta reduced by shifting tropical-cyclone activity. <i>Nature</i> , 2016 , 539, 276-279	50.4	146
217	Depositional processes, bedform development and hybrid bed formation in rapidly decelerated cohesive (mudand) sediment flows. <i>Sedimentology</i> , 2011 , 58, 1953-1987	3.3	140
216	Meander-Bend Evolution, Alluvial Architecture, and the Role of Cohesion in Sinuous River Channels: A Flume Study. <i>Journal of Sedimentary Research</i> , 2007 , 77, 197-212	2.1	138
215	Turbulence Modulation and Particle Velocities over Flat Sand Beds at Low Transport Rates. <i>Journal of Hydraulic Engineering</i> , 1997 , 123, 1118-1129	1.8	135

214	A Phase Diagram for Turbulent, Transitional, and Laminar Clay Suspension Flows. <i>Journal of Sedimentary Research</i> , 2009 , 79, 162-183	2.1	133
213	The sedimentology and alluvial architecture of the sandy braided South Saskatchewan River, Canada. <i>Sedimentology</i> , 2006 , 53, 413-434	3.3	132
212	On the entrainment of sediment and initiation of bed defects: insights from recent developments within turbulent boundary layer research. <i>Sedimentology</i> , 1992 , 39, 797-811	3.3	132
211	FLOW DYNAMICS AT RIVER CHANNEL CONFLUENCES: IMPLICATIONS FOR SEDIMENT TRANSPORT AND BED MORPHOLOGY 1987 , 27-35		131
210	Form roughness and the absence of secondary flow in a large confluence–difffluence, Rio Paraná Argentina. <i>Earth Surface Processes and Landforms</i> , 2007 , 32, 155-162	3.7	127
209	An experimental study of turbulent flow over a low-angle dune. <i>Journal of Geophysical Research</i> , 2002 , 107, 18-1		127
208	The morphology and dynamics of low amplitude bedwaves upon upper stage plane beds and the preservation of planar laminae. <i>Sedimentology</i> , 1992 , 39, 737-752	3.3	126
207	Bed morphology and sedimentology at the confluence of unequal depth channels. <i>Geomorphology</i> , 1993 , 8, 115-129	4.3	119
206	Velocity Mapping Toolbox (VMT): a processing and visualization suite for moving-vessel ADCP measurements. <i>Earth Surface Processes and Landforms</i> , 2013 , 38, 1244-1260	3.7	112
205	Turbulent flow structure at concordant and discordant open-channel confluences. <i>Experiments in Fluids</i> , 1996 , 21, 437-446	2.5	111
204	Morphology, flow structure, and suspended bed sediment transport at two large braid-bar confluences. <i>Water Resources Research</i> , 2009 , 45,	5.4	110
203	Measuring flow velocity and sediment transport with an acoustic Doppler current profiler. <i>Geomorphology</i> , 2005 , 68, 25-37	4.3	110
202	The morphology of river channel confluences. <i>Progress in Physical Geography</i> , 1986 , 10, 157-174	3.5	110
201	Dynamics of a river channel confluence with discordant beds: Flow turbulence, bed load sediment transport, and bed morphology. <i>Journal of Geophysical Research</i> , 2006 , 111,		109
200	Turbulence Modulation in Clay-Rich Sediment-Laden Flows and Some Implications for Sediment Deposition. <i>Journal of Sedimentary Research</i> , 2002 , 72, 336-340	2.1	102
199	Fluid and sediment dynamics of upper stage plane beds. <i>Journal of Geophysical Research</i> , 1998 , 103, 1239-1274	97	
198	Coherent flow structures in a depth-limited flow over a gravel surface: The role of near-bed turbulence and influence of Reynolds number. <i>Journal of Geophysical Research</i> , 2009 , 114,		96
197	Causes of rapid mixing at a junction of two large rivers: Río Paraná and Río Paraguay, Argentina. <i>Journal of Geophysical Research</i> , 2008 , 113,		95

196	Predicting bedforms and primary current stratification in cohesive mixtures of mud and sand. <i>Journal of the Geological Society</i> , 2016 , 173, 12-45	2.7	94
195	Extreme sediment pulses generated by bend cutoffs along a large meandering river. <i>Nature Geoscience</i> , 2011 , 4, 675-678	18.3	94
194	Whole flow field dynamics and velocity pulsing within natural sediment-laden underflows. <i>Geology</i> , 2005 , 33, 765	5	88
193	Mitigating land loss in coastal Louisiana by controlled diversion of Mississippi River sand. <i>Nature Geoscience</i> , 2012 , 5, 534-537	18.3	85
192	Spatial variability in bank resistance to erosion on a large meandering, mixed bedrock-alluvial river. <i>Geomorphology</i> , 2016 , 252, 80-97	4.3	84
191	Quantification of braided river channel change using archival digital image analysis. <i>Earth Surface Processes and Landforms</i> , 2010 , 35, 971-985	3.7	84
190	Comparison of Fixed- and Moving-Vessel Flow Measurements with an aDp in a Large River. <i>Journal of Hydraulic Engineering</i> , 2007 , 133, 1299-1309	1.8	84
189	Relationship between sediment supply and avulsion frequency in braided rivers. <i>Geology</i> , 2004 , 32, 21	5	84
188	Flow structure in sinuous submarine channels: Velocity and turbulence structure of an experimental submarine channel. <i>Marine Geology</i> , 2006 , 229, 241-257	3.3	83
187	Depositional Models of Braided Rivers 11-50		80
186	The orientation of helical flow in curved channels. <i>Sedimentology</i> , 2006 , 53, 249-257	3.3	80
185	Braided rivers: perspectives and problems. <i>Geological Society Special Publication</i> , 1993 , 75, 1-11	1.7	78
184	Evolution and sedimentology of a channel fill in the sandy braided South Saskatchewan River and its comparison to the deposits of an adjacent compound bar. <i>Sedimentology</i> , 2011 , 58, 1860-1883	3.3	75
183	River piracy and drainage basin reorganization led by climate-driven glacier retreat. <i>Nature Geoscience</i> , 2017 , 10, 370-375	18.3	71
182	Flow structure and channel morphodynamics of meander bend chute cutoffs: A case study of the Wabash River, USA. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013 , 118, 2468-2487	3.8	71
181	Preservation of planar laminae due to migration of low-relief bed waves over aggrading upper-stage plane beds: comparison of experimental data with theory. <i>Sedimentology</i> , 1997 , 44, 253-262 ³	3.3	71
180	River bank instability from unsustainable sand mining in the lower Mekong River. <i>Nature Sustainability</i> , 2020 , 3, 217-225	22.1	69
179	On the relationship between flow and suspended sediment transport over the crest of a sand dune, Río Paran, Argentina. <i>Sedimentology</i> , 2010 , 57, 252-272	3.3	68

178	On experimental reflected density currents and the interpretation of certain turbidites. <i>Sedimentology</i> , 1994 , 41, 437-461	3.3	68
177	Flow fields, bed shear stresses, and suspended bed sediment dynamics in bifurcations of a large river. <i>Water Resources Research</i> , 2012 , 48,	5.4	61
176	The planform mobility of river channel confluences: Insights from analysis of remotely sensed imagery. <i>Earth-Science Reviews</i> , 2018 , 176, 1-18	10.2	60
175	Measuring Velocity and Shear Stress over Dunes with Acoustic Doppler Profiler. <i>Journal of Hydraulic Engineering</i> , 2004 , 130, 932-936	1.8	57
174	Modulation of outer bank erosion by slump blocks: Disentangling the protective and destructive role of failed material on the three-dimensional flow structure. <i>Geophysical Research Letters</i> , 2015 , 42, 10,663-10,670	4.9	55
173	Sediment Transport, Bed Morphology and the Sedimentology of River Channel Confluences 2008 , 45-72		54
172	Tributary, distributary and other fluvial patterns: What really represents the norm in the continental rock record?. <i>Sedimentary Geology</i> , 2012 , 261-262, 15-32	2.8	53
171	Sedimentation in deep-sea lobe-elements: implications for the origin of thickening-upward sequences. <i>Journal of the Geological Society</i> , 2011 , 168, 319-332	2.7	53
170	Can we distinguish flood frequency and magnitude in the sedimentological record of rivers?. <i>Geology</i> , 2010 , 38, 579-582	5	52
169	Morphological Analysis and Prediction of River Bifurcations		52
168	The Sedimentology and Alluvial Architecture of a Large Braid Bar, Rio Parana, Argentina. <i>Journal of Sedimentary Research</i> , 2009 , 79, 629-642	2.1	51
167	Sedimentology and event timing of a catastrophic volcanoclastic mass flow, Volcan Hudson, Southern Chile. <i>Bulletin of Volcanology</i> , 1992 , 54, 299-318	2.4	50
166	Computational fluid dynamics and the physical modelling of an upland urban river. <i>Geomorphology</i> , 2002 , 44, 375-391	4.3	49
165	Three-dimensional flow structure and bed morphology in large elongate meander loops with different outer bank roughness characteristics. <i>Water Resources Research</i> , 2016 , 52, 9621-9641	5.4	48
164	The Brahmaputra-Jamuna River, Bangladesh		48
163	Development and testing of a numerical code for treatment of complex river channel topography in three-dimensional CFD models with structured grids. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2005 , 43, 468-480	1.9	48
162	Suspended sediment transport and deposition over a dune: Rio Parana, Argentina. <i>Earth Surface Processes and Landforms</i> , 2009 , 34, 1605-1611	3.7	47
161	Mean flow, turbulence structure, and bed form superimposition across the ripple-dune transition. <i>Water Resources Research</i> , 2006 , 42,	5.4	47

160	An experimental study of discharge partitioning and flow structure at symmetrical bifurcations. <i>Earth Surface Processes and Landforms</i> , 2011 , 36, 2069-2082	3.7	46
159	Scaling and Hierarchy in Braided Rivers and their Deposits: Examples and Implications for Reservoir Modelling	7.5	106
158	The influence of scale, slope and channel geometry on the flow dynamics of submarine channels. <i>Marine and Petroleum Geology</i> , 2007 , 24, 487-503	4.7	46
157	The dynamics of turbulent, transitional and laminar clay-laden flow over a fixed current ripple. <i>Sedimentology</i> , 2008 , 55, 635-666	3.3	45
156	Turbulence and Secondary Flow over Sediment Stripes in Weakly Bimodal Bed Material. <i>Journal of Hydraulic Engineering</i> , 1999 , 125, 463-473	1.8	45
155	Extremes in dune preservation: Controls on the completeness of fluvial deposits. <i>Earth-Science Reviews</i> , 2015 , 150, 652-665	10.2	44
154	The physical scale modelling of braided alluvial architecture and estimation of subsurface permeability. <i>Basin Research</i> , 2002 , 14, 265-285	3.2	43
153	Particle-image velocimetry measurements of flow over interacting barchan dunes. <i>Experiments in Fluids</i> , 2012 , 52, 809-829	2.5	42
152	Drag reduction in turbulent muddy seawater flows and some sedimentary consequences. <i>Sedimentology</i> , 1993 , 40, 1129-1137	3.3	42
151	The alluvial architecture of a suspended sediment dominated meandering river: the R� Bermejo, Argentina. <i>Sedimentology</i> , 2016 , 63, 1187-1208	3.3	42
150	Dunes in the world's big rivers are characterized by low-angle lee-side slopes and a complex shape. <i>Nature Geoscience</i> , 2020 , 13, 156-162	18.3	41
149	The impact of significant input of fine sediment on benthic fauna at tributary junctions: a case study of the Bermejo-Paraguay River confluence, Argentina. <i>Ecohydrology</i> , 2015 , 8, 340-352	2.5	40
148	Effect of bed permeability and hyporheic flow on turbulent flow over bed forms. <i>Geophysical Research Letters</i> , 2014 , 41, 6435-6442	4.9	40
147	The relationship between channel avulsion, flow occupancy and aggradation in braided rivers: insights from an experimental model. <i>Sedimentology</i> , 2007 , 54, 497-513	3.3	40
146	Response of sand dunes to variations in tidal flow: Fraser Estuary, Canada. <i>Journal of Geophysical Research</i> , 2005 , 110, n/a-n/a		40
145	Scales and causes of heterogeneity in bars in a large multi-channel river: R� Paran�Argentina. <i>Sedimentology</i> , 2014 , 61, 1055-1085	3.3	39
144	A New Phase Diagram for Combined-Flow Bedforms. <i>Journal of Sedimentary Research</i> , 2014 , 84, 301-313	2.1	39
143	Coherent flow structures in a depth-limited flow over a gravel surface: The influence of surface roughness. <i>Journal of Geophysical Research</i> , 2010 , 115,		38

142	The Morphology and Facies of Sandy Braided Rivers: Some Considerations of Scale Invariance	145-158	38
141	A flume experiment on the effect of channel width on the perturbation and recovery of flow in straight pools and riffles with smooth boundaries. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013 , 118, 1850-1863		3.8 36
140	The influence of tributary flow density differences on the hydrodynamic behavior of a confluent meander bend and implications for flow mixing. <i>Geomorphology</i> , 2018 , 304, 99-112		4.3 35
139	Kinematics, Topology and Significance of Dune-Related Macroturbulence: Some Observations from the Laboratory and Field	41-60	35
138	The influence of flow discharge variations on the morphodynamics of a diffluence-confluence unit on a large river. <i>Earth Surface Processes and Landforms</i> , 2018 , 43, 349-362		3.7 34
137	On the evolution and form of coherent flow structures over a gravel bed: Insights from whole flow field visualization and measurement. <i>Journal of Geophysical Research F: Earth Surface</i> , 2016 , 121, 1472-1493		2.8 34
136	Discrimination of bed form scales using robust spline filters and wavelet transforms: Methods and application to synthetic signals and bed forms of the Río Paraná, Argentina. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013 , 118, 1400-1418		3.8 34
135	A unified model for bedform development and equilibrium under unidirectional, oscillatory and combined-flows. <i>Sedimentology</i> , 2014 , 61, 2063-2085		3.3 33
134	Bar-top hollows: A new element in the architecture of sandy braided rivers. <i>Sedimentary Geology</i> , 2006 , 190, 241-255		2.8 33
133	The Western Irish Namurian Basin reassessed. <i>Basin Research</i> , 2000 , 12, 59-78		3.2 33
132	Length scales and statistical characteristics of outer bank roughness for large elongate meander bends: The influence of bank material properties, floodplain vegetation and flow inundation. <i>Earth Surface Processes and Landforms</i> , 2017 , 42, 2024-2037		3.7 32
131	Response of river-dominated delta channel networks to permanent changes in river discharge. <i>Geophysical Research Letters</i> , 2010 , 37, n/a-n/a		4.9 31
130	The role of discharge variability in determining alluvial stratigraphy. <i>Geology</i> , 2016 , 44, 3-6		5 29
129	Large River Channel Confluences	2008, 73-91	29
128	Approaching the System-Scale Understanding of Braided River Behaviour	107-135	29
127	Flow separation – physical process for the concentration of heavy minerals within alluvial channels. <i>Journal of the Geological Society</i> , 1985 , 142, 747-755		2.7 29
126	Turbulence Links Momentum and Solute Exchange in Coarse-Grained Streambeds. <i>Water Resources Research</i> , 2018 , 54, 3225-3242		5.4 27
125	Modelling hydrodynamics in the Río Paraná, Argentina: An evaluation and inter-comparison of reduced-complexity and physics based models applied to a large sand-bed river. <i>Geomorphology</i> , 2012 , 169-170, 192-211		4.3 27

124	Bed forms in bimodal sand-gravel sediments: laboratory and field analysis. <i>Sedimentology</i> , 2006 , 53, 631-654	3.3	27
123	The bubble bursts for cavitation in natural rivers: laboratory experiments reveal minor role in bedrock erosion. <i>Earth Surface Processes and Landforms</i> , 2017 , 42, 1308-1316	3.7	26
122	Extreme flood-driven fluvial bank erosion and sediment loads: direct process measurements using integrated Mobile Laser Scanning (MLS) and hydro-acoustic techniques. <i>Earth Surface Processes and Landforms</i> , 2017 , 42, 334-346	3.7	26
121	Deposits of the sandy braided South Saskatchewan River: Implications for the use of modern analogs in reconstructing channel dimensions in reservoir characterization. <i>AAPG Bulletin</i> , 2013 , 97, 553-576	2.5	26
120	Reply to Discussion of Imran et al. on "The orientation of helical flow in curved channels" by Corney et al., <i>Sedimentology</i> , 53, 249-257. <i>Sedimentology</i> , 2007 , 55, 241-247	3.3	26
119	Grain-Size Controls On the Morphology and Internal Geometry of River-Dominated Deltas. <i>Journal of Sedimentary Research</i> , 2015 , 85, 699-714	2.1	25
118	An integrated process-based model of flutes and tool marks in deep-water environments: Implications for palaeohydraulics, the Bouma sequence and hybrid event beds. <i>Sedimentology</i> , 2020 , 67, 1601-1666	3.3	25
117	Quantitative visualization of flow fields associated with alluvial sand dunes: Results from the laboratory and field using ultrasonic and acoustic doppler anemometry. <i>Journal of Visualization</i> , 2001 , 4, 373-381	1.6	25
116	Hydrodynamic modelling of tidal-fluvial flows in a large river estuary. <i>Estuarine, Coastal and Shelf Science</i> , 2018 , 212, 176-188	2.9	24
115	Quantifying the dynamics of flow within a permeable bed using time-resolved endoscopic particle imaging velocimetry (EPIV). <i>Experiments in Fluids</i> , 2012 , 53, 51-76	2.5	24
114	Particle Size and Velocity Discrimination in a Sediment-Laden Turbulent Flow Using Phase Doppler Anemometry. <i>Journal of Fluids Engineering, Transactions of the ASME</i> , 1995 , 117, 505-511	2.1	24
113	Observations and scaling of tidal mass transport across the lower Ganges-Brahmaputra delta plain: implications for delta management and sustainability. <i>Earth Surface Dynamics</i> , 2019 , 7, 231-245	3.8	23
112	Paragenetic sequences of carbonate and sulphide minerals of the Mamfe Basin (Cameroon): Indicators of palaeo-fluids, palaeo-oxygen levels and diagenetic zones. <i>Journal of African Earth Sciences</i> , 2013 , 86, 25-44	2.2	23
111	Discussion of "Development of Bed Features" by Arved J. Raudkivi and Hans-H. Witte (September, 1990, Vol. 116, No. 9). <i>Journal of Hydraulic Engineering</i> , 1992 , 118, 647-650	1.8	23
110	A numerical investigation into the importance of bed permeability on determining flow structures over river dunes. <i>Water Resources Research</i> , 2017 , 53, 3067-3086	5.4	22
109	Large eddy simulation of interacting barchan dunes in a steady, unidirectional flow. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013 , 118, 2089-2104	3.8	22
108	Fluvio-deltaic avulsions during relative sea-level fall. <i>Geology</i> , 2015 , 43, 719-722	5	21
107	Monitoring Suspended Sediment Dynamics Using MBES. <i>Journal of Hydraulic Engineering</i> , 2010 , 136, 45-49	1.8	21

106	Quantification of the relation between surface morphodynamics and subsurface sedimentological product in sandy braided rivers. <i>Sedimentology</i> , 2013 , 60, 820-839	3.3	20
105	A Sedimentological Model to Characterize Braided River Deposits for Hydrogeological Applications	51-74	20
104	Sedimentology and kinematics of a large, retrogressive growth-fault system in Upper Carboniferous deltaic sediments, western Ireland. <i>Sedimentology</i> , 2004 , 51, 1343-1358	3.3	20
103	Effect of Orientation and Size of Helley-Smith Sampler on Its Efficiency. <i>Journal of Hydraulic Engineering</i> , 1994 , 120, 758-766	1.8	20
102	Turbulent Flow Structure Associated With Collision Between Laterally Offset, Fixed-Bed Barchan Dunes. <i>Journal of Geophysical Research F: Earth Surface</i> , 2018 , 123, 2157-2188	3.8	19
101	Sedimentology of the Bengal shelf, Bangladesh: comparison of late Miocene sediments, Sitakund anticline, with the modern, tidally dominated shelf. <i>Sedimentary Geology</i> , 2003 , 155, 271-300	2.8	19
100	A scheme for resampling, filtering, and subsampling unevenly spaced laser Doppler anemometer data. <i>Mathematical Geosciences</i> , 1995 , 27, 731-748		19
99	Experimental study of turbulent flow over and within cubically packed walls of spheres: Effects of topography, permeability and wall thickness. <i>International Journal of Heat and Fluid Flow</i> , 2018 , 73, 16-29	3.4	18
98	Fluvial form in modern continental sedimentary basins: Distributive fluvial systems: COMMENT. <i>Geology</i> , 2010 , 38, e230-e230	5	18
97	A new methodology for the quantitative visualization of coherent flow structures in alluvial channels using multibeam echo-sounding (MBES). <i>Geophysical Research Letters</i> , 2010 , 37, n/a-n/a	4.9	18
96	Mechanisms of anabranch avulsion within gravel-bed braided rivers: observations from a scaled physical model. <i>Geological Society Special Publication</i> , 1993 , 75, 119-127	1.7	18
95	Fluidization pipes in volcanoclastic mass flows, Volcan Hudson, Southern Chile. <i>Terra Nova</i> , 1989 , 1, 203-208		18
94	Earthquakes, Rivers and Ice: Scientific Research at the Laguna San Rafael, Southern Chile, 1986. <i>Geographical Journal</i> , 1988 , 154, 392	2.2	18
93	Critical Reflections on the Coherent Flow Structures Paradigm in Aeolian Geomorphology	2013 , 111-134	17
92	Flow Structure and Transport of Sand-Grade Suspended Sediment around an Evolving Braid Bar, Jamuna River, Bangladesh	43-57	17
91	Quantification of bedform dynamics and bedload sediment flux in sandy braided rivers from airborne and satellite imagery. <i>Earth Surface Processes and Landforms</i> , 2019 , 44, 953-972	3.7	17
90	Source apportionment of soil heavy metals in fluvial islands, Anhui section of the lower Yangtze River: comparison of APCSM _{LR} and PMF. <i>Journal of Soils and Sediments</i> , 2020 , 20, 3380-3393	3.4	16
89	Describing fluvial systems: linking processes to deposits and stratigraphy. <i>Geological Society Special Publication</i> , 2019 , 488, 152-166	1.7	16

88	Sand, gravel, and UN Sustainable Development Goals: Conflicts, synergies, and pathways forward. <i>One Earth</i> , 2021 , 4, 1095-1111	8.1	16
87	Spatial Scales of Turbulent Flow Structures Associated With Interacting Barchan Dunes. <i>Journal of Geophysical Research F: Earth Surface</i> , 2019 , 124, 1175-1200	3.8	15
86	Experimental evidence of amplitude modulation in permeable-wall turbulence. <i>Journal of Fluid Mechanics</i> , 2020 , 887,	3.7	15
85	Bed morphology, flow structure, and sediment transport at the outlet of Lake Huron and in the upper St. Clair River. <i>Journal of Great Lakes Research</i> , 2011 , 37, 480-493	3	15
84	Mean Flow and Turbulence Structure of Sediment-Laden Gravity Currents: New Insights using Ultrasonic Doppler Velocity Profiling 157-172		15
83	River temperature and the thermal-dynamic transport of sediment. <i>Global and Planetary Change</i> , 2019 , 178, 168-183	4.2	14
82	Monitoring the generation and evolution of the sediment plume behind towed fishing gears using a multibeam echosounder. <i>ICES Journal of Marine Science</i> , 2013 , 70, 892-903	2.7	14
81	Bedforms: views and new perspectives from the third international workshop on Marine and River Dune Dynamics (MARID3). <i>Earth Surface Processes and Landforms</i> , 2013 , 38, 319-329	3.7	14
80	Coherent Flow Structures, Initiation of Motion, Sediment Transport and Morphological Feedbacks in Rivers 2013 , 289-307		13
79	Three-dimensional gravity-current flow within a subaqueous bend: Spatial evolution and force balance variations. <i>Sedimentology</i> , 2013 , 60, 1668-1680	3.3	13
78	The use and application of GPR in sandy fluvial environments: methodological considerations. <i>Geological Society Special Publication</i> , 2003 , 211, 127-142	1.7	13
77	On the Causes of Pulsing in Continuous Turbidity Currents. <i>Journal of Geophysical Research F: Earth Surface</i> , 2018 , 123, 2827-2843	3.8	13
76	Morphology and Facies Models of Channel Confluences 89-100		13
75	Decimeter-scale in situ mapping of modern cross-bedded dune deposits using parametric echo sounding: A new method for linking river processes and their deposits. <i>Geophysical Research Letters</i> , 2013 , 40, 3883-3887	4.9	12
74	Electrical Resistance Tomography for Suspended Sediment Measurements in Open Channel Flows Using a Novel Sensor Design. <i>Particle and Particle Systems Characterization</i> , 2006 , 23, 313-320	3.1	12
73	Soft-sediment deformation structures as indicators of tectono-volcanic activity during evolution of a lacustrine basin: A case study from the Upper Triassic Ordos Basin, China. <i>Marine and Petroleum Geology</i> , 2020 , 115, 104250	4.7	11
72	The sedimentology of river confluences. <i>Sedimentology</i> , 2019 , 66, 391-407	3.3	11
71	Application of a roughness-length representation to parameterize energy loss in 3-D numerical simulations of large rivers. <i>Water Resources Research</i> , 2012 , 48,	5.4	11

70	On determining the geometric and kinematic characteristics of coherent flow structures over a gravel bed: a new approach using combined PLIF-PIV. <i>Earth Surface Processes and Landforms</i> , 2011 , 36, 279-284	3.7	11
69	Coherent Structures and Mixing at a River Plume Front 2013 , 359-369		10
68	Closure to Separation Zone at Open-Channel Junctions by James L. Best and Ian Reid (November, 1984). <i>Journal of Hydraulic Engineering</i> , 1987 , 113, 545-548	1.8	10
67	Structure of Turbulent Boundary Layers 2013 , 17-24		9
66	Structural Attributes of Turbulent Flow Over a Complex Topography 2013 , 25-41		9
65	Small- and large- scale soft-sediment deformations in a Triassic lacustrine delta caused by overloading and seismicity in the Ordos Basin, central China. <i>Marine and Petroleum Geology</i> , 2019 , 103, 126-149	4.7	9
64	Sedimentologic and palaeoenvironmental evolution of the Mamfe Cretaceous Basin (SW Cameroon): Evidence from lithofacies analysis, tectonics and evaporite minerals suite. <i>Journal of African Earth Sciences</i> , 2019 , 149, 19-41	2.2	8
63	Bed form genesis from bed defects under unidirectional, oscillatory, and combined flows. <i>Journal of Geophysical Research F: Earth Surface</i> , 2014 , 119, 2635-2652	3.8	8
62	What is a Coherent Flow Structure in Geophysical Flow? 2013 , 1-16		8
61	Large-Scale Coherent Flow Structures in Alluvial Pools 2013 , 243-259		8
60	Sediment mobility and bed armoring in the St Clair River: insights from hydrodynamic modeling. <i>Earth Surface Processes and Landforms</i> , 2012 , 37, 957-970	3.7	8
59	An evaluation of the use of a multibeam echo-sounder for observations of suspended sediment. <i>Applied Acoustics</i> , 2017 , 126, 81-90	3.1	7
58	Early burial mud diapirism and its impact on stratigraphic architecture in the Carboniferous of the Shannon Basin, County Clare, Ireland. <i>Sedimentology</i> , 2019 , 66, 329-361	3.3	7
57	Turbulence Modulation by Suspended Sediment in a Zero Mean-Shear Geophysical Flow 2013 , 309-321		7
56	Numerical Modelling of Alternate Bars in Shallow Channels 153-175		7
55	Comparing the transitional behaviour of kaolinite and bentonite suspension flows. <i>Earth Surface Processes and Landforms</i> , 2016 , 41, 1911-1921	3.7	7
54	PIV measurements of turbulent flow overlying large, cubic- and hexagonally-packed hemisphere arrays. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2020 , 58, 363-383	1.9	7
53	Secondary Flows and Vortex Structure Associated With Isolated and Interacting Barchan Dunes. <i>Journal of Geophysical Research F: Earth Surface</i> , 2020 , 125, e2019JF005257	3.8	6

52	Bedform genesis in bedrock substrates: Insights into formative processes from a new experimental approach and the importance of suspension-dominated abrasion. <i>Geomorphology</i> , 2016 , 255, 26-38	4.3	6
51	Intermittent Suspension and Transport of Fine Sediment Over Natural Tidal Bedforms 2013 , 231-242		6
50	The Influence of Aggradation Rate on Braided Alluvial Architecture: Field Study and Physical Scale-Modelling of the Ashburton River Gravels, Canterbury Plains, New Zealand 331-346		6
49	The Impact of Nonequilibrium Flow on the Structure of Turbulence Over River Dunes. <i>Water Resources Research</i> , 2018 , 54, 6566-6584	5.4	6
48	Coherent Flow Structures in the Pore Spaces of Permeable Beds Underlying a Unidirectional Turbulent Boundary Layer: A Review and Some New Experimental Results 2013 , 43-62		5
47	Dune-scale cross-strata across the fluvial-deltaic backwater regime: Preservation potential of an autogenic stratigraphic signature. <i>Geology</i> , 2020 , 48, 1144-1148	5	5
46	Basin Models 2016 , 35-47		4
45	Interfacial Waves as Coherent Flow Structures Associated with Continuous Turbidity Currents: Lillooet Lake, Canada 2013 , 371-383		4
44	From Macroturbulent Flow Structures to Large-Scale Flow Pulsations in Gravel-Bed Rivers 2013 , 261-274		4
43	Influence of Dunes on Channel-Scale Flow and Sediment Transport in a Sand Bed Braided River. <i>Journal of Geophysical Research F: Earth Surface</i> , 2020 , 125, e2020JF005571	3.8	4
42	Introduction to the Field Guide 2016 , 1-15		4
41	Architecture of a Distributive Submarine Fan 2016 , 112-173		4
40	Amplification of downstream flood stage due to damming of fine-grained rivers. <i>Nature Communications</i> , 2022 , 13,	17.4	4
39	Novel Environment Enables PIV Measurements of Turbulent Flow around and within Complex Topographies. <i>Journal of Hydraulic Engineering</i> , 2020 , 146, 04020033	1.8	3
38	The Tullig and Kilkee Cyclothem in Southern County Clare 2016 , 240-328		3
37	Coherent Secondary Flows Over a Water-Worked Rough Bed in a Straight Channel 2013 , 275-288		3
36	Effect of Migrating Bed Topography on Flow Turbulence: Implications for Modelling Sediment Transport 2013 , 323-339		3
35	Ripple formation induced by biogenic mounds. <i>Marine Geology</i> , 2000 , 168, 145-151	3.3	3

34	Three-Dimensional Flow Structure at Open-Channel Diversions. <i>Journal of Hydraulic Engineering</i> , 1995 , 121, 87-90	1.8	3
33	Why do large, deep rivers have low-angle dune beds?: COMMENT. <i>Geology</i> , 2020 , 48, e505-e505	5	3
32	Alluvial architecture of mid-channel fluvial tidal barforms: The mesotidal Lower Columbia River, Oregon/Washington, USA. <i>Sedimentology</i> , 2020 , 67, 3533-3566	3.3	2
31	Drainage and erosion of Cambodia's great lake in the middle-late Holocene: The combined role of climatic drying, base-level fall and river capture. <i>Quaternary Science Reviews</i> , 2020 , 236, 106265	3.9	2
30	The Tullig and Kilkee Cyclothem of Northern County Clare 2016 , 329-349		2
29	Boundary mapping and visualizing climatically changed landscapes at Kaskawulsh Glacier and Klane Lake, Yukon. <i>Journal of Maps</i> , 2019 , 15, 19-30	2.2	2
28	Instabilities in Stratified Shear Flow 2013 , 63-71		2
27	A pilot study of the efficacy of residuum lodges for managing sediment delivery to impoundment reservoirs. <i>Water and Environment Journal</i> , 2009 , 23, 52-62	1.7	2
26	The influence of dunes on mixing in a migrating salt-wedge: Fraser River estuary, Canada. <i>Earth Surface Processes and Landforms</i> , 2010 , 35, n/a-n/a	3.7	2
25	Discussion and Closure: Bed-Load Motion at High Shear Stress: Dune Washout and Plane-Bed Flow. <i>Journal of Hydraulic Engineering</i> , 1997 , 123, 375-377	1.8	2
24	Braided Rivers: Where have we Come in 10 Years? Progress and Future Needs1-10		2
23	Use of GPR in developing a facies model for a large sandy braided river, Brahmaputra River, Bangladesh 2000 ,		2
22	The Influence of Three-Dimensional Topography on Turbulent Flow Structures Over Dunes in Unidirectional Flows. <i>Journal of Geophysical Research F: Earth Surface</i> , 2021 , 126, e2021JF006121	3.8	2
21	Unsteady dynamics of turbulent flow in the wakes of barchan dunes modulated by overlying boundary-layer structure. <i>Journal of Fluid Mechanics</i> , 2021 , 920,	3.7	2
20	Evolving Depocentre and Slope 2016 , 174-239		2
19	The sedimentary architecture of hyperpycnites produced by transient turbulent flows in a shallow lacustrine environment. <i>Sedimentary Geology</i> , 2021 , 411, 105804	2.8	2
18	Linking the local vertical variability of permeability and porosity to newly-interpreted lithofacies in the lower Mt. Simon CO2 reservoir. <i>International Journal of Greenhouse Gas Control</i> , 2018 , 68, 26-41	4.2	2
17	Turbulence Structure and Sand Transport Over a Gravel Bed in a Laboratory Flume 2013 , 341-357		1

16	Calculation and Eduction of Coherent Flow Structures in Open-Channel Flow Using Large-Eddy Simulations 2013 , 175-197		1
15	Cohstrex: Coherent Structures in Rivers and Estuaries Experiment 2013 , 215-230		1
14	Interpreting pre-vegetation landscape dynamics: The Cambrian Lower Mount Simon Sandstone, Illinois, U.S.A.. <i>Journal of Sedimentary Research</i> , 2020 , 90, 1614-1641	2.1	1
13	Subaqueous and Subaerial Depositional Bedforms 2021 , 771-786		1
12	Rapid gravity flow transformation revealed in a single climbing ripple. <i>Geology</i> , 2021 , 49, 493-497	5	1
11	The Effect of Biofilms on Turbulent Flow Over Permeable Beds. <i>Water Resources Research</i> , 2021 , 57, e2019WR026032	5.4	1
10	Using multibeam backscatter strength to analyze the distribution of manganese nodules: A case study of seamounts in the Western Pacific Ocean. <i>Applied Acoustics</i> , 2021 , 173, 107729	3.1	1
9	Observations and scaling of tidal mass transport across the lower Ganges-Brahmaputra delta plain: implications for delta management and sustainability 2018 ,		1
8	Sedimentary pyrite in carbonaceous shales of the Mamfe Cretaceous basin, SW Cameroon: Morphologies, composition, pyrite framboid size frequency distribution, and formation pathways. <i>Journal of African Earth Sciences</i> , 2022 , 188, 104465	2.2	0
7	The mysterious grooves of Volcā Bīcena: a review of the role of streamwise counter-rotating vortices during erosion by dilute pyroclastic density currents. <i>Bulletin of Volcanology</i> , 2021 , 83, 1	2.4	0
6	Sand mining impact on Poyang Lake: a case study based on high-resolution bathymetry and sub-bottom data. <i>Journal of Oceanology and Limnology</i> ,1	1.5	0
5	Detection and Analysis of Coherent Flow Structures in a Depth-Limited Flow Over a Gravel Surface 2013 , 199-214		
4	Preface to Decadal Issue. <i>Sedimentology</i> , 2011 , 58, 1-1	3.3	
3	Discussion of ¶ransition from Ripples to Dunes¶y Arved J. Raudkivi. <i>Journal of Hydraulic Engineering</i> , 2008 , 134, 1778-1780	1.8	
2	Late Triassic tectono-volcanic activity and resulting soft-sediment deformation structures in the Yanchang Formation (Ordos Basin, China) 2022 , 371-393		
1	The J amuna¶ rahmaputra River, B angladesh 2022 , 579-640		