

# Koen Blanckaert

## List of Publications by Year in descending order

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Version: 2024-02-01

57  
papers

2,991  
citations

159358

30  
h-index

161609

54  
g-index

60  
all docs

60  
docs citations

60  
times ranked

1356  
citing authors

#	ARTICLE	IF	CITATIONS
1	Secondary flow in sharp open-channel bends. <i>Journal of Fluid Mechanics</i> , 2004, 498, 353-380.	1.4	246
2	Mean Flow and Turbulence in Open-Channel Bend. <i>Journal of Hydraulic Engineering</i> , 2001, 127, 835-847.	0.7	184
3	Momentum Transport in Sharp Open-Channel Bends. <i>Journal of Hydraulic Engineering</i> , 2004, 130, 186-198.	0.7	139
4	Nonlinear modeling of mean flow redistribution in curved open channels. <i>Water Resources Research</i> , 2003, 39, .	1.7	138
5	Topographic steering, flow recirculation, velocity redistribution, and bed topography in sharp meander bends. <i>Water Resources Research</i> , 2010, 46, .	1.7	133
6	Hydrodynamic processes in sharp meander bends and their morphological implications. <i>Journal of Geophysical Research</i> , 2011, 116, n/a-n/a.	3.3	133
7	Flow and sediment dynamics in channel confluences. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	122
8	Saturation of curvature-induced secondary flow, energy losses, and turbulence in sharp open-channel bends: Laboratory experiments, analysis, and modeling. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	118
9	Meander dynamics: A nonlinear model without curvature restrictions for flow in open-channel bends. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	113
10	Means of noise reduction in acoustic turbulence measurements. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2006, 44, 3-17.	0.7	103
11	Flow and bathymetry in sharp open-channel bends: Experiments and predictions. <i>Water Resources Research</i> , 2008, 44, .	1.7	99
12	Flow separation at the inner (convex) and outer (concave) banks of constant-width and widening open-channel bends. <i>Earth Surface Processes and Landforms</i> , 2013, 38, 696-716.	1.2	92
13	Influence of shallowness, bank inclination and bank roughness on the variability of flow patterns and boundary shear stress due to secondary currents in straight open-channels. <i>Advances in Water Resources</i> , 2010, 33, 1062-1074.	1.7	79
14	Processes governing the flow redistribution in sharp river bends. <i>Geomorphology</i> , 2012, 163-164, 45-55.	1.1	79
15	Large-eddy simulation of a mildly curved open-channel flow. <i>Journal of Fluid Mechanics</i> , 2009, 630, 413-442.	1.4	73
16	Large-eddy simulation of a curved open-channel flow over topography. <i>Physics of Fluids</i> , 2010, 22, .	1.6	61
17	Flow processes near smooth and rough (concave) outer banks in curved open channels. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	59
18	Optimization of water quality monitoring network in a large river by combining measurements, a numerical model and matter-element analyses. <i>Journal of Environmental Management</i> , 2012, 110, 116-124.	3.8	57

#	ARTICLE	IF	CITATIONS
19	Turbulence structure in sharp open-channel bends. <i>Journal of Fluid Mechanics</i> , 2005, 536, 27-48.	1.4	56
20	Analysis of the role of turbulence in curved open-channel flow at different water depths by means of experiments, LES and RANS. <i>Journal of Turbulence</i> , 2010, 11, N12.	0.5	56
21	Flow separation at convex banks in open channels. <i>Journal of Fluid Mechanics</i> , 2015, 779, 432-467.	1.4	56
22	Optimal pipe replacement strategy based on break rate prediction through genetic programming for water distribution network. <i>Journal of Hydro-Environment Research</i> , 2013, 7, 134-140.	1.0	52
23	Turbulence characteristics in sharp open-channel bends. <i>Physics of Fluids</i> , 2005, 17, 055102.	1.6	50
24	Adapting the operation of two cascaded reservoirs for ecological flow requirement of a de-watered river channel due to diversion-type hydropower stations. <i>Ecological Modelling</i> , 2013, 252, 266-272.	1.2	49
25	Meander dynamics: A reduced-order nonlinear model without curvature restrictions for flow and bed morphology. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 1118-1131.	1.0	48
26	Hydromorphological implications of local tributary widening for river rehabilitation. <i>Water Resources Research</i> , 2012, 48, .	1.7	46
27	Hydrodynamic processes, sediment erosion mechanisms, and Reynolds-number-induced scale effects in an open channel bend of strong curvature with flat bathymetry. <i>Journal of Geophysical Research F: Earth Surface</i> , 2013, 118, 2308-2324.	1.0	39
28	Investigation on the Suitability of Two-Dimensional Depth-Averaged Models for Bend-Flow Simulation. <i>Journal of Hydraulic Engineering</i> , 2003, 129, 597-612.	0.7	34
29	Reduction of Bend Scour by an Outer Bank Footing: Footing Design and Bed Topography. <i>Journal of Hydraulic Engineering</i> , 2007, 133, 139-147.	0.7	34
30	Water Saving and Energy Reduction through Pressure Management in Urban Water Distribution Networks. <i>Water Resources Management</i> , 2014, 28, 3715-3726.	1.9	34
31	A parametrical study on secondary flow in sharp open-channel bends: experiments and theoretical modelling. <i>Journal of Hydro-Environment Research</i> , 2016, 13, 1-13.	1.0	32
32	Dynamic investigation of nutrient consumption and injection strategy in microbial enhanced oil recovery (MEOR) by means of large-scale experiments. <i>Applied Microbiology and Biotechnology</i> , 2015, 99, 6551-6561.	1.7	28
33	Reduction of Bend Scour by an Outer Bank Footing: Flow Field and Turbulence. <i>Journal of Hydraulic Engineering</i> , 2009, 135, 361-368.	0.7	27
34	Adaptation and multiple parameter optimization of the simulation model SALMO as prerequisite for scenario analysis on a shallow eutrophic Lake. <i>Ecological Modelling</i> , 2014, 273, 109-116.	1.2	25
35	Redistribution of Velocity and Bed-Shear Stress in Straight and Curved Open Channels by Means of a Bubble Screen: Laboratory Experiments. <i>Journal of Hydraulic Engineering</i> , 2008, 134, 184-195.	0.7	23
36	The role of turbulence in the hydraulic environment of benthic invertebrates. <i>Ecohydrology</i> , 2013, 6, 700-712.	1.1	23

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37	Reduction of bend scour with an air-bubble screen – morphology and flow patterns. <i>International Journal of Sediment Research</i> , 2013, 28, 15-23.	1.8	22
38	Geometry of meandering and braided gravel-bed threads from the Bayanbulak Grassland, Tianshan, P.R. China. <i>Earth Surface Dynamics</i> , 2016, 4, 273-283.	1.0	21
39	Optimizing the operation of the Qingshitan Reservoir in the Lijiang River for multiple human interests and quasi-natural flow maintenance. <i>Journal of Environmental Sciences</i> , 2012, 24, 1923-1928.	3.2	20
40	Riparian vegetation dynamics: insight provided by a process-based model, a statistical model and field data. <i>Ecohydrology</i> , 2013, 6, 567-585.	1.1	20
41	An investigation on the outer bank cell of secondary flow in channel bends. <i>Journal of Hydro-Environment Research</i> , 2018, 18, 1-11.	1.0	18
42	Fish ( <i>Spinibarbus hollandi</i> ) dynamics in relation to changing hydrological conditions: physical modelling, individual-based numerical modelling, and case study. <i>Ecohydrology</i> , 2013, 6, 586-597.	1.1	15
43	Modeling Flow Pattern and Evolution of Meandering Channels with a Nonlinear Model. <i>Water (Switzerland)</i> , 2016, 8, 418.	1.2	15
44	Measuring Bedload Sediment Transport with an Acoustic Doppler Velocity Profiler. <i>Journal of Hydraulic Engineering</i> , 2017, 143, 04017008.	0.7	14
45	Improvement of Acoustic Doppler Velocimetry in steady and unsteady turbulent open-channel flows by means of seeding with hydrogen bubbles. <i>Flow Measurement and Instrumentation</i> , 2008, 19, 215-221.	1.0	13
46	Secondary Flow and Flow Redistribution in Two Sharp Bends on the Middle Yangtze River. <i>Water Resources Research</i> , 2021, 57, e2020WR028534.	1.7	13
47	Study of factors influencing the invasion of Golden Mussels ( <i>Limnoperna fortunei</i> ) in water transfer projects. <i>Aquatic Ecosystem Health and Management</i> , 2019, 22, 385-395.	0.3	12
48	Bend-Flow Simulation Using 2D Depth-Averaged Model. <i>Journal of Hydraulic Engineering</i> , 2001, 127, 167-170.	0.7	11
49	Influencing Flow Patterns and Bed Morphology in Open Channels and Rivers by Means of an Air-Bubble Screen. <i>Journal of Hydraulic Engineering</i> , 2015, 141, .	0.7	11
50	A field investigation on debris flows in the incised Tongde sedimentary basin on the northeastern edge of the Tibetan Plateau. <i>Catena</i> , 2022, 208, 105727.	2.2	11
51	Ecologically-friendly operation scheme for the Jinping cascaded reservoirs in the Yalongjiang River, China. <i>Frontiers of Earth Science</i> , 2014, 8, 282-290.	0.9	8
52	Generalized Likelihood Uncertainty Estimation Method in Uncertainty Analysis of Numerical Eutrophication Models: Take BLOOM as an Example. <i>Mathematical Problems in Engineering</i> , 2013, 2013, 1-9.	0.6	7
53	Local tributary widening for river rehabilitation. <i>Ecohydrology</i> , 2016, 9, 204-217.	1.1	7
54	A Matlab script for the morphometric analysis of subaerial, subaquatic and extra-terrestrial rivers, channels and canyons. <i>Computers and Geosciences</i> , 2022, 162, 105080.	2.0	4

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55	Ecohydraulics: linkages between hydraulics, morphodynamics and ecological processes in rivers. Ecohydrology, 2013, 6, 507-510.	1.1	2
56	Effects of large wood on morphology, flow and turbulence in a Lowland River. , 2014, , 2493-2501.		2
57	Discussion of "Three-dimensional numerical study of flow structure in channel confluences" Appears in the Canadian Journal of Civil Engineering, <b>37</b> (5): 772-781.. Canadian Journal of Civil Engineering, 2011, 38, 124-126.	0.7	1