

# Robert Boes

## List of Publications by Year in descending order

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Version: 2024-02-01

64  
papers

1,450  
citations

331670

21  
h-index

361022

35  
g-index

71  
all docs

71  
docs citations

71  
times ranked

912  
citing authors

#	ARTICLE	IF	CITATIONS
1	Two-Phase Flow Characteristics of Stepped Spillways. Journal of Hydraulic Engineering, 2003, 129, 661-670.	1.5	228
2	Hydraulic Design of Stepped Spillways. Journal of Hydraulic Engineering, 2003, 129, 671-679.	1.5	178
3	Backwater Rise due to Large Wood Accumulations. Journal of Hydraulic Engineering, 2018, 144, .	1.5	75
4	Turbulence Characteristics in Supercritical Open Channel Flows: Effects of Froude Number and Aspect Ratio. Journal of Hydraulic Engineering, 2014, 140, .	1.5	48
5	Laboratory Flume Experiments on the Formation of Spanwise Large Wood Accumulations: Part II – Effect on local scour. Water Resources Research, 2019, 55, 4871-4885.	4.2	48
6	Assessing the energy potential of modernizing the European hydropower fleet. Energy Conversion and Management, 2021, 246, 114655.	9.2	48
7	Vortex-Induced Air Entrainment Rates at Intakes. Journal of Hydraulic Engineering, 2015, 141, .	1.5	38
8	Laboratory flume experiments with the Swiss plate geophone bed load monitoring system: 2. Application to field sites with direct bed load samples. Water Resources Research, 2016, 52, 7760-7778.	4.2	38
9	Laboratory flume experiments with the Swiss plate geophone bed load monitoring system: 1. Impulse counts and particle size identification. Water Resources Research, 2016, 52, 7744-7759.	4.2	35
10	An experimental investigation on louvres and angled bar racks. Journal of Hydraulic Research/De Recherches Hydrauliques, 2018, 56, 59-75.	1.7	32
11	Hydraulic structures: a positive outlook into the future. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 299-310.	1.7	31
12	Trajectories and air flow features of ski jump-generated jets. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 336-346.	1.7	31
13	Sediment transport in high-speed flows over a fixed bed: 1. Particle dynamics. Earth Surface Processes and Landforms, 2017, 42, 1365-1383.	2.5	31
14	Spatial Impulse Wave Generation and Propagation. Journal of Waterway, Port, Coastal and Ocean Engineering, 2019, 145, .	1.2	31
15	Hydropower Potential in the Periglacial Environment of Switzerland under Climate Change. Sustainability, 2018, 10, 2794.	3.2	30
16	Laboratory Flume Experiments on the Formation of Spanwise Large Wood Accumulations: I. Effect on Backwater Rise. Water Resources Research, 2019, 55, 4854-4870.	4.2	30
17	Fish guidance structures: hydraulic performance and fish guidance efficiencies. Journal of Ecohydraulics, 2020, 5, 113-131.	3.1	30
18	Sediment transport in high-speed flows over a fixed bed: 2. Particle impacts and abrasion prediction. Earth Surface Processes and Landforms, 2017, 42, 1384-1396.	2.5	28

#	ARTICLE	IF	CITATIONS
19	Laboratory study on wood accumulation probability at bridge piers. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2020, 58, 566-581.	1.7	26
20	Laboratory investigation on measuring suspended sediment by portable laser diffractometer (LISST) focusing on particle shape. <i>Geo-Marine Letters</i> , 2013, 33, 485-498.	1.1	25
21	High-velocity air-water flows downstream of sluice gates including selection of optimum phase-detection probe. <i>International Journal of Multiphase Flow</i> , 2019, 116, 203-220.	3.4	23
22	Numerical Simulation of Air-Water Two-Phase Flow on Stepped Spillways Behind X-Shaped Flaring Gate Piers under Very High Unit Discharge. <i>Water (Switzerland)</i> , 2019, 11, 1956.	2.7	22
23	Risk reduction measures of large wood accumulations at bridges. <i>Environmental Fluid Mechanics</i> , 2020, 20, 485-502.	1.6	21
24	Deflector Effect on Chute Flow. <i>Journal of Hydraulic Engineering</i> , 2013, 139, 444-449.	1.5	19
25	Development of Probabilistic Dam Breach Model Using Bayesian Inference. <i>Water Resources Research</i> , 2018, 54, 4376-4400.	4.2	17
26	Velocity Fields at Horizontal Bar Racks as Fish Guidance Structures. <i>Water (Switzerland)</i> , 2020, 12, 280.	2.7	16
27	Impulse Wave Runup on Steep to Vertical Slopes. <i>Journal of Marine Science and Engineering</i> , 2019, 7, 8.	2.6	15
28	Head Losses of Horizontal Bar Racks as Fish Guidance Structures. <i>Water (Switzerland)</i> , 2020, 12, 475.	2.7	15
29	Continuous Seasonal and Large-Scale Periglacial Reservoir Sedimentation. <i>Sustainability</i> , 2018, 10, 3265.	3.2	14
30	Swimming Behavior of Downstream Moving Fish at Innovative Curved-Bar Rack Bypass Systems for Fish Protection at Water Intakes. <i>Water (Switzerland)</i> , 2020, 12, 3244.	2.7	13
31	Numerical embankment breach modelling including seepage flow effects. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2017, 55, 480-490.	1.7	12
32	Assessment of flow field and sediment flux at alpine desanding facilities. <i>International Journal of River Basin Management</i> , 2017, 15, 287-295.	2.7	11
33	An experimental investigation on fish guidance structures with horizontal bars. <i>Journal of Hydraulic Research/De Recherches Hydrauliques</i> , 2020, 58, 516-530.	1.7	11
34	Effects of Secondary Currents on Turbulence Characteristics of Supercritical Open Channel Flows at Low Aspect Ratios. <i>Water (Switzerland)</i> , 2020, 12, 3233.	2.7	11
35	Side-Channel Flow: Physical Model Studies. <i>Journal of Hydraulic Engineering</i> , 2015, 141, .	1.5	9
36	Erosion pattern of artificial gravel deposits. <i>International Journal of Sediment Research</i> , 2018, 33, 57-67.	3.5	9

#	ARTICLE	IF	CITATIONS
37	Hydraulic performance of fish guidance structures with curved bars " Part 1: head loss assessment. Journal of Hydraulic Research/De Recherches Hydrauliques, 2020, 58, 807-818.	1.7	9
38	Field Investigation on Hydroabrasion in High-Speed Sediment-Laden Flows at Sediment Bypass Tunnels. Water (Switzerland), 2020, 12, 469.	2.7	9
39	Numerical simulation of air entrainment in uniform chute flow. Journal of Hydraulic Research/De Recherches Hydrauliques, 2021, 59, 378-391.	1.7	9
40	Experimental study on the flow characteristics of unstructured block ramps. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 600-613.	1.7	8
41	Conceptual Approach for Positioning of Fish Guidance Structures Using CFD and Expert Knowledge. Sustainability, 2019, 11, 1646.	3.2	8
42	Stability of Unstructured Block Ramps. Journal of Hydraulic Engineering, 2017, 143, .	1.5	7
43	How does sediment supply influence refugia availability in river widenings?. Journal of Ecohydraulics, 2021, 6, 121-138.	3.1	7
44	Enhancing an unsupervised clustering algorithm with a spatial contiguity constraint for river habitat analysis. Ecohydrology, 2021, 14, e2285.	2.4	7
45	Abrasion prediction at Asahi sediment bypass tunnel based on Ishibashi's formula. Journal of Applied Water Engineering and Research, 2018, 6, 125-138.	1.8	6
46	Modeling Streambank and Artificial Gravel Deposit Erosion for Sediment Replenishment. Water (Switzerland), 2018, 10, 508.	2.7	6
47	Hydraulic performance of fish guidance structures with curved bars " Part 2: flow fields. Journal of Hydraulic Research/De Recherches Hydrauliques, 2020, 58, 819-830.	1.7	6
48	Protection and guidance of downstream moving fish with horizontal bar rack bypass systems. Ecological Engineering, 2022, 178, 106584.	3.6	6
49	Combining Fish Passage and Sediment Bypassing: A Conceptual Solution for Increased Sustainability of Dams and Reservoirs. Water (Switzerland), 2022, 14, 1977.	2.7	6
50	Run-Up of Impulse Wave Trains on Steep to Vertical Slopes. Journal of Hydraulic Engineering, 2020, 146, .	1.5	5
51	Morphological Response of Channelized, Sinuous Gravel-Bed Rivers to Sediment Replenishment. Water Resources Research, 2021, 57, e2020WR029178.	4.2	5
52	Protection and Guidance of Downstream Moving Fish with Electrified Horizontal Bar Rack Bypass Systems. Water (Switzerland), 2021, 13, 2786.	2.7	5
53	Field Investigation of Hydraulics and Fish Guidance Efficiency of a Horizontal Bar Rack-Bypass System. Water (Switzerland), 2022, 14, 776.	2.7	5
54	An experimental study on fish-friendly trashracks: part I & II. Journal of Hydraulic Research/De Recherches Hydrauliques, 2014, 52, 144-146.	1.7	4

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55	Measuring suspended sediments in periglacial reservoirs using water samples, laser in-situ scattering and transmissometry and acoustic Doppler current profiler. International Journal of River Basin Management, 2017, 15, 413-431.	2.7	4
56	Morphological development of river widenings with variable sediment supply. E3S Web of Conferences, 2018, 40, 02007.	0.5	4
57	Design of Desanding Facilities for Hydropower Schemes Based on Trapping Efficiency. Water (Switzerland), 2022, 14, 520.	2.7	3
58	Effect of Water Withdrawal on the Appearance and Sound Level of Waterfalls. Water Resources Research, 2021, 57, e2021WR030980.	4.2	2
59	Fish Guidance Structures with Narrow Bar Spacing: Physical Barriers. , 2022, , 91-98.		2
60	Aerated flow characteristics of skimming flow over stepped chutes. Journal of Hydraulic Research/De Recherches Hydrauliques, 2013, 51, 735-736.	1.7	1
61	Effect of Macrorough Sidewalls on Flow Resistance in Steep Rough Channels. Water Resources Research, 0, , .	4.2	1
62	Stepped chute of TrÅngslet Dam: physical model study. Journal of Applied Water Engineering and Research, 2015, 3, 166-176.	1.8	0
63	Discussion of "Reservoir Level Rise under Extreme Driftwood Blockage at Ogee Crest" by LoÃc BÃ©net, Giovanni De Cesare, and Michael Pfister. Journal of Hydraulic Engineering, 2021, 147, 07021012.	1.5	0
64	Fish Guidance Structure with Wide Bar Spacing: Mechanical Behavioural Barrier. , 2022, , 99-104.		0