## **Astrid Blom**

## List of Publications by Year in descending order

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32 papers	870 citations	15 h-index	501196 28 g-index
38 all docs	38 docs citations	38 times ranked	591 citing authors

#	Article	IF	CITATIONS
1	Quantification of variability in bedform geometry. Journal of Geophysical Research, 2008, 113, .	3.3	109
2	The equilibrium alluvial river under variable flow and its channelâ€forming discharge. Journal of Geophysical Research F: Earth Surface, 2017, 122, 1924-1948.	2.8	104
3	Vertical sorting in bed forms: Flume experiments with a natural and a trimodal sediment mixture. Water Resources Research, 2003, 39, .	4.2	86
4	The graded alluvial river: Profile concavity and downstream fining. Geophysical Research Letters, 2016, 43, 6285-6293.	4.0	75
5	Vertical sorting and the morphodynamics of bed form-dominated rivers: A modeling framework. Journal of Geophysical Research, 2004, 109, n/a-n/a.	3.3	57
6	Advance, Retreat, and Halt of Abrupt Gravelâ€Sand Transitions in Alluvial Rivers. Geophysical Research Letters, 2017, 44, 9751-9760.	4.0	49
7	Different approaches to handling vertical and streamwise sorting in modeling river morphodynamics. Water Resources Research, 2008, 44, .	4.2	41
8	Vertical sorting and the morphodynamics of bed formâ€dominated rivers: A sorting evolution model. Journal of Geophysical Research, 2008, 113, .	3.3	36
9	Mathematical analysis of the <scp>S</scp> aintâ€ <scp>V</scp> enantâ€ <scp>H</scp> irano model for mixedâ€sediment morphodynamics. Water Resources Research, 2014, 50, 7563-7589.	4.2	35
10	Vertical sorting and the morphodynamics of bed-form-dominated rivers: An equilibrium sorting model. Journal of Geophysical Research, 2006, $111$ , .	3.3	32
11	An accurate numerical solution to the Saint-Venant-Hirano model for mixed-sediment morphodynamics in rivers. Advances in Water Resources, 2016, 93, 39-61.	3.8	25
12	Morphodynamic assessment of side channel systems using a simple oneâ€dimensional bifurcation model and a comparison with aerial images. Earth Surface Processes and Landforms, 2018, 43, 1169-1182.	2.5	24
13	River Response to Anthropogenic Modification: Channel Steepening and Gravel Front Fading in an Incising River. Geophysical Research Letters, 2021, 48, e2020GL091338.	4.0	22
14	Ill-posedness in modeling mixed sediment river morphodynamics. Advances in Water Resources, 2018, 114, 219-235.	3.8	17
15	Armor breakup and reformation in a degradational laboratory experiment. Earth Surface Dynamics, 2016, 4, 461-470.	2.4	16
16	The Quasiâ€Equilibrium Longitudinal Profile inÂBackwater Reaches of the Engineered Alluvial River: A Spaceâ€Marching Method. Journal of Geophysical Research F: Earth Surface, 2019, 124, 2542-2560.	2.8	15
17	Ill posedness in modelling two-dimensional morphodynamic problems: effects of bed slope and secondary flow. Journal of Fluid Mechanics, 2019, 868, 461-500.	3.4	13
18	A new technique for measuring the bed surface texture during flow and application to a degradational sandâ€gravel laboratory experiment. Water Resources Research, 2016, 52, 7005-7022.	4.2	12

#	Article	IF	Citations
19	Comparison between experimental and numerical stratigraphy emplaced by a prograding delta. Earth Surface Dynamics, 2014, 2, 323-338.	2.4	11
20	A Sandâ€Gravel Gilbert Delta Subject to Base Level Change. Journal of Geophysical Research F: Earth Surface, 2018, 123, 1160-1179.	2.8	11
21	A regularization strategy for modeling mixed-sediment river morphodynamics. Advances in Water Resources, 2019, 127, 291-309.	3.8	9
22	A reduced complexity model of a gravel-sand river bifurcation: Equilibrium states and their stability. Advances in Water Resources, 2018, 121, 9-21.	3.8	8
23	Image analysis for measuring the size stratification in sand–gravel laboratory experiments. Earth Surface Dynamics, 2014, 2, 217-232.	2.4	8
24	A Qualitative Analysis of the Distribution of Bed-Surface Elevation and the Characteristics of Associated Deposits for Subaqueous Dunes., 0,, 121-134.		7
25	A Wellâ€Posed Alternative to the Hirano Active Layer Model for Rivers With Mixedâ€Size Sediment. Journal of Geophysical Research F: Earth Surface, 2019, 124, 2491-2520.	2.8	7
26	A Rapid Method for Modeling Transient River Response Under Stochastic Controls With Applications to Sea Level Rise and Sediment Nourishment. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2021JF006177.	2.8	6
27	Modelling sorting over the lee face of individual bed forms. , 2006, , .		5
28	Variability in bedform characteristics using flume and river data., 2007,, 923-930.		5
29	A Framework to Evaluate the SDG Contribution of Fluvial Nature-Based Solutions. Sustainability, 2021, 13, 11320.	3.2	5
30	Sediment Nourishments to Mitigate Channel Bed Incision in Engineered Rivers. Journal of Hydraulic Engineering, 2022, 148, .	1.5	5
31	Erosional Cyclic Steps Governed by Plunge Pool Erosion: A Parametric Study Based on Field, Laboratory, and Model Data. Journal of Geophysical Research F: Earth Surface, 2021, 126, e2020JF006034.	2.8	4
32	Degradational response of engineered channels to changes in the upstream controls and channel width: Simplified 1D numerical simulations. E3S Web of Conferences, 2018, 40, 03035.	0.5	0