

# Joel C Rowland

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

52  
papers

1,626  
citations

23  
h-index

40  
g-index

61  
ext. papers

1,985  
ext. citations

6  
avg, IF

4.81  
L-index

#	Paper	IF	Citations
52	Organic carbon burial by river meandering partially offsets bank erosion carbon fluxes in a discontinuous permafrost floodplain. <i>Earth Surface Dynamics</i> , <b>2022</b> , 10, 421-435	3.8	0
51	rabpro: global watershed boundaries, river elevation profiles, and catchment statistics. <i>Journal of Open Source Software</i> , <b>2022</b> , 7, 4237	5.2	
50	Climate Signatures on Lake And Wetland Size Distributions in Arctic Deltas. <i>Geophysical Research Letters</i> , <b>2021</b> , 48, e2021GL094437	4.9	2
49	Unraveling the Combined Effects of Ice and Permafrost on Arctic Delta Morphodynamics. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2021</b> , 126, e2020JF005706	3.8	8
48	Arctic soil patterns analogous to fluid instabilities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2021</b> , 118,	11.5	2
47	Impact of River Channel Lateral Migration on Microbial Communities across a Discontinuous Permafrost Floodplain. <i>Applied and Environmental Microbiology</i> , <b>2021</b> , 87, e0133921	4.8	1
46	Effects of different vegetation drag parameterizations on the tidal propagation in coastal marshlands. <i>Journal of Hydrology</i> , <b>2021</b> , 603, 126775	6	2
45	Representing the function and sensitivity of coastal interfaces in Earth system models. <i>Nature Communications</i> , <b>2020</b> , 11, 2458	17.4	55
44	Channel Network Control on Seasonal Lake Area Dynamics in Arctic Deltas. <i>Geophysical Research Letters</i> , <b>2020</b> , 47, e2019GL086710	4.9	3
43	Determining flow directions in river channel networks using planform morphology and topology. <i>Earth Surface Dynamics</i> , <b>2020</b> , 8, 87-102	3.8	7
42	Global-scale human impact on delta morphology has led to net land area gain. <i>Nature</i> , <b>2020</b> , 577, 514-518	30.4	117
41	Understanding the Eco-Geomorphologic Feedback of Coastal Marsh Under Sea Level Rise: Vegetation Dynamic Representations, Processes Interaction, and Parametric Sensitivity. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2020</b> , 125, e2020JF005729	3.8	3
40	Arctic River Delta Morphologic Variability and Implications for Riverine Fluxes to the Coast. <i>Journal of Geophysical Research F: Earth Surface</i> , <b>2020</b> , 125, e2019JF005250	3.8	20
39	Estimating Sediment Settling Velocities from a Theoretically Guided Data-Driven Approach. <i>Journal of Hydraulic Engineering</i> , <b>2020</b> , 146, 04020067	1.8	4
38	Ice and Permafrost Effects on Delta Morphology and Channel Dynamics. <i>Geophysical Research Letters</i> , <b>2019</b> , 46, 6574-6582	4.9	24
37	Investigating Microtopographic and Soil Controls on a Mountainous Meadow Plant Community Using High-Resolution Remote Sensing and Surface Geophysical Data. <i>Journal of Geophysical Research G: Biogeosciences</i> , <b>2019</b> , 124, 1618-1636	3.7	14
36	From Grain to Floodplain: Evaluating heterogeneity of floodplain hydrostatigraphy using sedimentology, geophysics, and remote sensing. <i>Earth Surface Processes and Landforms</i> , <b>2019</b> , 44, 1799	3.7	6

35	Large uncertainty in permafrost carbon stocks due to hillslope soil deposits. <i>Geophysical Research Letters</i> , <b>2017</b> , 44, 6134-6144	4.9	14
34	From documentation to prediction: raising the bar for thermokarst research. <i>Hydrogeology Journal</i> , <b>2016</b> , 24, 645-648	3.1	9
33	Effect of soil property uncertainties on permafrost thaw projections: a calibration-constrained analysis. <i>Cryosphere</i> , <b>2016</b> , 10, 341-358	5.5	25
32	Preface: Land subsidence processes. <i>Hydrogeology Journal</i> , <b>2016</b> , 24, 547-550	3.1	27
31	A morphology independent methodology for quantifying planview river change and characteristics from remotely sensed imagery. <i>Remote Sensing of Environment</i> , <b>2016</b> , 184, 212-228	13.2	40
30	Dynamics of river mouth deposits. <i>Reviews of Geophysics</i> , <b>2015</b> , 53, 642-672	23.1	91
29	Forecasting the response of Earth's surface to future climatic and land use changes: A review of methods and research needs. <i>Earth's Future</i> , <b>2015</b> , 3, 220-251	7.9	77
28	A hydrologic routing model suitable for climate-scale simulations of arctic rivers: application to the Mackenzie River Basin. <i>Hydrological Processes</i> , <b>2015</b> , 29, 2751-2768	3.3	11
27	Recursive active contours for hierarchical segmentation of wetlands in high-resolution satellite imagery of Arctic landscapes <b>2014</b> ,		4
26	Temporal and spatial pattern of thermokarst lake area changes at Yukon Flats, Alaska. <i>Hydrological Processes</i> , <b>2014</b> , 28, 837-852	3.3	42
25	Extrapolating active layer thickness measurements across Arctic polygonal terrain using LiDAR and data sets. <i>Water Resources Research</i> , <b>2014</b> , 50, 6339-6357	5.4	45
24	Change detection and classification of land cover in multispectral satellite imagery using clustering of sparse approximations (CoSA) over learned feature dictionaries <b>2014</b> ,		1
23	Land cover classification in multispectral imagery using clustering of sparse approximations over learned feature dictionaries. <i>Journal of Applied Remote Sensing</i> , <b>2014</b> , 8, 084793	1.4	11
22	Land cover classification in multispectral satellite imagery using sparse approximations on learned dictionaries <b>2014</b> ,		3
21	Undercomplete learned dictionaries for land cover classification in multispectral imagery of Arctic landscapes using CoSA: clustering of sparse approximations <b>2013</b> ,		5
20	The Importance of Natural Variability in Lake Areas on the Detection of Permafrost Degradation: A Case Study in the Yukon Flats, Alaska. <i>Permafrost and Periglacial Processes</i> , <b>2013</b> , 24, 224-240	4.2	19
19	Erosion at inception of deep-sea channels. <i>Marine and Petroleum Geology</i> , <b>2013</b> , 41, 48-61	4.7	87
18	Arctic tundra ice-wedge landscape characterization by active contours without edges and structural analysis using high-resolution satellite imagery. <i>Remote Sensing Letters</i> , <b>2013</b> , 4, 1077-1086	2.3	14

17	Unsupervised land cover classification in multispectral imagery with sparse representations on learned dictionaries <b>2012</b> ,		6
16	Learning sparse discriminative representations for land cover classification in the Arctic <b>2012</b> ,		4
15	The role of advective heat transport in talik development beneath lakes and ponds in discontinuous permafrost. <i>Geophysical Research Letters</i> , <b>2011</b> , 38, n/a-n/a	4.9	89
14	A Test of Initiation of Submarine Leveed Channels by Deposition Alone. <i>Journal of Sedimentary Research</i> , <b>2010</b> , 80, 710-727	2.1	26
13	Arctic Landscapes in Transition: Responses to Thawing Permafrost. <i>Eos</i> , <b>2010</b> , 91, 229-230	1.5	173
12	Morphodynamics of subaqueous levee formation: Insights into river mouth morphologies arising from experiments. <i>Journal of Geophysical Research</i> , <b>2010</b> , 115,		35
11	Response of Alum Rock springs to the October 30, 2007 Alum Rock earthquake and implications for the origin of increased discharge after earthquakes. <i>Geofluids</i> , <b>2009</b> , 9, 237-250	1.5	69
10	Formation and maintenance of single-thread tie channels entering floodplain lakes: Observations from three diverse river systems. <i>Journal of Geophysical Research</i> , <b>2009</b> , 114,		58
9	Turbulent characteristics of a shallow wall-bounded plane jet: experimental implications for river mouth hydrodynamics. <i>Journal of Fluid Mechanics</i> , <b>2009</b> , 627, 423-449	3.7	46
8	The influence of poorly interconnected fault zone flow paths on spring geochemistry. <i>Geofluids</i> , <b>2008</b> , 8, 93-101	1.5	20
7	The depositional web on the floodplain of the Fly River, Papua New Guinea. <i>Journal of Geophysical Research</i> , <b>2008</b> , 113,		67
6	Chapter 3 The Rapid Spread of Mine-Derived Sediment across the Middle Fly River Floodplain. <i>Developments in Earth and Environmental Sciences</i> , <b>2008</b> , 9, 113-152		
5	Tie channel sedimentation rates, oxbow formation age and channel migration rate from optically stimulated luminescence (OSL) analysis of floodplain deposits. <i>Earth Surface Processes and Landforms</i> , <b>2005</b> , 30, 1161-1179	3.7	74
4	Dispersal of mercury-contaminated sediments by geomorphic processes, sixmile canyon, Nevada, USA: Implications to site characterization and remediation of fluvial environments. <i>Water, Air, and Soil Pollution</i> , <b>1996</b> , 86, 373-388	2.6	87
3	An integrated approach to the determination of the quantity, distribution, and dispersal of mercury in Lahontan Reservoir, Nevada, USA. <i>Journal of Geochemical Exploration</i> , <b>1995</b> , 52, 45-55	3.8	23
2	Evolution of a conjugate passive margin pair in Mesozoic southern Turkey. <i>Tectonics</i> , <b>1993</b> , 12, 954-970	4.3	52
1	Effect of soil property uncertainties on permafrost thaw projections: a calibration-constrained analysis		4