

# Joel C Rowland

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/626413/publications.pdf>

Version: 2024-02-01

53  
papers

2,347  
citations

236925

25  
h-index

214800

47  
g-index

61  
all docs

61  
docs citations

61  
times ranked

3017  
citing authors

#	ARTICLE	IF	CITATIONS
1	Global-scale human impact on delta morphology has led to net land area gain. <i>Nature</i> , 2020, 577, 514-518.	27.8	241
2	Arctic Landscapes in Transition: Responses to Thawing Permafrost. <i>Eos</i> , 2010, 91, 229-230.	0.1	230
3	Representing the function and sensitivity of coastal interfaces in Earth system models. <i>Nature Communications</i> , 2020, 11, 2458.	12.8	153
4	Dynamics of river mouth deposits. <i>Reviews of Geophysics</i> , 2015, 53, 642-672.	23.0	133
5	Erosion at inception of deep-sea channels. <i>Marine and Petroleum Geology</i> , 2013, 41, 48-61.	3.3	118
6	The role of advective heat transport in talik development beneath lakes and ponds in discontinuous permafrost. <i>Geophysical Research Letters</i> , 2011, 38, n/a-n/a.	4.0	109
7	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> , 2015, 3, 220-251.	6.3	98
8	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> , 2005, 30, 1161-1179.	2.5	96
9	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> , 1996, 86, 373-388.	2.4	94
10	The depositional web on the floodplain of the Fly River, Papua New Guinea. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	82
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> , 2009, 9, 237-250.	0.7	77
12	Formation and maintenance of single-thread tie channels entering floodplain lakes: Observations from three diverse river systems. <i>Journal of Geophysical Research</i> , 2009, 114, .	3.3	77
13	A morphology independent methodology for quantifying planview river change and characteristics from remotely sensed imagery. <i>Remote Sensing of Environment</i> , 2016, 184, 212-228.	11.0	68
14	Evolution of a conjugate passive margin pair in Mesozoic southern Turkey. <i>Tectonics</i> , 1993, 12, 954-970.	2.8	58
15	Extrapolating active layer thickness measurements across Arctic polygonal terrain using LiDAR and NDVI data sets. <i>Water Resources Research</i> , 2014, 50, 6339-6357.	4.2	51
16	Turbulent characteristics of a shallow wall-bounded plane jet: experimental implications for river mouth hydrodynamics. <i>Journal of Fluid Mechanics</i> , 2009, 627, 423-449.	3.4	50
17	Temporal and spatial pattern of thermokarst lake area changes at Yukon Flats, Alaska. <i>Hydrological Processes</i> , 2014, 28, 837-852.	2.6	49
18	Preface: Land subsidence processes. <i>Hydrogeology Journal</i> , 2016, 24, 547-550.	2.1	48

#	ARTICLE	IF	CITATIONS
19	Morphodynamics of subaqueous levee formation: Insights into river mouth morphologies arising from experiments. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	44
20	Ice and Permafrost Effects on Delta Morphology and Channel Dynamics. <i>Geophysical Research Letters</i> , 2019, 46, 6574-6582.	4.0	36
21	A Test of Initiation of Submarine Leveed Channels by Deposition Alone. <i>Journal of Sedimentary Research</i> , 2010, 80, 710-727.	1.6	34
22	From documentation to prediction: raising the bar for thermokarst research. <i>Hydrogeology Journal</i> , 2016, 24, 645-648.	2.1	34
23	Effect of soil property uncertainties on permafrost thaw projections: a calibration-constrained analysis. <i>Cryosphere</i> , 2016, 10, 341-358.	3.9	33
24	Large uncertainty in permafrost carbon stocks due to hillslope soil deposits. <i>Geophysical Research Letters</i> , 2017, 44, 6134-6144.	4.0	31
25	Arctic River Delta Morphologic Variability and Implications for Riverine Fluxes to the Coast. <i>Journal of Geophysical Research F: Earth Surface</i> , 2020, 125, e2019JF005250.	2.8	29
26	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> , 1995, 52, 45-55.	3.2	26
27	The influence of poorly interconnected fault zone flow paths on spring geochemistry. <i>Geofluids</i> , 2008, 8, 93-101.	0.7	25
28	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> , 2019, 124, 1618-1636.	3.0	23
29	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> , 2013, 24, 224-240.	3.4	21
30	Unraveling the Combined Effects of Ice and Permafrost on Arctic Delta Morphodynamics. <i>Journal of Geophysical Research F: Earth Surface</i> , 2021, 126, e2020JF005706.	2.8	19
31	Arctic tundra ice-wedge landscape characterization by active contours without edges and structural analysis using high-resolution satellite imagery. <i>Remote Sensing Letters</i> , 2013, 4, 1077-1086.	1.4	15
32	A hydrologic routing model suitable for climate-scale simulations of arctic rivers: application to the Mackenzie River Basin. <i>Hydrological Processes</i> , 2015, 29, 2751-2768.	2.6	14
33	Land cover classification in multispectral imagery using clustering of sparse approximations over learned feature dictionaries. <i>Journal of Applied Remote Sensing</i> , 2014, 8, 084793.	1.3	13
34	Determining flow directions in river channel networks using planform morphology and topology. <i>Earth Surface Dynamics</i> , 2020, 8, 87-102.	2.4	13
35	Arctic soil patterns analogous to fluid instabilities. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	12
36	Organic carbon burial by river meandering partially offsets bank erosion carbon fluxes in a discontinuous permafrost floodplain. <i>Earth Surface Dynamics</i> , 2022, 10, 421-435.	2.4	12

#	ARTICLE	IF	CITATIONS
37	From Grain to Floodplain: Evaluating heterogeneity of floodplain hydrostratigraphy using sedimentology, geophysics, and remote sensing. <i>Earth Surface Processes and Landforms</i> , 2019, 44, 1799-1815.	2.5	11
38	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> , 2020, 125, e2020JF005729.	2.8	11
39	Unsupervised land cover classification in multispectral imagery with sparse representations on learned dictionaries. , 2012, , .		7
40	Undercomplete learned dictionaries for land cover classification in multispectral imagery of Arctic landscapes using CoSA: clustering of sparse approximations. <i>Proceedings of SPIE</i> , 2013, , .	0.8	6
41	Learning sparse discriminative representations for land cover classification in the Arctic. <i>Proceedings of SPIE</i> , 2012, , .	0.8	5
42	Recursive active contours for hierarchical segmentation of wetlands in high-resolution satellite imagery of Arctic landscapes. , 2014, , .		5
43	Estimating Sediment Settling Velocities from a Theoretically Guided Data-Driven Approach. <i>Journal of Hydraulic Engineering</i> , 2020, 146, .	1.5	5
44	Channel Network Control on Seasonal Lake Area Dynamics in Arctic Deltas. <i>Geophysical Research Letters</i> , 2020, 47, e2019GL086710.	4.0	5
45	Land cover classification in multispectral satellite imagery using sparse approximations on learned dictionaries. <i>Proceedings of SPIE</i> , 2014, , .	0.8	4
46	Climate Signatures on Lake And Wetland Size Distributions in Arctic Deltas. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL094437.	4.0	4
47	Impact of Coastal Marsh Eco-Geomorphologic Change on Saltwater Intrusion Under Future Sea Level Rise. <i>Water Resources Research</i> , 2022, 58, .	4.2	4
48	Impact of River Channel Lateral Migration on Microbial Communities across a Discontinuous Permafrost Floodplain. <i>Applied and Environmental Microbiology</i> , 2021, 87, e0133921.	3.1	3
49	Effects of different vegetation drag parameterizations on the tidal propagation in coastal marshlands. <i>Journal of Hydrology</i> , 2021, 603, 126775.	5.4	3
50	Change detection and classification of land cover in multispectral satellite imagery using clustering of sparse approximations (CoSA) over learned feature dictionaries. , 2014, , .		2
51	rabpro: global watershed boundaries, river elevation profiles, and catchment statistics. <i>Journal of Open Source Software</i> , 2022, 7, 4237.	4.6	2
52	Chapter 3 The Rapid Spread of Mine-Derived Sediment across the Middle Fly River Floodplain. <i>Developments in Earth and Environmental Sciences</i> , 2008, 9, 113-152.	0.1	0
53	Change detection in Arctic satellite imagery using clustering of sparse approximations (CoSA) over learned feature dictionaries. <i>Proceedings of SPIE</i> , 2015, , .	0.8	0