

# Eric Lajeunesse

## List of Publications by Year in descending order

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Version: 2024-02-01

63  
papers

2,840  
citations

186265

28  
h-index

175258

52  
g-index

83  
all docs

83  
docs citations

83  
times ranked

2497  
citing authors

#	ARTICLE	IF	CITATIONS
1	Bed load transport in turbulent flow at the grain scale: Experiments and modeling. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	293
2	Spreading of a granular mass on a horizontal plane. <i>Physics of Fluids</i> , 2004, 16, 2371-2381.	4.0	279
3	Granular slumping on a horizontal surface. <i>Physics of Fluids</i> , 2005, 17, 103302.	4.0	238
4	On the use of Saint Venant equations to simulate the spreading of a granular mass. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	161
5	Miscible displacement in a Hele-Shaw cell at high rates. <i>Journal of Fluid Mechanics</i> , 1999, 398, 299-319.	3.4	140
6	OZCAR: The French Network of Critical Zone Observatories. <i>Vadose Zone Journal</i> , 2018, 17, 1-24.	2.2	126
7	Turbulent mixing in the Amazon River: The isotopic memory of confluences. <i>Earth and Planetary Science Letters</i> , 2010, 290, 37-43.	4.4	118
8	3D Instability of Miscible Displacements in a Hele-Shaw Cell. <i>Physical Review Letters</i> , 1997, 79, 5254-5257.	7.8	101
9	Interface instabilities during displacements of two miscible fluids in a vertical pipe. <i>Physics of Fluids</i> , 2001, 13, 553-556.	4.0	61
10	Small is beautiful: Upscaling from microscale laminar to natural turbulent rivers. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	58
11	Cross-stream diffusion in bedload transport. <i>Physics of Fluids</i> , 2014, 26, .	4.0	58
12	Fluvial and submarine morphodynamics of laminar and near-laminar flows: a synthesis. <i>Sedimentology</i> , 2010, 57, 1-26.	3.1	57
13	On the tip-splitting instability of viscous fingers. <i>Journal of Fluid Mechanics</i> , 2000, 419, 125-149.	3.4	55
14	Laboratory rivers: Lacey's law, threshold theory, and channel stability. <i>Earth Surface Dynamics</i> , 2017, 5, 187-198.	2.4	53
15	Dynamic of particulate and dissolved organic carbon in small volcanic mountainous tropical watersheds. <i>Chemical Geology</i> , 2013, 351, 229-244.	3.3	52
16	Understanding how volume affects the mobility of dry debris flows. <i>Geophysical Research Letters</i> , 2009, 36, .	4.0	51
17	Controls on chemical weathering on a mountainous volcanic tropical island: Guadeloupe (French) Tj ETQq1 1 0.784314 rgBT /Overlo	3.9	50
18	Flow pattern and sediment transport in a braided river: The "torrent de St Pierre" (French Alps). <i>Journal of Hydrology</i> , 2006, 330, 496-505.	5.4	49

#	ARTICLE	IF	CITATIONS
19	Orography-driven chemical denudation in the Lesser Antilles: Evidence for a new feed-back mechanism stabilizing atmospheric CO <sub>2</sub> . <i>Numerische Mathematik</i> , 2011, 311, 851-894.	1.4	49
20	Submarine Canyons in the Bathtub. <i>Journal of Sedimentary Research</i> , 2005, 75, 6-11.	1.6	46
21	Flow Rule, Self-Channelization, and Levees in Unconfined Granular Flows. <i>Physical Review Letters</i> , 2006, 97, 158303.	7.8	45
22	Bedload transport of a bimodal sediment bed. <i>Journal of Geophysical Research</i> , 2012, 117, .	3.3	45
23	New insights on the runout of large landslides in the Valles-Marineris canyons, Mars. <i>Geophysical Research Letters</i> , 2006, 33, .	4.0	42
24	Thermocapillary migration of long bubbles in polygonal tubes. II. Experiments. <i>Physics of Fluids</i> , 2003, 15, 308-314.	4.0	38
25	Physically based model of downstream fining in bedrock streams with lateral input. <i>Water Resources Research</i> , 2010, 46, .	4.2	35
26	Width of laminar laboratory rivers. <i>Physical Review E</i> , 2013, 87, 052204.	2.1	35
27	Stability of bedforms in laminar flows with free surface: from bars to ripples. <i>Journal of Fluid Mechanics</i> , 2010, 642, 329-348.	3.4	33
28	Measuring bedload in gravel-bed mountain rivers: averaging methods and sampling strategies. <i>Geodinamica Acta</i> , 2008, 21, 81-92.	2.2	30
29	The threshold of the instability in miscible displacements in a Hele-Shaw cell at high rates. <i>Physics of Fluids</i> , 2001, 13, 799-801.	4.0	24
30	Laboratory alluvial fans in one dimension. <i>Physical Review E</i> , 2014, 90, 022203.	2.1	22
31	Tracer dispersion in bedload transport. <i>Advances in Geosciences</i> , 0, 37, 1-6.	12.0	22
32	Rivers from Volcanic Island Arcs: The subduction weathering factory. <i>Applied Geochemistry</i> , 2011, 26, S350-S353.	3.0	21
33	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.	2.4	21
34	Erosion rates deduced from seasonal mass balance along the upper Urumqi River in Tianshan. <i>Solid Earth</i> , 2011, 2, 283-301.	2.8	20
35	Threshold constraints on the size, shape and stability of alluvial rivers. <i>Nature Reviews Earth &amp; Environment</i> , 2022, 3, 406-419.	29.7	20
36	Experimental Investigation On Self-Channelized Erosive Gravity Currents. <i>Journal of Sedimentary Research</i> , 2014, 84, 487-498.	1.6	18

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37	Advection and dispersion of bed load tracers. <i>Earth Surface Dynamics</i> , 2018, 6, 389-399.	2.4	18
38	Stream Discharge Surges Generated by Groundwater Flow. <i>Geophysical Research Letters</i> , 2019, 46, 7447-7455.	4.0	18
39	Diffusive evolution of experimental braided rivers. <i>Physical Review E</i> , 2014, 89, 052809.	2.1	17
40	The Grain-size Patchiness of Braided Gravel-Bed Streams – example of the Urumqi River (northeast Tian) Tj ETQq000 rgBT /Overlock 1	12.0	17
41	Jamming transition of a granular pile below the angle of repose. <i>European Physical Journal B</i> , 2003, 36, 105-113.	1.5	16
42	Rhomboid beach pattern: A laboratory investigation. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	16
43	Erosive effects of the storm Helena (1963) on Basse Terre Island (Guadeloupe – Lesser Antilles Arc). <i>Geomorphology</i> , 2014, 206, 79-86.	2.6	16
44	Self-similar growth of a bimodal laboratory fan. <i>Earth Surface Dynamics</i> , 2017, 5, 239-252.	2.4	16
45	Optical method for measuring bed topography and flow depth in an experimental flume. <i>Solid Earth</i> , 2011, 2, 143-154.	2.8	14
46	Response of a laboratory aquifer to rainfall. <i>Journal of Fluid Mechanics</i> , 2014, 759, .	3.4	13
47	Recirculation cells in a wide channel. <i>Physics of Fluids</i> , 2014, 26, .	4.0	13
48	Boltzmann Distribution of Sediment Transport. <i>Physical Review Letters</i> , 2019, 123, 014501.	7.8	10
49	Laboratory rivers adjust their shape to sediment transport. <i>Physical Review E</i> , 2020, 102, 053101.	2.1	10
50	Sediment load determines the shape of rivers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	9
51	Uniform grain-size distribution in the active layer of a shallow, gravel-bedded, braided river (the) Tj ETQq1 1 0.784314 rgBT /Overlock 10	2.4	8
52	Streamwise streaks induced by bedload diffusion. <i>Journal of Fluid Mechanics</i> , 2019, 863, 601-619.	3.4	8
53	Near-wall velocity measurements by particle-shadow tracking. <i>Experiments in Fluids</i> , 2007, 42, 843-846.	2.4	6
54	Building the information system of the French Critical Zone Observatories network: Theia/OZCAR-IS. <i>Hydrological Sciences Journal</i> , 2022, 67, 2401-2419.	2.6	6

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55	Viscous transfer of momentum across a shallow laminar flow. <i>Journal of Fluid Mechanics</i> , 2022, 932, .	3.4	4
56	Turbulent mixing in the Amazon River: The isotopic memory of confluences. <i>Earth and Planetary Science Letters</i> , 290 (2010), pp. 37â€“43. <i>Earth and Planetary Science Letters</i> , 2011, 311, 448-450.	4.4	3
57	Flow and residence time in a two-dimensional aquifer recharged by rainfall. <i>Journal of Fluid Mechanics</i> , 2021, 917, .	3.4	3
58	Experimental investigation of the response of an alluvial river to a vertical offset of its bed. , 2007, , 179-184.		3
59	Erosion structures in laminar flumes. , 2009, , .		1
60	Reply to the Comment made by C. Gualtieri on â€œTurbulent mixing in the Amazon River: The isotopic memory of confluencesâ€ by J. Bouchez, E. Lajeunesse, J. Gaillardet, C. France-Lanord, P. Dutra-Maia and L. Maurice. <i>Earth and Planetary Science Letters</i> , 2011, 311, 451-452.	4.4	0
61	Incision dynamics and shear stress measurements in submarine channels experiments. , 2006, , .		0
62	Modelling of dune patterns by short range interactions. , 2006, , .		0
63	Physically-based model of downstream fining in bedrock streams with side input and verification with field data. , 2007, , 571-579.		0