Eric Lajeunesse

List of Publications by Year
in descending order

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	Building the information system of the French Critical Zone Observatories network: Theia/OZCAR-IS. Hydrological Sciences Journal, 2022, 67, 2401-2419.	2.6	6
2	Viscous transfer of momentum across a shallow laminar flow. Journal of Fluid Mechanics, 2022, 932, .	3.4	4
3	Threshold constraints on the size, shape and stability of alluvial rivers. Nature Reviews Earth & Environment, 2022, 3, 406-419.	29.7	20
4	Flow and residence time in a two-dimensional aquifer recharged by rainfall. Journal of Fluid Mechanics, 2021, 917, .	3.4	3
5	Sediment load determines the shape of rivers. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	9
6	Laboratory rivers adjust their shape to sediment transport. Physical Review E, 2020, 102, 053101.	2.1	10
7	Streamâ€Discharge Surges Generated by Groundwater Flow. Geophysical Research Letters, 2019, 46, 7447-7455.	4.0	18
8	Boltzmann Distribution of Sediment Transport. Physical Review Letters, 2019, 123, 014501.	7.8	10
9	Streamwise streaks induced by bedload diffusion. Journal of Fluid Mechanics, 2019, 863, 601-619.	3.4	8
10	Advection and dispersion of bed load tracers. Earth Surface Dynamics, 2018, 6, 389-399.	2.4	18
11	Uniform grain-size distribution in the active layer of a shallow, gravel-bedded, braided river (the) Tj ETQq1 1 0.784314 rgBT /Overlock	2.4	8
12	OZCAR: The French Network of Critical Zone Observatories. Vadose Zone Journal, 2018, 17, 1-24.	2.2	126
13	Self-similar growth of a bimodal laboratory fan. Earth Surface Dynamics, 2017, 5, 239-252.	2.4	16
14	Laboratory rivers: Lacey's law, threshold theory, and channel stability. Earth Surface Dynamics, 2017, 5, 187-198.	2.4	53
15	Geometry of meandering and braided gravel-bed threads from the Bayanbulak Grassland, Tianshan, P.ÂR.ÂChina. Earth Surface Dynamics, 2016, 4, 273-283.	2.4	21
16	Controls on chemical weathering on a mountainous volcanic tropical island: Guadeloupe (French) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	3.9	50
17	Experimental Investigation On Self-Channelized Erosive Gravity Currents. Journal of Sedimentary Research, 2014, 84, 487-498.	1.6	18
18	Diffusive evolution of experimental braided rivers. Physical Review E, 2014, 89, 052809.	2.1	17

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19	Cross-stream diffusion in bedload transport. Physics of Fluids, 2014, 26, .	4.0	58
20	Response of a laboratory aquifer to rainfall. Journal of Fluid Mechanics, 2014, 759, .	3.4	13
21	Recirculation cells in a wide channel. Physics of Fluids, 2014, 26, .	4.0	13
22	Laboratory alluvial fans in one dimension. Physical Review E, 2014, 90, 022203.	2.1	22
23	Erosive effects of the storm Helena (1963) on Basse Terre Island (Guadeloupe â€" Lesser Antilles Arc). Geomorphology, 2014, 206, 79-86.	2.6	16
24	Dynamic of particulate and dissolved organic carbon in small volcanic mountainous tropical watersheds. Chemical Geology, 2013, 351, 229-244.	3.3	52
25	Width of laminar laboratory rivers. Physical Review E, 2013, 87, 052204.	2.1	35
26	Bedload transport of a bimodal sediment bed. Journal of Geophysical Research, 2012, 117, .	3.3	45
27	Rivers from Volcanic Island Arcs: The subduction weathering factory. Applied Geochemistry, 2011, 26, S350-S353.	3.0	21
28	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. Earth and Planetary Science Letters, 2011, 311, 451-452.	4.4	0
29	Turbulent mixing in the Amazon River: The isotopic memory of confluences. Earth and Planetary Science Letters, 290 (2010), pp. 37â€“43. Earth and Planetary Science Letters, 2011, 311, 448-450.	4.4	3
30	Orography-driven chemical denudation in the Lesser Antilles: Evidence for a new feed-back mechanism stabilizing atmospheric CO2. Numerische Mathematik, 2011, 311, 851-894.	1.4	49
31	Optical method for measuring bed topography and flow depth in an experimental flume. Solid Earth, 2011, 2, 143-154.	2.8	14
32	Erosion rates deduced from seasonal mass balance along the upper Urumqi River in Tianshan. Solid Earth, 2011, 2, 283-301.	2.8	20
33	Stability of bedforms in laminar flows with free surface: from bars to ripples. Journal of Fluid Mechanics, 2010, 642, 329-348.	3.4	33
34	Fluvial and submarine morphodynamics of laminar and near-laminar flows: a synthesis. Sedimentology, 2010, 57, 1-26.	3.1	57
35	Rhomboid beach pattern: A laboratory investigation. Journal of Geophysical Research, 2010, 115, .	3.3	16
36	Bed load transport in turbulent flow at the grain scale: Experiments and modeling. Journal of Geophysical Research, 2010, 115, .	3.3	293

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37	Turbulent mixing in the Amazon River: The isotopic memory of confluences. Earth and Planetary Science Letters, 2010, 290, 37-43.	4.4	118
38	Physically based model of downstream fining in bedrock streams with lateral input. Water Resources Research, 2010, 46, .	4.2	35
39	Erosion structures in laminar flumes. , 2009, , .		1
40	Understanding how volume affects the mobility of dry debris flows. Geophysical Research Letters, 2009, 36, .	4.0	51
41	Small is beautiful: Upscaling from microscale laminar to natural turbulent rivers. Journal of Geophysical Research, 2008, 113, .	3.3	58
42	Measuring bedload in gravel-bed mountain rivers: averaging methods and sampling strategies. Geodinamica Acta, 2008, 21, 81-92.	2.2	30
43	Near-wall velocity measurements by particle-shadow tracking. Experiments in Fluids, 2007, 42, 843-846.	2.4	6
44	Experimental investigation of the response of an alluvial river to a vertical offset of its bed. , 2007, , 179-184.		3
45	Physically-based model of downstream fining in bedrock streams with side input and verification with field data. , 2007, , 571-579.		0
46	New insights on the runout of large landslides in the Valles-Marineris canyons, Mars. Geophysical Research Letters, 2006, 33, .	4.0	42
47	Flow pattern and sediment transport in a braided river: The â€œtorrent de St Pierreâ€•(French Alps). Journal of Hydrology, 2006, 330, 496-505.	5.4	49
48	Flow Rule, Self-Channelization, and Levees in Unconfined Granular Flows. Physical Review Letters, 2006, 97, 158303.	7.8	45
49	Incision dynamics and shear stress measurements in submarine channels experiments. , 2006, , .		0
50	Modelling of dune patterns by short range interactions. , 2006, , .		0
51	Submarine Canyons in the Bathtub. Journal of Sedimentary Research, 2005, 75, 6-11.	1.6	46
52	Granular slumping on a horizontal surface. Physics of Fluids, 2005, 17, 103302.	4.0	238
53	On the use of Saint Venant equations to simulate the spreading of a granular mass. Journal of Geophysical Research, 2005, 110, .	3.3	161
54	Spreading of a granular mass on a horizontal plane. Physics of Fluids, 2004, 16, 2371-2381.	4.0	279

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55	Jamming transition of a granular pile below the angle of repose. European Physical Journal B, 2003, 36, 105-113.	1.5	16
56	Thermocapillary migration of long bubbles in polygonal tubes. II. Experiments. Physics of Fluids, 2003, 15, 308-314.	4.0	38
57	Interface instabilities during displacements of two miscible fluids in a vertical pipe. Physics of Fluids, 2001, 13, 553-556.	4.0	61
58	The threshold of the instability in miscible displacements in a Heleâ€“Shaw cell at high rates. Physics of Fluids, 2001, 13, 799-801.	4.0	24
59	On the tip-splitting instability of viscous fingers. Journal of Fluid Mechanics, 2000, 419, 125-149.	3.4	55
60	Miscible displacement in a Hele-Shaw cell at high rates. Journal of Fluid Mechanics, 1999, 398, 299-319.	3.4	140
61	3D Instability of Miscible Displacements in a Hele-Shaw Cell. Physical Review Letters, 1997, 79, 5254-5257.	7.8	101
62	Tracer dispersion in bedload transport. Advances in Geosciences, 0, 37, 1-6.	12.0	22
63	The Grain-size Patchiness of Braided Gravel-Bed Streams â€“ example of the Urumqi River (northeast Tian) Tj ETQq1 1 0.784314 rgBT	12.0	17