Laurent G J MontÃ©si

List of Publications by Year
in descending order

64	1,873	304743	276875
papers	citations	22 h-index	41 g-index

71	71	71	2081
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Barriers to Melt Ascent in the Lithosphere of Io With Applications to Heat Pipe Formation. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	1
2	In Recognition of Our 2021 Peer Reviewers. Journal of Geophysical Research E: Planets, 2022, 127, .	3.6	0
3	Venus Corona and Tessera Explorer (VeCaTEx). , 2021, 53, .		0
4	The Venus Strategic Plan. , 2021, 53, .		0
5	Recommendations for Addressing Priority Io Science in the Next Decade. , 2021, 53, .		0
6	The Science Case for Io Exploration. , 2021, 53, .		1
7	The scientific rationale for deployment of a long-lived geophysical network on the Moon. , 2021, 53, .		4
8	The Growth of Europa's Icy Shell: Convection and Crystallization. Journal of Geophysical Research E: Planets, 2021, 126, e2020JE006677.	3.6	12
9	Thank You to Our 2020 Peer Reviewers. Journal of Geophysical Research E: Planets, 2021, 126, e2021JE006865.	3.6	0
10	Effective seismic wave velocities and attenuation in partially molten rocks. Earth and Planetary Science Letters, 2021, 572, 117117.	4.4	3
11	Geoscientists, Who Have Documented the Rapid and Accelerating Climate Crisis for Decades, Are Now Pleading for Immediate Collective Action. Geophysical Research Letters, 2021, 48, e2021GL096644.	4.0	3
12	A Bayesian approach to infer interior mass anomalies from the gravity data of celestial bodies. Geophysical Journal International, 2020, 220, 1687-1699.	2.4	9
13	Corona structures driven by plumeâ€“lithosphere interactions and evidence for ongoing plume activity on Venus. Nature Geoscience, 2020, 13, 547-554.	12.9	90
14	In Appreciation of Our 2019 Peer Reviewers. Journal of Geophysical Research E: Planets, 2020, 125, e2020JE006420.	3.6	0
15	Melt Focusing Along Permeability Barriers at Subduction Zones and the Location of Volcanic Arcs. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009253.	2.5	8
16	Effects of Heatâ€Producing Elements on the Stability of Deep Mantle Thermochemical Piles. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008895.	2.5	9
17	The dynamic life of an oceanic plate. Tectonophysics, 2019, 760, 107-135.	2.2	33
18	The Generation of Barriers to Melt Ascent in the Martian Lithosphere. Journal of Geophysical Research E: Planets, 2018, 123, 47-66.	3.6	8

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19	The impact of a pressurized regional sea or global ocean on stresses on Enceladus. Journal of Geophysical Research E: Planets, 2017, 122, 1258-1275.	3.6	12
20	Deformation-aided segregation of Fe-S liquid from olivine under deep Earth conditions: Implications for core formation in the early solar system. Physics of the Earth and Planetary Interiors, 2017, 263, 38-54.	1.9	11
21	Evaluating geodynamic models for sub-slab anisotropy: Effects of olivine fabric type. , 2017, 13, 247-259.		13
22	MeltMigrator: A MATLABâ€based software for modeling threeâ€dimensional melt migration and crustal thickness variations at midâ€ocean ridges following a rulesâ€based approach. Geochemistry, Geophysics, Geosystems, 2017, 18, 445-456.	2.5	2
23	Experimental evidence for melt partitioning between olivine and orthopyroxene in partially molten harzburgite. Journal of Geophysical Research: Solid Earth, 2016, 121, 5776-5793.	3.4	11
24	Faultâ€bound valley associated with the Rembrandt basin on Mercury. Geophysical Research Letters, 2016, 43, 11,536.	4.0	8
25	Along-strike variation in subducting plate velocity induced by along-strike variation in overriding plate structure: Insights from 3D numerical models. Journal of Geodynamics, 2016, 100, 175-183.	1.6	7
26	Coulomb stress transfer and modeled permanent vertical surface deformation from the August 2011, Mineral, Virginia, earthquake. , 2015, , .		2
27	Slipâ€rateâ€dependent melt extraction at oceanic transform faults. Geochemistry, Geophysics, Geosystems, 2015, 16, 401-419.	2.5	17
28	Estimates of olivineâ€“basaltic melt electrical conductivity using a digital rock physics approach. Earth and Planetary Science Letters, 2015, 432, 332-341.	4.4	33
29	Strain weakening enables continental plate tectonics. Tectonophysics, 2014, 631, 189-196.	2.2	60
30	Experimental quantification of permeability of partially molten mantle rock. Earth and Planetary Science Letters, 2014, 388, 273-282.	4.4	99
31	Formation of ridges on Europa above crystallizing water bodies inside the ice shell. Icarus, 2014, 237, 190-201.	2.5	24
32	Deflection of mantle flow beneath subducting slabs and the origin of subslab anisotropy. Geophysical Research Letters, 2014, 41, 6734-6742.	4.0	12
33	Three-dimensional flow in the subslab mantle. Geochemistry, Geophysics, Geosystems, 2014, 15, 3989-4008.	2.5	17
34	Hydration adjacent to a deeply subducting slab: The roles of nominally anhydrous minerals and migrating fluids. Journal of Geophysical Research: Solid Earth, 2013, 118, 5753-5770.	3.4	17
35	The recent history of the Galapagos triple junction preserved on the Pacific plate. Earth and Planetary Science Letters, 2013, 371-372, 6-15.	4.4	10
36	Fabric development as the key for forming ductile shear zones and enabling plate tectonics. Journal of Structural Geology, 2013, 50, 254-266.	2.3	102

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37	Solving the Mascon Mystery. Science, 2013, 340, 1535-1536.	12.6	8
38	Geodynamic Models of Melt Generation and Extraction at Mid-Ocean Ridges. Oceanography, 2012, 25, 78-88.	1.0	11
39	Distributed deformation ahead of the Cocos-Nazca Rift at the Galapagos triple junction. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	2.5	16
40	Melt extraction pathways at segmented oceanic ridges: Application to the East Pacific Rise at the Siqueiros transform. Geophysical Research Letters, 2011, 38, n/a-n/a.	4.0	27
41	Controls on melt migration and extraction at the ultraslow Southwest Indian Ridge 10Â°â€“16Â°E. Journal of Geophysical Research, 2011, 116, .	3.3	44
42	Transient rifting north of the GalÃ¡pagos Triple Junction. Earth and Planetary Science Letters, 2011, 307, 461-469.	4.4	6
43	Microtomography of Partially Molten Rocks: Three-Dimensional Melt Distribution in Mantle Peridotite. Science, 2011, 332, 88-91.	12.6	134
44	Accommodation of lithospheric shortening on Mercury from altimetric profiles of ridges and lobate scarps measured during MESSENGER flybys 1 and 2. Icarus, 2010, 209, 247-255.	2.5	29
45	Generation of permeability barriers during melt extraction at midâ€•ocean ridges. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	53
46	Fault reactivation and selective abandonment in the oceanic lithosphere. Geophysical Research Letters, 2008, 35, .	4.0	42
47	Cracking of lithosphere north of the Galapagos triple junction. Geology, 2008, 36, 339.	4.4	22
48	A probabilistic damage model of stressâ€•induced permeability anisotropy during cataclastic flow. Journal of Geophysical Research, 2007, 112, .	3.3	30
49	A constitutive model for layer development in shear zones near the brittle-ductile transition. Geophysical Research Letters, 2007, 34, .	4.0	34
50	Mantle flow and melting underneath oblique and ultraslow midâ€•ocean ridges. Geophysical Research Letters, 2007, 34, .	4.0	64
51	Spreading rate dependence of gravity anomalies along oceanic transform faults. Nature, 2007, 448, 183-187.	27.8	63
52	Faulting and volcanism in the axial valley of the slow-spreading center of the Mariana back arc basin from Wadatsumi side-scan sonar images. Geochemistry, Geophysics, Geosystems, 2005, 6, n/a-n/a.	2.5	20
53	Postseismic deformation and the strength of ductile shear zones. Earth, Planets and Space, 2004, 56, 1135-1142.	2.5	11
54	Controls of shear zone rheology and tectonic loading on postseismic creep. Journal of Geophysical Research, 2004, 109, .	3.3	75

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55	Effects of regional slope on viscous flows: a preliminary study of lava terrace emplacement at submarine volcanic rift zones. Journal of Volcanology and Geothermal Research, 2003, 119, 145-159.	2.1	13
56	Spacing of faults at the scale of the lithosphere and localization instability: 1. Theory. Journal of Geophysical Research, 2003, 108, .	3.3	20
57	Spacing of faults at the scale of the lithosphere and localization instability: 2. Application to the Central Indian Basin. Journal of Geophysical Research, 2003, 108, .	3.3	15
58	Clues to the lithospheric structure of Mars from wrinkle ridge sets and localization instability. Journal of Geophysical Research, 2003, 108, .	3.3	95
59	Grain size evolution and the rheology of ductile shear zones: from laboratory experiments to postseismic creep. Earth and Planetary Science Letters, 2003, 211, 97-110.	4.4	123
60	Effects of stress on the anisotropic development of permeability during mechanical compaction of porous sandstones. Geological Society Special Publication, 2002, 200, 119-136.	1.3	13
61	A unified description of localization for application to large-scale tectonics. Journal of Geophysical Research, 2002, 107, ECV 1-1.	3.3	109
62	Concentric dikes on the flanks of Pavonis Mons: Implications for the evolution of martian shield volcanoes and mantle plumes. , 2001, , .		11
63	Shear-enhanced compaction and permeability reduction: Triaxial extension tests on porous sandstone. Mechanics of Materials, 1997, 25, 199-214.	3.2	83
64	New geophysical insight into the origin of the Denali volcanic gap. Geophysical Journal International, 0, 182, 613-630.	2.4	63