

Ll Lavier

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1360032/publications.pdf>

Version: 2024-02-01

66
papers

4,887
citations

109321

35
h-index

110387

64
g-index

71
all docs

71
docs citations

71
times ranked

3527
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Late Miocene–Pliocene Vigorous Deep–Sea Circulation in the Southeast Indian Ocean: Paleoceanographic and Tectonic Implications. <i>Paleoceanography and Paleoclimatology</i> , 2022, 37, . | 2.9 | 2 |
| 2 | The Mechanics of Creep, Slow Slip Events, and Earthquakes in Mixed Brittle–Ductile Fault Zones. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB020325. | 3.4 | 7 |
| 3 | Strain Localization in the Root of Detachment Faults at a Melt–Starved Mid–Ocean Ridge: A Microstructural Study of Abyssal Peridotites From the Southwest Indian Ridge. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, e2020GC009434. | 2.5 | 14 |
| 4 | Physical conditions and frictional properties in the source region of a slow-slip event. <i>Nature Geoscience</i> , 2021, 14, 334-340. | 12.9 | 14 |
| 5 | Mechanical Implications of Creep and Partial Coupling on the World's Fastest Slipping Low–Angle Normal Fault in Southeastern Papua New Guinea. <i>Journal of Geophysical Research: Solid Earth</i> , 2020, 125, e2020JB020117. | 3.4 | 15 |
| 6 | Emerged Coral Reefs Record Holocene Low–Angle Normal Fault Earthquakes. <i>Geophysical Research Letters</i> , 2020, 47, e2020GL089301. | 4.0 | 6 |
| 7 | How do detachment faults form at ultraslow mid-ocean ridges in a thick axial lithosphere?. <i>Earth and Planetary Science Letters</i> , 2020, 533, 116048. | 4.4 | 32 |
| 8 | Episodic heating of continental lower crust during extension: A thermal modeling investigation of the Ivrea-Verbano Zone. <i>Earth and Planetary Science Letters</i> , 2019, 521, 158-168. | 4.4 | 17 |
| 9 | Controls on the Thermomechanical Evolution of Hyperextended Lithosphere at Magma–Poor Rifted Margins: The Example of Espirito Santo and the Kwanza Basins. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 5148-5176. | 2.5 | 12 |
| 10 | On spreading modes and magma supply at slow and ultraslow mid-ocean ridges. <i>Earth and Planetary Science Letters</i> , 2019, 519, 223-233. | 4.4 | 72 |
| 11 | Impact of Mafic Underplating and Mantle Depletion on Subsequent Rifting: A Numerical Modeling Study. <i>Tectonics</i> , 2019, 38, 2185-2207. | 2.8 | 8 |
| 12 | Tectonic Inheritance Following Failed Continental Subduction: A Model for Core Complex Formation in Cold, Strong Lithosphere. <i>Tectonics</i> , 2019, 38, 1742-1763. | 2.8 | 9 |
| 13 | Strong-form approach to elasticity: Hybrid finite difference-meshless collocation method (FDMCM). <i>Applied Mathematical Modelling</i> , 2018, 57, 316-338. | 4.2 | 16 |
| 14 | Effect of contrasting strength from inherited crustal fabrics on the development of rifting margins. <i>Tectonics</i> , 2018, 37, 407-422. | | 7 |
| 15 | Simulation of slip transients and earthquakes in finite thickness shear zones with a plastic formulation. <i>Nature Communications</i> , 2018, 9, 3893. | 12.8 | 16 |
| 16 | Neogene siliciclastic deposition and climate variability on a carbonate margin: Australian Northwest Shelf. <i>Marine Geology</i> , 2018, 403, 285-300. | 2.1 | 11 |
| 17 | Earthquake supercycles as part of a spectrum of normal fault slip styles. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 3221-3240. | 3.4 | 21 |
| 18 | Thermal evolution of a hyperextended rift basin, Maulāon Basin, western Pyrenees. <i>Tectonics</i> , 2017, 36, 1103-1128. | 2.8 | 62 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Influences on the development of volcanic and magma-poor morphologies during passive continental rifting. , 2017, 13, 1524-1540. | | 23 |
| 20 | Semi-brittle rheology and ice dynamics in DynEarthSol3D. Cryosphere, 2017, 11, 117-132. | 3.9 | 2 |
| 21 | The effect of biminerale composition on extensional processes at lithospheric scale. Geochemistry, Geophysics, Geosystems, 2016, 17, 3375-3392. | 2.5 | 24 |
| 22 | The effects of lower crustal strength and preexisting midcrustal shear zones on the formation of continental core complexes and low-angle normal faults. Tectonics, 2016, 35, 2195-2214. | 2.8 | 19 |
| 23 | Thinning factor distributions viewed through numerical models of continental extension. Tectonics, 2016, 35, 3050-3069. | 2.8 | 18 |
| 24 | A lithospheric profile across northern Taiwan: from arc-continent collision to extension. Geophysical Journal International, 2016, 204, 331-346. | 2.4 | 20 |
| 25 | Localization and delocalization of deformation in a biminerale material. Journal of Geophysical Research: Solid Earth, 2015, 120, 3649-3663. | 3.4 | 28 |
| 26 | Conjugate rifted margins width and asymmetry: The interplay between lithospheric strength and thermomechanical processes. Journal of Geophysical Research: Solid Earth, 2015, 120, 8672-8700. | 3.4 | 72 |
| 27 | Experimental demonstration of a semi-brittle origin for crustal strain transients. Nature Geoscience, 2015, 8, 712-715. | 12.9 | 40 |
| 28 | Modes of continental extension in a crustal wedge. Earth and Planetary Science Letters, 2015, 421, 89-97. | 4.4 | 13 |
| 29 | Assessing the impact of orogenic inheritance on the architecture, timing and magmatic budget of the North Atlantic rift system: a mapping approach. Journal of the Geological Society, 2015, 172, 711-720. | 2.1 | 50 |
| 30 | Variable Holocene deformation above a shallow subduction zone extremely close to the trench. Nature Communications, 2015, 6, 7607. | 12.8 | 17 |
| 31 | New geophysical constraints on a failed subduction initiation: The structure and potential evolution of the <sc>G</sc>agua <sc>R</sc>idge and <sc>H</sc>uatung <sc>B</sc>asin. Geochemistry, Geophysics, Geosystems, 2015, 16, 380-400. | 2.5 | 35 |
| 32 | The role of inheritance in structuring hyperextended rift systems: Some considerations based on observations and numerical modeling. Gondwana Research, 2015, 27, 140-164. | 6.0 | 143 |
| 33 | Stickâ€slip and creep behavior in lubricated granular material: Insights into the brittleâ€ductile transition. Geophysical Research Letters, 2014, 41, 3471-3477. | 4.0 | 24 |
| 34 | Crustalâ€scale seismic profiles across the Manila subduction zone: The transition from intraoceanic subduction to incipient collision. Journal of Geophysical Research: Solid Earth, 2014, 119, 1-17. | 3.4 | 75 |
| 35 | Rifting and magmatism in the northeastern South China Sea from wideâ€angle tomography and seismic reflection imaging. Journal of Geophysical Research: Solid Earth, 2014, 119, 2305-2323. | 3.4 | 113 |
| 36 | The geologic record of deep episodic tremor and slip. Geology, 2014, 42, 195-198. | 4.4 | 81 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Crustal structure and inferred rifting processes in the northeast South China Sea. <i>Marine and Petroleum Geology</i> , 2014, 58, 612-626. | 3.3 | 100 |
| 38 | Seismic evidence of hyper-stretched crust and mantle exhumation offshore Vietnam. <i>Tectonophysics</i> , 2013, 608, 72-83. | 2.2 | 90 |
| 39 | Crustal accretion in the Manila trench accretionary wedge at the transition from subduction to mountain-building in Taiwan. <i>Earth and Planetary Science Letters</i> , 2013, 375, 430-440. | 4.4 | 55 |
| 40 | Inversion of a hyper-extended rifted margin in the southern Central Range of Taiwan. <i>Geology</i> , 2013, 41, 871-874. | 4.4 | 114 |
| 41 | Using core complex geometry to constrain fault strength. <i>Geophysical Research Letters</i> , 2013, 40, 3863-3867. | 4.0 | 35 |
| 42 | Creep events at the brittle ductile transition. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 3334-3351. | 2.5 | 34 |
| 43 | A novel method for predicting fracture in floating ice. <i>Journal of Glaciology</i> , 2013, 59, 750-758. | 2.2 | 12 |
| 44 | The role of frictional strength on plate coupling at the subduction interface. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, . | 2.5 | 36 |
| 45 | A finite strain Eulerian formulation for compressible and nearly incompressible hyperelasticity using high-order B-spline finite elements. <i>International Journal for Numerical Methods in Engineering</i> , 2012, 89, 762-785. | 2.8 | 39 |
| 46 | Interaction between prerift salt and detachment faulting in hyperextended rift systems: The example of the Parentis and Mauléon basins (Bay of Biscay and western Pyrenees). <i>AAPG Bulletin</i> , 2010, 94, 957-975. | 1.5 | 54 |
| 47 | Extreme crustal thinning in the Bay of Biscay and the Western Pyrenees: From observations to modeling. <i>Geochemistry, Geophysics, Geosystems</i> , 2010, 11, . | 2.5 | 66 |
| 48 | Oceanic corrugated surfaces and the strength of the axial lithosphere at slow spreading ridges. <i>Earth and Planetary Science Letters</i> , 2009, 288, 174-183. | 4.4 | 59 |
| 49 | Extension of continental crust at the margin of the eastern Grand Banks, Newfoundland. <i>Tectonophysics</i> , 2009, 468, 131-148. | 2.2 | 75 |
| 50 | Tectonosedimentary evolution related to extreme crustal thinning ahead of a propagating ocean: Example of the western Pyrenees. <i>Tectonics</i> , 2009, 28, . | 2.8 | 288 |
| 51 | Thermomechanics of mid-ocean ridge segmentation. <i>Physics of the Earth and Planetary Interiors</i> , 2008, 171, 374-386. | 1.9 | 52 |
| 52 | Triggering mechanism and tsunamogenic potential of the Cape Fear Slide complex, U.S. Atlantic margin. <i>Geochemistry, Geophysics, Geosystems</i> , 2007, 8, . | 2.5 | 49 |
| 53 | A mechanism to thin the continental lithosphere at magma-poor margins. <i>Nature</i> , 2006, 440, 324-328. | 27.8 | 523 |
| 54 | Modes of faulting at mid-ocean ridges. <i>Nature</i> , 2005, 434, 719-723. | 27.8 | 342 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 55 | Evolving force balance during incipient subduction. <i>Geochemistry, Geophysics, Geosystems</i> , 2004, 5, . | 2.5 | 341 |
| 56 | Catastrophic initiation of subduction following forced convergence across fracture zones. <i>Earth and Planetary Science Letters</i> , 2003, 212, 15-30. | 4.4 | 381 |
| 57 | A Numerical Model of Lithospheric Extension Producing Fault-Bounded Basins and Ranges. <i>International Geology Review</i> , 2003, 45, 712-723. | 2.1 | 18 |
| 58 | Half graben versus large-offset low-angle normal fault: Importance of keeping cool during normal faulting. <i>Journal of Geophysical Research</i> , 2002, 107, ETG 8-1. | 3.3 | 96 |
| 59 | Numerical models of crustal scale convection and partial melting beneath the Altiplano-Puna plateau. <i>Earth and Planetary Science Letters</i> , 2002, 199, 373-388. | 4.4 | 139 |
| 60 | Climatic and tectonic control on the Cenozoic evolution of the West African margin. <i>Marine Geology</i> , 2001, 178, 63-80. | 2.1 | 146 |
| 61 | A tale of two kinds of normal fault: the importance of strain weakening in fault development. <i>Geological Society Special Publication</i> , 2001, 187, 289-303. | 1.3 | 12 |
| 62 | Factors controlling normal fault offset in an ideal brittle layer. <i>Journal of Geophysical Research</i> , 2000, 105, 23431-23442. | 3.3 | 205 |
| 63 | How to make a rift wide. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 1999, 357, 671-693. | 3.4 | 90 |
| 64 | Self-consistent rolling-hinge model for the evolution of large-offset low-angle normal faults. <i>Geology</i> , 1999, 27, 1127. | 4.4 | 205 |
| 65 | Pattern of mantle thinning from subsidence and heat flow measurements in the Gulf of Suez: Evidence for the rotation of Sinai and along-strike flow from the Red Sea. <i>Tectonics</i> , 1998, 17, 903-920. | 2.8 | 36 |
| 66 | The effect of sedimentary cover on the flexural strength of continental lithosphere. <i>Nature</i> , 1997, 389, 476-479. | 27.8 | 57 |