Sascha Brune

List of Publications by Year in descending order

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56 papers	2,331 citations	218677 26 h-index	214800 47 g-index
88 all docs	88 docs citations	88 times ranked	2082 citing authors

#	Article	IF	Citations
1	Rift migration explains continental margin asymmetry and crustal hyper-extension. Nature Communications, 2014, 5, 4014.	12.8	272
2	Abrupt plate accelerations shape rifted continental margins. Nature, 2016, 536, 201-204.	27.8	147
3	Rifted margin architecture and crustal rheology: Reviewing Iberia-Newfoundland, Central South Atlantic, and South China Sea. Marine and Petroleum Geology, 2017, 79, 257-281.	3.3	138
4	Potential links between continental rifting, CO2 degassing and climate change through time. Nature Geoscience, 2017, 10, 941-946.	12.9	136
5	Evolution of stress and fault patterns in oblique rift systems: 3â€Ð numerical lithosphericâ€scale experiments from rift to breakup. Geochemistry, Geophysics, Geosystems, 2014, 15, 3392-3415.	2.5	109
6	Modeling suggests that oblique extension facilitates rifting and continental breakâ€up. Journal of Geophysical Research, 2012, 117, .	3.3	99
7	Oblique rifting: the rule, not the exception. Solid Earth, 2018, 9, 1187-1206.	2.8	85
8	Controls of inherited lithospheric heterogeneity on rift linkage: Numerical and analog models of interaction between the Kenyan and Ethiopian rifts across the Turkana depression. Tectonics, 2017, 36, 1767-1786.	2.8	82
9	Climate changes control offshore crustal structure at South China Sea continental margin. Earth and Planetary Science Letters, 2015, 420, 66-72.	4.4	77
10	Rift and plate boundary evolution across two supercontinent cycles. Global and Planetary Change, 2019, 173, 1-14.	3.5	70
11	Oblique rifting of the Equatorial Atlantic: Why there is no Saharan Atlantic Ocean. Geology, 2014, 42, 211-214.	4.4	69
12	The rift to break-up evolution of the Gulf of Aden: Insights from 3D numerical lithospheric-scale modelling. Tectonophysics, 2013, 607, 65-79.	2.2	62
13	Kinematics and extent of the Piemontâ€“Liguria Basin â€“ implications for subduction processes in the Alps. Solid Earth, 2021, 12, 885-913.	2.8	55
14	Linking rift propagation barriers to excess magmatism at volcanic rifted margins. Geology, 2014, 42, 1071-1074.	4.4	53
15	Aborted propagation of the Ethiopian rift caused by linkage with the Kenyan rift. Nature Communications, 2019, 10, 1309.	12.8	49
16	Quantifying the thermo-mechanical impact of plume arrival on continental break-up. Tectonophysics, 2013, 604, 51-59.	2.2	44
17	From gradual spreading to catastrophic collapse â€“ Reconstruction of the 1888 Ritter Island volcanic sector collapse from high-resolution 3D seismic data. Earth and Planetary Science Letters, 2019, 517, 1-13.	4.4	44
18	Deep Carbon Cycling Over the Past 200 Million Years: A Review of Fluxes in Different Tectonic Settings. Frontiers in Earth Science, 2019, 7, .	1.8	43

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19	Landslide tsunami hazard in the Indonesian Sunda Arc. Natural Hazards and Earth System Sciences, 2010, 10, 589-604.	3.6	39
20	Victoria continental microplate dynamics controlled by the lithospheric strength distribution of the East African Rift. Nature Communications, 2020, 11, 2881.	12.8	33
21	Development of 3â€D Rift Heterogeneity Through Fault Network Evolution. Geophysical Research Letters, 2020, 47, e2019GL086611.	4.0	31
22	Experimental insights into the scaling and variability of local tsunamis triggered by giant subduction megathrust earthquakes. Journal of Geophysical Research, 2010, 115, .	3.3	30
23	Global patterns in Earth's dynamic topography since the Jurassic: the role of subducted slabs. Solid Earth, 2017, 8, 899-919.	2.8	30
24	Submarine landslides at the eastern Sunda margin: observations and tsunami impact assessment. Natural Hazards, 2010, 54, 547-562.	3.4	29
25	Sedimentary loadingâ€“unloading cycles and faulting in intermontane basins: Insights from numerical modeling and field observations in the NW Argentine Andes. Earth and Planetary Science Letters, 2019, 506, 388-396.	4.4	28
26	Plumeâ€Induced Subduction Initiation: Singleâ€Slab or Multiâ€Slab Subduction?. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008663.	2.5	28
27	Formation of Continental Microplates Through Rift Linkage: Numerical Modeling and Its Application to the Flemish Cap and Sao Paulo Plateau. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009615.	2.5	28
28	Tsunami modeling of a submarine landslide in the Fram Strait. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	27
29	Thermal Evolution of Asymmetric Hyperextended Magmaâ€Poor Rift Systems: Results From Numerical Modeling and Pyrenean Field Observations. Geochemistry, Geophysics, Geosystems, 2019, 20, 4567-4587.	2.5	27
30	Formation of the Iberianâ€European Convergent Plate Boundary Fault and Its Effect on Intraplate Deformation in Central Europe. Geochemistry, Geophysics, Geosystems, 2019, 20, 2395-2417.	2.5	26
31	Breakup Without Borders: How Continents Speed Up and Slow Down During Rifting. Geophysical Research Letters, 2019, 46, 1338-1347.	4.0	24
32	Quantifying Postrift Lower Crustal Flow in the Northern Margin of the South China Sea. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018910.	3.4	24
33	Crustal stretching style variations in the northern margin of the South China Sea. Tectonophysics, 2019, 751, 1-12.	2.2	22
34	Hazard assessment of underwater landslide-generated tsunamis: a case study in the Padang region, Indonesia. Natural Hazards, 2010, 53, 205-218.	3.4	21
35	Evolution of Rift Systems and Their Fault Networks in Response to Surface Processes. Tectonics, 2022, 41, .	2.8	20
36	3D seismic interpretation with deep learning: A brief introduction. The Leading Edge, 2021, 40, 524-532.	0.7	16

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37	Forces within continental and oceanic rifts: Numerical modeling elucidates the impact of asthenospheric flow on surface stress. Geology, 2018, 46, 191-192.	4.4	15
38	Mechanism for Deep Crustal Seismicity: Insight From Modeling of Deformation Processes at the Main Ethiopian Rift. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC008935.	2.5	15
39	Controls on Asymmetric Rift Dynamics: Numerical Modeling of Strain Localization and Fault Evolution in the Kenya Rift. Tectonics, 2021, 40, e2020TC006553.	2.8	15
40	Seismic structure of the lithosphere beneath <scp>NW</scp><scp>N</scp>amibia: Impact of the <scp>T</scp>ristan da <scp>C</scp>unha mantle plume. Geochemistry, Geophysics, Geosystems, 2017, 18, 125-141.	2.5	14
41	Numerical Modeling of Mantle Flow Beneath Madagascar to Constrain Upper Mantle Rheology Beneath Continental Regions. Journal of Geophysical Research: Solid Earth, 2020, 125, e2019JB018560.	3.4	12
42	Recent volcano-tectonic activity of the Ririba rift and the evolution of rifting in South Ethiopia. Journal of Volcanology and Geothermal Research, 2020, 403, 106989.	2.1	12
43	Symmetry of the South China Sea conjugate margins in a rifting, drifting and collision context. Marine and Petroleum Geology, 2020, 117, 104397.	3.3	12
44	Kinematics of Footwall Exhumation at Oceanic Detachment faults: Solidâ€Block Rotation and Apparent Unbending. Geochemistry, Geophysics, Geosystems, 2021, 22, e2021GC009681.	2.5	12
45	Strain Localization and Weakening Processes in Viscously Deforming Rocks: Numerical Modeling Based on Laboratory Torsion Experiments. Journal of Geophysical Research: Solid Earth, 2019, 124, 1120-1137.	3.4	9
46	Subduction Initiation by Plumeâ€Plateau Interaction: Insights From Numerical Models. Geochemistry, Geophysics, Geosystems, 2020, 21, e2020GC009119.	2.5	9
47	Strain localization in polycrystalline material with second phase particles: Numerical modeling with application to ice mixtures. Geochemistry, Geophysics, Geosystems, 2016, 17, 3608-3628.	2.5	8
48	High-temperature shear zone formation in Carrara marble: The effect of loading conditions. Tectonophysics, 2018, 749, 120-139.	2.2	8
49	Is There a Speed Limit for the Thermal Steadyâ€State Assumption in Continental Rifts?. Geochemistry, Geophysics, Geosystems, 2021, 22, e2020GC009577.	2.5	6
50	Flexural strike-slip basins. Geology, 2022, 50, 361-365.	4.4	6
51	Are tilt measurements useful in detecting tsunamigenic submarine landslides?. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	5
52	Plate motion and plume-induced subduction initiation. Gondwana Research, 2021, 98, 277-288.	6.0	5
53	Modeling of Potential Landslide Tsunami Hazards Off Western Thailand (Andaman Sea). Advances in Natural and Technological Hazards Research, 2014, , 517-527.	1.1	3
54	Examining the impact of the Great Barrier Reef on tsunami propagation using numerical simulations. Natural Hazards, 2021, 108, 347-388.	3.4	2

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55	Modelling Mie scattering in pyrolite in the laser-heated diamond anvil cell: Implications for the core-mantle boundary temperature determination. Physics of the Earth and Planetary Interiors, 2021, 318, 106773.	1.9	1
56	Numerical Modeling of Tectonic Processes. , 2021, , 903-912.		0