Marcel Thielmann

List of Publications by Year
in descending order

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21 papers	590 citations	623734 14 h-index	713466 21 g-index
40 all docs	40 docs citations	40 times ranked	812 citing authors

#	Article	IF	Citations
1	Chemical Stability of FeOOH at High Pressure and Temperature, and Oxygen Recycling in Early Earth History**. European Journal of Inorganic Chemistry, 2021, 2021, 3048-3053.	2.0	16
2	Ferropericlase Control of Lower Mantle Rheology: Impact of Phase Morphology. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008688.	2.5	20
3	Contributions of Grain Damage, Thermal Weakening, and Necking to Slab Detachment. Frontiers in Earth Science, 2020, 8, .	1.8	8
4	A transdisciplinary and community-driven database to unravel subduction zone initiation. Nature Communications, 2020, 11, 3750.	12.8	83
5	High-stress creep preceding coseismic rupturing in amphibolite-facies ultramylonites. Earth and Planetary Science Letters, 2020, 541, 116260.	4.4	13
6	Can Grain Size Reduction Initiate Transform Faults?â€”Insights From a 3â€Ð Numerical Study. Tectonics, 2020, 39, e2019TC005793.	2.8	15
7	Effect of Water on Lattice Thermal Conductivity of Ringwoodite and Its Implications for the Thermal Evolution of Descending Slabs. Geophysical Research Letters, 2020, 47, e2020GL087607.	4.0	16
8	Combined numerical and experimental study of microstructure and permeability in porous granular media. Solid Earth, 2020, 11, 1079-1095.	2.8	12
9	Pore-scale permeability prediction for Newtonian and non-Newtonian fluids. Solid Earth, 2019, 10, 1717-1731.	2.8	15
10	Tomographic Study of Internal Erosion of Particle Flows in Porous Media. Transport in Porous Media, 2018, 122, 169-184.	2.6	18
11	Critical Bursts in Filtration. Physical Review Letters, 2018, 120, 034503.	7.8	13
12	Grain size assisted thermal runaway as a nucleation mechanism for continental mantle earthquakes: Impact of complex rheologies. Tectonophysics, 2018, 746, 611-623.	2.2	29
13	3D geodynamic models for the development of opposing continental subduction zones: The Hindu Kushâ€“Pamir example. Earth and Planetary Science Letters, 2017, 480, 133-146.	4.4	31
14	Tensile stress relaxation in unsaturated granular materials. Granular Matter, 2016, 18, 1.	2.2	5
15	Critical Fragmentation Properties of Random Drilling: How Many Holes Need to Be Drilled to Collapse a Wooden Cube?. Physical Review Letters, 2016, 116, 055701.	7.8	18
16	Grain-scale modeling of arbitrary fluid saturation in random packings. Physical Review E, 2015, 92, 022206.	2.1	27
17	Lithospheric stresses in Rayleighâ€“BÃ©nard convection: effects of a free surface and a viscoelastic Maxwell rheology. Geophysical Journal International, 2015, 203, 2200-2219.	2.4	16
18	Intermediate-depth earthquake generation and shear zone formation caused by grain size reduction and shear heating. Geology, 2015, 43, 791-794.	4.4	66

#	Article	IF	Citations
19	Discretization Errors in the Hybrid Finite Element Particle-in-cell Method. Pure and Applied Geophysics, 2014, 171, 2165-2184.	1.9	20
20	Strain Localization in Pyroxenite by Reaction-Enhanced Softening in the Shallow Subcontinental Lithospheric Mantle. Journal of Petrology, 2013, 54, 1997-2031.	2.8	29
21	Shear heating induced lithospheric-scale localization: Does it result in subduction?. Earth and Planetary Science Letters, 2012, 359-360, 1-13.	4.4	119