

# Marcel Thielmann

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7748341/publications.pdf>

Version: 2024-02-01

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	Shear heating induced lithospheric-scale localization: Does it result in subduction?. Earth and Planetary Science Letters, 2012, 359-360, 1-13.	4.4	119
2	A transdisciplinary and community-driven database to unravel subduction zone initiation. Nature Communications, 2020, 11, 3750.	12.8	83
3	Intermediate-depth earthquake generation and shear zone formation caused by grain size reduction and shear heating. Geology, 2015, 43, 791-794.	4.4	66
4	3D geodynamic models for the development of opposing continental subduction zones: The Hindu Kush-Pamir example. Earth and Planetary Science Letters, 2017, 480, 133-146.	4.4	31
5	Strain Localization in Pyroxenite by Reaction-Enhanced Softening in the Shallow Subcontinental Lithospheric Mantle. Journal of Petrology, 2013, 54, 1997-2031.	2.8	29
6	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
7	Grain-scale modeling of arbitrary fluid saturation in random packings. Physical Review E, 2015, 92, 022206.	2.1	27
8	Discretization Errors in the Hybrid Finite Element Particle-in-cell Method. Pure and Applied Geophysics, 2014, 171, 2165-2184.	1.9	20
9	Ferropericlase Control of Lower Mantle Rheology: Impact of Phase Morphology. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008688.	2.5	20
10	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
11	Tomographic Study of Internal Erosion of Particle Flows in Porous Media. Transport in Porous Media, 2018, 122, 169-184.	2.6	18
12	Lithospheric stresses in Rayleigh-Bénard convection: effects of a free surface and a viscoelastic Maxwell rheology. Geophysical Journal International, 2015, 203, 2200-2219.	2.4	16
13	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
14	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
15	Pore-scale permeability prediction for Newtonian and non-Newtonian fluids. Solid Earth, 2019, 10, 1717-1731.	2.8	15
16	Can Grain Size Reduction Initiate Transform Faults? Insights From a 3D Numerical Study. Tectonics, 2020, 39, e2019TC005793.	2.8	15
17	Critical Bursts in Filtration. Physical Review Letters, 2018, 120, 034503.	7.8	13
18	High-stress creep preceding coseismic rupturing in amphibolite-facies ultramylonites. Earth and Planetary Science Letters, 2020, 541, 116260.	4.4	13

#	ARTICLE	IF	CITATIONS
19	Combined numerical and experimental study of microstructure and permeability in porous granular media. <i>Solid Earth</i> , 2020, 11, 1079-1095.	2.8	12
20	Contributions of Grain Damage, Thermal Weakening, and Necking to Slab Detachment. <i>Frontiers in Earth Science</i> , 2020, 8, .	1.8	8
21	Tensile stress relaxation in unsaturated granular materials. <i>Granular Matter</i> , 2016, 18, 1.	2.2	5