Gregor Golabek

List of Publications by Year
in descending order

38 papers	2,058 citations	279798 23 h-index	330143 37 g-index
56 all docs	56 docs citations	56 times ranked	1552 citing authors

#	Article	IF	Citations
1	Olivine aggregates reveal a complex collisional history of the main group pallasite parent body. Meteoritics and Planetary Science, 2022, 57, 1098-1115.	1.6	2
2	Modification of icy planetesimals by early thermal evolution and collisions: Constraints for formation time and initial size of comets and small KBOs. Icarus, 2021, 363, 114437.	2.5	8
3	Scaling laws for the geometry of an impact-induced magma ocean. Earth and Planetary Science Letters, 2021, 568, 116983.	4.4	25
4	Bifurcation of planetary building blocks during Solar System formation. Science, 2021, 371, 365-370.	12.6	108
5	Ferropericlase Control of Lower Mantle Rheology: Impact of Phase Morphology. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008688.	2.5	20
6	Two-stage formation of pallasites and the evolution of their parent bodies revealed by deformation experiments. Earth and Planetary Science Letters, 2020, 546, 116419.	4.4	12
7	Can Grain Size Reduction Initiate Transform Faults?â€”Insights From a 3â€Ð Numerical Study. Tectonics, 2020, 39, e2019TC005793.	2.8	15
8	Dry late accretion inferred from Venusâ€™s coupled atmosphere and internal evolution. Nature Geoscience, 2020, 13, 265-269.	12.9	27
9	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
10	Combined numerical and experimental study of microstructure and permeability in porous granular media. Solid Earth, 2020, 11, 1079-1095.	2.8	12
11	A water budget dichotomy of rocky protoplanets from 26Al-heating. Nature Astronomy, 2019, 3, 307-313.	10.1	91
12	Pore-scale permeability prediction for Newtonian and non-Newtonian fluids. Solid Earth, 2019, 10, 1717-1731.	2.8	15
13	Magma ascent in planetesimals: Control by grain size. Earth and Planetary Science Letters, 2019, 507, 154-165.	4.4	31
14	Water and the Interior Structure of Terrestrial Planets and Icy Bodies. Space Science Reviews, 2018, 214, 1.	8.1	33
15	Impact splash chondrule formation during planetesimal recycling. Icarus, 2018, 302, 27-43.	2.5	79
16	Coupling SPH and thermochemical models of planets: Methodology and example of a Mars-sized body. Icarus, 2018, 301, 235-246.	2.5	65
17	Late metalâ€“silicate separation on the IAB parent asteroid: Constraints from combined W and Pt isotopes and thermal modelling. Earth and Planetary Science Letters, 2018, 482, 490-500.	4.4	33
18	Olivine grain growth in partially molten Feâ€“Niâ€“S: A proxy for the genesis of pallasite meteorites. Earth and Planetary Science Letters, 2018, 504, 38-52.	4.4	10

#	Article	IF	Citations
19	Water and the Interior Structure of Terrestrial Planets and Icy Bodies. Space Sciences Series of ISSI, 2018, , 343-375.	0.0	0
20	Continental crust formation on early Earth controlled by intrusive magmatism. Nature, 2017, 545, 332-335.	27.8	174
21	The effects of short-lived radionuclides and porosity on the early thermo-mechanical evolution of planetesimals. Icarus, 2016, 274, 350-365.	2.5	89
22	Effect of a single large impact on the coupled atmosphere-interior evolution of Venus. Icarus, 2016, 268, 295-312.	2.5	38
23	Formation of ridges in a stable lithosphere in mantle convection models with a viscoplastic rheology. Geophysical Research Letters, 2015, 42, 4770-4777.	4.0	23
24	Fast grain growth of olivine in liquid Feâ€“S and the formation of pallasites with rounded olivine grains. Geochimica Et Cosmochimica Acta, 2015, 162, 259-275.	3.9	15
25	Is Vesta an intact and pristine protoplanet?. Icarus, 2015, 254, 190-201.	2.5	30
26	Numerical models of the thermomechanical evolution of planetesimals: Application to the acapulcoiteâ€lodranite parent body. Meteoritics and Planetary Science, 2014, 49, 1083-1099.	1.6	59
27	Selfâ€consistent generation of singleâ€plume state for Enceladus using nonâ€Newtonian rheology. Journal of Geophysical Research E: Planets, 2014, 119, 416-439.	3.6	13
28	Solid-state plastic deformation in the dynamic interior of a differentiated asteroid. Nature Geoscience, 2013, 6, 93-97.	12.9	32
29	N-body simulations of oligarchic growth of Mars: Implications for Hfâ€“W chronology. Earth and Planetary Science Letters, 2013, 366, 6-16.	4.4	26
30	A comparison of numerical surface topography calculations in geodynamic modelling: an evaluation of the â€˜sticky airâ€™ method. Geophysical Journal International, 2012, 189, 38-54.	2.4	301
31	Origin of the martian dichotomy and Tharsis from a giant impact causing massive magmatism. Icarus, 2011, 215, 346-357.	2.5	99
32	Protocore destabilization in planetary embryos formed by cold accretion: Feedbacks from non-Newtonian rheology and energy dissipation. Icarus, 2011, 213, 24-42.	2.5	4
33	Numerical modeling of protocore destabilization during planetary accretion: Methodology and results. Icarus, 2009, 204, 732-748.	2.5	50
34	Centrifuge assisted percolation of Feâ€“S melts in partially molten peridotite: Time constraints for planetary core formation. Earth and Planetary Science Letters, 2009, 288, 84-95.	4.4	39
35	Constraints on the Feâ€“S melt connectivity in mantle silicates from electrical impedance measurements. Physics of the Earth and Planetary Interiors, 2009, 177, 139-146.	1.9	38
36	Rheological controls on the terrestrial core formation mechanism. Geochemistry, Geophysics, Geosystems, 2009, 10, .	2.5	18

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37	A benchmark comparison of spontaneous subduction modelsâ€"Towards a free surface. Physics of the Earth and Planetary Interiors, 2008, 171, 198-223.	1.9	361
38	Earth's core formation aided by flow channelling instabilities induced by iron diapirs. Earth and Planetary Science Letters, 2008, 271, 24-33.	4.4	46