

# Florian Heidelbach

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1839113/publications.pdf>

Version: 2024-02-01

27  
papers

1,221  
citations

430874

18  
h-index

526287

27  
g-index

27  
all docs

27  
docs citations

27  
times ranked

1181  
citing authors

#	ARTICLE	IF	CITATIONS
1	Lower-mantle water reservoir implied by the extreme stability of a hydrous aluminosilicate. <i>Nature Geoscience</i> , 2015, 8, 75-79.	12.9	173
2	Shear deformation experiments of forsterite at 11 GPa - 1400C in the multianvil apparatus. <i>European Journal of Mineralogy</i> , 2004, 16, 877-889.	1.3	145
3	Analysis of the Native Structure of Starch Granules with X-ray Microfocus Diffraction. <i>Macromolecules</i> , 1997, 30, 3813-3820.	4.8	125
4	The role of dynamic recrystallization in the development of lattice preferred orientations in experimentally deformed quartz aggregates. <i>Journal of Structural Geology</i> , 1993, 15, 1145-1168.	2.3	98
5	The origin of reaction textures in mantle peridotite xenoliths from Sal Island, Cape Verde: the case for "metasomatism" by the host lava. <i>Contributions To Mineralogy and Petrology</i> , 2006, 151, 681-697.	3.1	87
6	Crystallographic preferred orientation in albite samples deformed experimentally by dislocation and solution precipitation creep. <i>Journal of Structural Geology</i> , 2000, 22, 1649-1661.	2.3	69
7	Dislocation creep of magnesiow <sup>1/4</sup> stite (Mg <sub>0.8</sub> Fe <sub>0.2</sub> O). <i>Earth and Planetary Science Letters</i> , 2001, 194, 229-240.	4.4	62
8	Shear zone evolution and timing of deformation in the Neoproterozoic transpressional Dom Feliciano Belt, Uruguay. <i>Journal of Structural Geology</i> , 2016, 92, 59-78.	2.3	61
9	Compositional re-equilibration of garnet: the importance of sub-grain boundaries. <i>European Journal of Mineralogy</i> , 2007, 19, 431-438.	1.3	53
10	Dynamic recrystallization of garnet and related diffusion processes. <i>Journal of Structural Geology</i> , 2008, 30, 777-790.	2.3	43
11	Superplasticity in garnet from eclogite facies shear zones in the Haram Gabbro, Harams <sup>1/4</sup> ya, Norway. <i>Geology</i> , 2004, 32, 281.	4.4	39
12	Large-strain deformation and strain partitioning in polyphase rocks: Dislocation creep of olivine "magnesiow <sup>1/4</sup> stite aggregates. <i>Tectonophysics</i> , 2006, 427, 115-132.	2.2	35
13	Grain size effect on the electrical conductivity of clinopyroxene. <i>Contributions To Mineralogy and Petrology</i> , 2012, 163, 939-947.	3.1	29
14	Texture development of polycrystalline anhydrite experimentally deformed in torsion. <i>International Journal of Earth Sciences</i> , 2001, 90, 118-126.	1.8	27
15	Microstructure evolution and recrystallization during creep of MgO single crystals. <i>Acta Materialia</i> , 2009, 57, 1886-1898.	7.9	25
16	Deformation inside a paleosubduction channel " Insights from microstructures and crystallographic preferred orientations of eclogites and metasediments from the Tauern Window, Austria. <i>Journal of Structural Geology</i> , 2016, 82, 60-79.	2.3	25
17	Evolution of the Major Gercino Shear Zone in the Dom Feliciano Belt, South Brazil, and implications for the assembly of southwestern Gondwana. <i>International Journal of Earth Sciences</i> , 2019, 108, 403-425.	1.8	25
18	The structure of a super-aluminous version of the dense hydrous-magnesium silicate phase D. <i>American Mineralogist</i> , 2010, 95, 1113-1116.	1.9	24

#	ARTICLE	IF	CITATIONS
19	Dating recurrent shear zone activity and the transition from ductile to brittle deformation: White mica geochronology applied to the Neoproterozoic Dom Feliciano Belt in South Brazil. <i>Journal of Structural Geology</i> , 2020, 141, 104199.	2.3	18
20	Dendritic crystallization in hydrous basaltic magmas controls magma mobility within the Earth's crust. <i>Nature Communications</i> , 2022, 13, .	12.8	17
21	Electron channelling contrast imaging of individual dislocations in geological materials using a field-emission scanning electron microscope equipped with an EBSD system. <i>European Journal of Mineralogy</i> , 2018, 30, 5-15.	1.3	10
22	Magnetic fabrics in the Bjerkreim Sokndal Layered Intrusion, Rogaland, southern Norway: Mineral sources and geological significance. <i>Tectonophysics</i> , 2016, 688, 101-118.	2.2	9
23	Fluid-assisted fracturing, cataclasis, and resulting plastic flow in mylonites from the Moresby Seamount detachment, Woodlark Basin. <i>Journal of Structural Geology</i> , 2013, 56, 156-171.	2.3	8
24	Inherited Fabric in an Omphacite Symplectite: Reconstruction of Plastic Deformation under Ultra-High Pressure Conditions. <i>Microscopy and Microanalysis</i> , 2013, 19, 942-949.	0.4	4
25	Combining ECCI and FIB milling techniques to prepare site-specific TEM samples for crystal defect analysis of deformed minerals at high pressure. <i>Comptes Rendus - Geoscience</i> , 2019, 351, 295-301.	1.2	4
26	Origin of twist in 'gwindel' quartz crystals from the Alps: a transmission electron microscopy study. <i>European Journal of Mineralogy</i> , 2013, 25, 145-153.	1.3	3
27	MATERIALS SCIENCE: Watching Grains Deform. <i>Science</i> , 2001, 291, 2330-2331.	12.6	3