

Sandra C Piazolo

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1304200/publications.pdf>

Version: 2024-02-01

154
papers

3,710
citations

117453

34
h-index

197535

49
g-index

182
all docs

182
docs citations

182
times ranked

3053
citing authors

#	ARTICLE	IF	CITATIONS
1	Deformation-induced trace element redistribution in zircon revealed using atom probe tomography. <i>Nature Communications</i> , 2016, 7, 10490.	5.8	137
2	Tectonic significance of deformation patterns in granitoid rocks of the Menderes nappes, Anatolide belt, southwest Turkey. <i>International Journal of Earth Sciences</i> , 2001, 89, 766-780.	0.9	115
3	The weighted Burgers vector: a new quantity for constraining dislocation densities and types using electron backscatter diffraction on 2D sections through crystalline materials. <i>Journal of Microscopy</i> , 2009, 233, 482-494.	0.8	85
4	Controls on lineation development in low to medium grade shear zones: a study from the Cap de Creus peninsula, NE Spain. <i>Journal of Structural Geology</i> , 2002, 24, 25-44.	1.0	78
5	The initiation of strain localisation in plagioclase-rich rocks: Insights from detailed microstructural analyses. <i>Journal of Structural Geology</i> , 2010, 32, 1404-1416.	1.0	78
6	Evaluating quartz crystallographic preferred orientations and the role of deformation partitioning using EBSD and fabric analyser techniques. <i>Journal of Structural Geology</i> , 2010, 32, 803-817.	1.0	75
7	Brittle-ductile microfabrics in naturally deformed zircon: Deformation mechanisms and consequences for U-Pb dating. <i>American Mineralogist</i> , 2012, 97, 1544-1563.	0.9	73
8	Halogen-bearing minerals in syenites and high-grade marbles of Dronning Maud Land, Antarctica: monitors of fluid compositional changes during late-magmatic fluid-rock interaction processes. <i>Contributions To Mineralogy and Petrology</i> , 1998, 132, 246-268.	1.2	72
9	Temperature dependent grain boundary migration in deformed-then-annealed material: Observations from experimentally deformed synthetic rocksalt. <i>Tectonophysics</i> , 2006, 427, 55-71.	0.9	70
10	The effect of DauphinÅ© twinning on plastic strain in quartz. <i>Contributions To Mineralogy and Petrology</i> , 2011, 161, 635-652.	1.2	66
11	Making EBSD on water ice routine. <i>Journal of Microscopy</i> , 2015, 259, 237-256.	0.8	64
12	Are polymers suitable rock analogs?. <i>Tectonophysics</i> , 2002, 350, 35-47.	0.9	63
13	Microstructural evolution during initial stages of static recovery and recrystallization: new insights from in-situ heating experiments combined with electron backscatter diffraction analysis. <i>Journal of Structural Geology</i> , 2005, 27, 447-457.	1.0	63
14	Effect of surface orientation on dissolution rates and topography of CaF ₂ . <i>Geochimica Et Cosmochimica Acta</i> , 2012, 86, 392-403.	1.6	62
15	Stability of high-Al titanite from low-pressure calcsilicates in light of fluid and host-rock composition. <i>American Mineralogist</i> , 1999, 84, 37-47.	0.9	59
16	Stylolite interfaces and surrounding matrix material: Nature and role of heterogeneities in roughness and microstructural development. <i>Journal of Structural Geology</i> , 2010, 32, 1070-1084.	1.0	55
17	Microstructure and fabric development in ice: Lessons learned from in situ experiments and implications for understanding rock evolution. <i>Journal of Structural Geology</i> , 2014, 61, 50-77.	1.0	55
18	Sub-structure characterization of experimentally and naturally deformed ice using cryo-EBSD. <i>Journal of Microscopy</i> , 2008, 230, 509-519.	0.8	54

#	ARTICLE	IF	CITATIONS
19	The geodynamic evolution of Mesoproterozoic anorthosite complexes inferred from the Naajat Kuuat Complex, southern West Greenland. <i>Precambrian Research</i> , 2012, 196-197, 149-170.	1.2	53
20	Brittle fracturing and fracture healing of zircon: An integrated cathodoluminescence, EBSD, U-Th-Pb, and REE study. <i>American Mineralogist</i> , 2007, 92, 1213-1224.	0.9	46
21	Structure of grain boundaries in wet, synthetic polycrystalline, statically recrystallizing halite - evidence from cryo-SEM observations. <i>Geofluids</i> , 2006, 6, 93-104.	0.3	45
22	Chemical and physical heterogeneity within native gold: implications for the design of gold particle studies. <i>Mineralium Deposita</i> , 2021, 56, 1563-1588.	1.7	44
23	Measurements and full-field predictions of deformation heterogeneities in ice. <i>Earth and Planetary Science Letters</i> , 2011, 305, 153-160.	1.8	43
24	Messengers from the deep: Fossil wadsleyite-chromite microstructures from the Mantle Transition Zone. <i>Scientific Reports</i> , 2015, 5, 16484.	1.6	43
25	A new type of numerical experiment on the spatial and temporal patterns of localization of deformation in a material with a coupling of grain size and rheology. <i>Earth and Planetary Science Letters</i> , 2005, 239, 309-326.	1.8	40
26	Process of magnetite fabric development during granite deformation. <i>Earth and Planetary Science Letters</i> , 2011, 308, 77-89.	1.8	39
27	Hydrothermal replacement of Aragonite by Calcite: interplay between replacement, fracturing and growth. <i>European Journal of Mineralogy</i> , 2013, 25, 123-136.	0.4	39
28	Atomic worlds: Current state and future of atom probe tomography in geoscience. <i>Scripta Materialia</i> , 2018, 148, 115-121.	2.6	39
29	Hornblende delineates zones of mass transfer through the lower crust. <i>Scientific Reports</i> , 2016, 6, 31369.	1.6	38
30	Humite- and scapolite-bearing assemblages in marbles and calcsilicates of Dronning Maud Land, Antarctica: new data for Gondwana reconstructions. <i>Journal of Metamorphic Geology</i> , 1999, 17, 91-107.	1.6	36
31	A spectroscopic and carbon-isotope study of mixed-habit diamonds: Impurity characteristics and growth environment. <i>American Mineralogist</i> , 2013, 98, 66-77.	0.9	36
32	Local partial melting of the lower crust triggered by hydration through melt-rock interaction: an example from Fiordland, New Zealand. <i>Journal of Metamorphic Geology</i> , 2017, 35, 213-230.	1.6	36
33	Tectonic cycles of the New England Orogen, eastern Australia: A Review. <i>Australian Journal of Earth Sciences</i> , 2019, 66, 459-496.	0.4	36
34	Lightning strikes as a major facilitator of prebiotic phosphorus reduction on early Earth. <i>Nature Communications</i> , 2021, 12, 1535.	5.8	36
35	The influence of matrix rheology and vorticity on fabric development of populations of rigid objects during plane strain deformation. <i>Tectonophysics</i> , 2002, 351, 315-329.	0.9	35
36	Deformation-resembling microstructure created by fluid-mediated dissolution-precipitation reactions. <i>Nature Communications</i> , 2017, 8, 14032.	5.8	34

#	ARTICLE	IF	CITATIONS
37	Brittle-plastic deformation in initially dry rocks at fluid-present conditions: transient behaviour of feldspar at mid-crustal levels. <i>Contributions To Mineralogy and Petrology</i> , 2012, 163, 403-425.	1.2	33
38	The influence of phase and grain size distribution on the dynamics of strain localization in polymineralic rocks. <i>Journal of Structural Geology</i> , 2015, 72, 15-32.	1.0	33
39	The use of combined cathodoluminescence and EBSD analysis: a case study investigating grain boundary migration mechanisms in quartz. <i>Journal of Microscopy</i> , 2005, 217, 152-161.	0.8	32
40	Numerical simulations of microstructures using the Elle platform: A modern research and teaching tool. <i>Journal of the Geological Society of India</i> , 2010, 75, 110-127.	0.5	32
41	Mass transfer in the lower crust: Evidence for incipient melt assisted flow along grain boundaries in the deep arc granulites of Fiordland, New Zealand. <i>Geochemistry, Geophysics, Geosystems</i> , 2016, 17, 3733-3753.	1.0	32
42	Redox-freezing and nucleation of diamond via magnetite formation in the Earth's mantle. <i>Nature Communications</i> , 2016, 7, 11891.	5.8	31
43	Fluid-present deformation aids chemical modification of chromite: Insights from chromites from Golyamo Kamenyane, SE Bulgaria. <i>Lithos</i> , 2015, 228-229, 78-89.	0.6	30
44	The recognition of former melt flux through high-strain zones. <i>Journal of Metamorphic Geology</i> , 2018, 36, 1049-1069.	1.6	30
45	Dominance of microstructural processes and their effect on microstructural development: insights from numerical modelling of dynamic recrystallization. <i>Geological Society Special Publication</i> , 2002, 200, 149-170.	0.8	29
46	Olivine Pseudomorphs after Serpentinized Orthopyroxene Record Transient Oceanic Lithospheric Mantle Dehydration (Leka Ophiolite Complex, Norway). <i>Journal of Petrology</i> , 2012, 53, 1943-1968.	1.1	29
47	Quantitative characterization of plastic deformation of single diamond crystals: A high pressure high temperature (HPHT) experimental deformation study combined with electron backscatter diffraction (EBSD). <i>Diamond and Related Materials</i> , 2012, 30, 20-30.	1.8	29
48	The effect of pre-ectonic reaction and annealing extent on behaviour during subsequent deformation: insights from paired shear zones in the lower crust of Fiordland, New Zealand. <i>Journal of Metamorphic Geology</i> , 2015, 33, 557-577.	1.6	29
49	Effect of local stress heterogeneities on dislocation fields: Examples from transient creep in polycrystalline ice. <i>Acta Materialia</i> , 2015, 90, 303-309.	3.8	29
50	The Anita Peridotite, New Zealand: Ultra-depletion and Subtle Enrichment in Sub-arc Mantle. <i>Journal of Petrology</i> , 2016, 57, 717-750.	1.1	28
51	Patterns of strain localization in heterogeneous, polycrystalline rocks – a numerical perspective. <i>Earth and Planetary Science Letters</i> , 2017, 463, 253-265.	1.8	28
52	Atom probe tomography analysis of the reference zircon gj-1: An interlaboratory study. <i>Chemical Geology</i> , 2018, 495, 27-35.	1.4	27
53	Quantification of the microstructural evolution of polycrystalline fabrics using FAME: Application to in situ deformation of ice. <i>Journal of Structural Geology</i> , 2014, 61, 109-122.	1.0	26
54	The integration of experimental in-situ EBSD observations and numerical simulations: a novel technique of microstructural process analysis. <i>Journal of Microscopy</i> , 2004, 213, 273-284.	0.8	25

#	ARTICLE	IF	CITATIONS
55	Dynamics of ice mass deformation: Linking processes to rheology, texture, and microstructure. <i>Geochemistry, Geophysics, Geosystems</i> , 2013, 14, 4185-4194.	1.0	25
56	The importance of fracture-healing on the deformation of fluid-filled layered systems. <i>Journal of Structural Geology</i> , 2014, 67, 94-106.	1.0	25
57	Strain localization in brittle-ductile shear zones: fluid-abundant vs. fluid-limited conditions (an) Tj ETQq1 1 0.784314 rgBT /Overloc 1.2	1.2	25
58	Laser-Assisted Atom Probe Tomography of Deformed Minerals: A Zircon Case Study. <i>Microscopy and Microanalysis</i> , 2017, 23, 404-413.	0.2	25
59	Melt-present shear zones enable intracontinental orogenesis. <i>Geology</i> , 2020, 48, 643-648.	2.0	25
60	Pinch and swell structures: evidence for strain localisation by brittle-viscous behaviour in the middle crust. <i>Solid Earth</i> , 2015, 6, 1045-1061.	1.2	24
61	Trace element homogeneity from micron- to atomic scale: Implication for the suitability of the zircon CJ-1 as a trace element reference material. <i>Chemical Geology</i> , 2017, 456, 10-18.	1.4	24
62	Zircon U-Pb Dating of a Lower Crustal Shear Zone: A Case Study From the Northern Sector of the Ivrea-Verbano Zone (Val Cannobina, Italy). <i>Tectonics</i> , 2018, 37, 322-342.	1.3	24
63	Symplectite formation in the presence of a reactive fluid: insights from hydrothermal experiments. <i>Journal of Metamorphic Geology</i> , 2017, 35, 281-299.	1.6	23
64	Chemical Signatures of Melt-Rock Interaction in the Root of a Magmatic Arc. <i>Journal of Petrology</i> , 2018, 59, 321-340.	1.1	23
65	Subgrain Rotation Recrystallization During Shearing: Insights From Full-Field Numerical Simulations of Halite Polycrystals. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 8810-8827.	1.4	22
66	Recurrent magmatic activity on a lithosphere-scale structure: Crystallization and deformation in kimberlitic zircons. <i>Gondwana Research</i> , 2017, 42, 126-132.	3.0	22
67	A review of numerical modelling of the dynamics of microstructural development in rocks and ice: Past, present and future. <i>Journal of Structural Geology</i> , 2019, 125, 111-123.	1.0	22
68	Ultrahigh temperature deformation microstructures in felsic granulites of the Napier Complex, Antarctica. <i>Tectonophysics</i> , 2006, 427, 133-151.	0.9	21
69	Post-deformational annealing at the subgrain scale: Temperature dependent behaviour revealed by in-situ heating experiments on deformed single crystal halite. <i>Journal of Structural Geology</i> , 2010, 32, 982-996.	1.0	21
70	Importance of surface structure on dissolution of fluorite: Implications for surface dynamics and dissolution rates. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 126, 398-410.	1.6	21
71	Fabric development during exhumation from ultrahigh-pressure in an eclogite-bearing shear zone, Western Gneiss Region, Norway. <i>Journal of Structural Geology</i> , 2015, 71, 58-70.	1.0	21
72	The field and microstructural signatures of deformation-assisted melt transfer: Insights from magmatic arc lower crust, New Zealand. <i>Journal of Metamorphic Geology</i> , 2019, 37, 795-821.	1.6	21

#	ARTICLE	IF	CITATIONS
73	Orthopyroxene-omphacite- and garnet-omphacite-bearing magmatic assemblages, Breaksea Orthogneiss, New Zealand: Oxidation state controlled by high-P oxide fractionation. <i>Lithos</i> , 2015, 216-217, 1-16.	0.6	20
74	Non-basal dislocations should be accounted for in simulating ice mass flow. <i>Earth and Planetary Science Letters</i> , 2017, 473, 247-255.	1.8	20
75	Compositional boundary layers trigger liquid unmixing in a basaltic crystal mush. <i>Nature Communications</i> , 2019, 10, 4821.	5.8	20
76	Shape of pinch and swell structures as a viscosity indicator: Application to lower crustal polyphase rocks. <i>Journal of Structural Geology</i> , 2016, 88, 32-45.	1.0	19
77	Intracontinental Orogeny Enhanced by Far-Field Extension and Local Weak Crust. <i>Tectonics</i> , 2018, 37, 4421-4443.	1.3	19
78	Evaluating the importance of metamorphism in the foundering of continental crust. <i>Scientific Reports</i> , 2017, 7, 13039.	1.6	18
79	Grain-scale dependency of metamorphic reaction on crystal plastic strain. <i>Journal of Metamorphic Geology</i> , 2019, 37, 1021-1036.	1.6	17
80	Microstructurally controlled trace element (Zr, U-Pb) concentrations in metamorphic rutile: An example from the amphibolites of the Bergen Arcs. <i>Journal of Metamorphic Geology</i> , 2020, 38, 103-127.	1.6	17
81	Interaction of chemical and physical processes during deformation at fluid-present conditions: a case study from an anorthosite-leucogabbro deformed at amphibolite facies conditions. <i>Contributions To Mineralogy and Petrology</i> , 2013, 165, 543-562.	1.2	16
82	What happens to deformed rocks after deformation? A refined model for recovery based on numerical simulations. <i>Geological Society Special Publication</i> , 2014, 394, 215-234.	0.8	16
83	Seismic anisotropy from compositional banding in granulites from the deep magmatic arc of Fiordland, New Zealand. <i>Earth and Planetary Science Letters</i> , 2017, 477, 156-167.	1.8	16
84	Precambrian geology of the northern Nagssugtoqidian orogen, West Greenland: mapping in the Kangaatsiaq area. <i>Geological Survey of Denmark and Greenland Bulletin</i> , 0, 191, 13-23.	0.0	16
85	Rheology, microstructure and crystallographic preferred orientation of matrix containing a dispersed second phase: Insight from experimentally deformed ice. <i>Earth and Planetary Science Letters</i> , 2016, 449, 272-281.	1.8	15
86	Generation of amorphous carbon and crystallographic texture during low-temperature subseismic slip in calcite fault gouge. <i>Geology</i> , 2018, 46, 163-166.	2.0	15
87	Boom boom pow: Shock-facilitated aqueous alteration and evidence for two shock events in the Martian nakhlite meteorites. <i>Science Advances</i> , 2019, 5, eaaw5549.	4.7	15
88	The recognition of multiple magmatic events and pre-existing deformation zones in metamorphic rocks as illustrated by CL signatures and numerical modelling: examples from the Ballachulish contact aureole, Scotland. <i>International Journal of Earth Sciences</i> , 2012, 101, 1127-1148.	0.9	14
89	Simulation of surface dynamics during dissolution as a function of the surface orientation: Implications for non-constant dissolution rates. <i>Earth and Planetary Science Letters</i> , 2014, 408, 163-170.	1.8	14
90	Direct Observations of the Dissolution of Fluorite Surfaces with Different Orientations. <i>Crystal Growth and Design</i> , 2014, 14, 69-77.	1.4	14

#	ARTICLE	IF	CITATIONS
91	Pink color in Type I diamonds: Is deformation twinning the cause?. <i>American Mineralogist</i> , 2015, 100, 1518-1527.	0.9	14
92	Deformation behavior of migmatites: insights from microstructural analysis of a garnet-sillimanite-mullite-quartz-feldspar-bearing anatectic migmatite at Rampura-Agucha, Aravalli-Delhi Fold Belt, NW India. <i>International Journal of Earth Sciences</i> , 2018, 107, 2265-2292.	0.9	14
93	Sub-arc xenolith Fe-Li-Pb isotopes and textures tell tales of their journey through the mantle wedge and crust. <i>Geology</i> , 2018, 46, 947-950.	2.0	13
94	Tectonics of the Isua Supracrustal Belt 1: P-T-X-t Constraints of a Poly-Metamorphic Terrane. <i>Tectonics</i> , 2021, 40, e2020TC006516.	1.3	13
95	Sintering of CaF ₂ pellets as nuclear fuel analog for surface stability experiments. <i>Journal of Nuclear Materials</i> , 2011, 419, 46-51.	1.3	12
96	Quantification of mineral behavior in four dimensions: Grain boundary and substructure dynamics in salt. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	1.0	12
97	Coupled extrusion of sub-arc lithospheric mantle and lower crust during orogen collapse: a case study from Fiordland, New Zealand. <i>Journal of Metamorphic Geology</i> , 2016, 34, 501-524.	1.6	12
98	Time for anisotropy: The significance of mechanical anisotropy for the development of deformation structures. <i>Journal of Structural Geology</i> , 2019, 125, 41-47.	1.0	12
99	Inefficient high-temperature metamorphism in orthogneiss. <i>American Mineralogist</i> , 2019, 104, 17-30.	0.9	12
100	The influence of strain rate and presence of dispersed second phases on the deformation behaviour of polycrystalline D ₂ ice. <i>Journal of Glaciology</i> , 2019, 65, 101-122.	1.1	12
101	Climmerite: A product of melt-rock interaction within a crustal-scale high-strain zone. <i>Gondwana Research</i> , 2022, 105, 160-184.	3.0	12
102	Experimental modeling of viscous inclusions in a circular high-strain shear rig: Implications for the interpretation of shape fabrics and deformed enclaves. <i>Journal of Geophysical Research</i> , 2002, 107, ETG 11-1-ETG 11-15.	3.3	11
103	The application of GIS to unravel patterns of deformation in high grade terrains: a case study of indenter tectonics from west Greenland. <i>Geological Society Special Publication</i> , 2004, 224, 63-78.	0.8	11
104	Sillimanite deformation mechanisms within a Grt-Sil-Bt gneiss: effect of pre-deformation grain orientations and characteristics on mechanism, slip-system activation and rheology. <i>Geological Society Special Publication</i> , 2014, 394, 189-213.	0.8	11
105	Understanding the emplacement of Martian volcanic rocks using petrofabrics of the nakhlite meteorites. <i>Earth and Planetary Science Letters</i> , 2019, 520, 220-230.	1.8	11
106	Animations of dynamic recrystallization with the numerical modelling system Elle. <i>Journal of the Virtual Explorer</i> , 0, 04, .	0.0	11
107	Deformation microstructures reveal a complex mantle history for polycrystalline diamond. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	1.0	10
108	Surface morphology and structural types of natural impact apographitic diamonds. <i>Journal of Superhard Materials</i> , 2016, 38, 71-84.	0.5	10

#	ARTICLE	IF	CITATIONS
109	Maghemite soil nodules reveal the impact of fire on mineralogical and geochemical differentiation at the Earth's surface. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 200, 25-41.	1.6	10
110	Full analysis of feldspar texture and crystal structure by combining X-ray and electron techniques. <i>American Mineralogist</i> , 2013, 98, 41-52.	0.9	9
111	In search of early life: Carbonate veins in Archean metamorphic rocks as potential hosts of biomarkers. <i>Earth and Planetary Science Letters</i> , 2016, 453, 44-55.	1.8	9
112	Microstructures reveal multistage melt present strain localisation in mid-ocean gabbros. <i>Lithos</i> , 2020, 366-367, 105572.	0.6	9
113	The evolution of ice fabrics: A continuum modelling approach validated against laboratory experiments. <i>Earth and Planetary Science Letters</i> , 2021, 556, 116718.	1.8	9
114	Tectonics of the Isua Supracrustal Belt 2: Microstructures Reveal Distributed Strain in the Absence of Major Fault Structures. <i>Tectonics</i> , 2021, 40, e2020TC006514.	1.3	9
115	The influence of triple junction kinetics on the evolution of polycrystalline materials during normal grain growth: New evidence from in-situ experiments using columnar Al foil. <i>International Journal of Materials Research</i> , 2005, 96, 1152-1157.	0.8	8
116	Time-lapse misorientation maps for the analysis of electron backscatter diffraction data from evolving microstructures. <i>Scripta Materialia</i> , 2011, 65, 600-603.	2.6	8
117	Strain localization in polycrystalline material with second phase particles: Numerical modeling with application to ice mixtures. <i>Geochemistry, Geophysics, Geosystems</i> , 2016, 17, 3608-3628.	1.0	8
118	Crystallography of refractory metal nuggets in carbonaceous chondrites: A transmission Kikuchi diffraction approach. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 216, 42-60.	1.6	7
119	Fracturing and Porosity Channeling in Fluid Overpressure Zones in the Shallow Earth's Crust. <i>Geofluids</i> , 2020, 2020, 1-17.	0.3	7
120	Deformation Behavior and Inferred Seismic Properties of Tonalitic Migmatites at the Time of Pre-melting, Partial Melting, and Post-solidification. <i>Geochemistry, Geophysics, Geosystems</i> , 2021, 22, e2020GC009202.	1.0	7
121	Relative rates of fluid advection, elemental diffusion and replacement govern reaction front patterns. <i>Earth and Planetary Science Letters</i> , 2021, 565, 116950.	1.8	7
122	The Potential of Combined In-Situ Heating Experiments and Detailed EBSD Analysis in the Investigation of Grain Scale Processes such as Recrystallization and Phase Transformation. <i>Materials Science Forum</i> , 2004, 467-470, 1407-1412.	0.3	6
123	Substructure Dynamics in Crystalline Materials: New Insight from <i>In Situ</i> Experiments, Detailed EBSD Analysis of Experimental and Natural Samples and Numerical Modelling. <i>Materials Science Forum</i> , 2012, 715-716, 502-507.	0.3	6
124	Carbonado revisited: Insights from neutron diffraction, high resolution orientation mapping and numerical simulations. <i>Lithos</i> , 2016, 265, 244-256.	0.6	6
125	Palaeoproterozoic reworking of early Archean lithospheric blocks: Rocks and zircon records from charnockitoids in Volgo-Uralia. <i>Precambrian Research</i> , 2021, 360, 106224.	1.2	6
126	Pressure, temperature and lithological dependence of seismic and magnetic susceptibility anisotropy in amphibolites and gneisses from the central Scandinavian Caledonides. <i>Tectonophysics</i> , 2021, 820, 229113.	0.9	6

#	ARTICLE	IF	CITATIONS
127	Seismic anisotropy of mid crustal orogenic nappes and their bounding structures: An example from the Middle Allochthon (Seve Nappe) of the Central Scandinavian Caledonides. <i>Tectonophysics</i> , 2021, 819, 229045.	0.9	5
128	Metamorphism in the New England Orogen, eastern Australia: a review. <i>Australian Journal of Earth Sciences</i> , 2020, 67, 453-478.	0.4	5
129	Grain Growth in Al: First Results from a Combined Study of Bulk and In-Situ Experiments Using a Columnar Structured Al Foil. <i>Materials Science Forum</i> , 2004, 467-470, 935-940.	0.3	4
130	The Weighted Burgers Vector: A Quantity for Constraining Dislocation Densities and Types Using Electron Backscatter Diffraction on 2D Sections through Crystalline Materials. <i>Materials Science Forum</i> , 0, 715-716, 732-736.	0.3	4
131	The Application of <i>In Situ</i> 3D X-Ray Diffraction in Annealing Experiments: First Interpretation of Substructure Development in Deformed NaCl. <i>Materials Science Forum</i> , 2012, 715-716, 461-466.	0.3	4
132	Determining relative bulk viscosity of kilometre-scale crustal units using field observations and numerical modelling. <i>Tectonophysics</i> , 2017, 721, 275-291.	0.9	4
133	Characterization of Ultra-fine Grained and Nanocrystalline Materials Using Transmission Kikuchi Diffraction. <i>Journal of Visualized Experiments</i> , 2017, , .	0.2	4
134	Metamorphic Differentiation via Enhanced Dissolution along High Permeability Zones. <i>Journal of Petrology</i> , 2021, 61, .	1.1	4
135	Local variations of metamorphic record from compositionally heterogeneous rocks (Cima di Tj ETQq1 1 0.784314 rgBT /Overlock 10 106126.	0.6	4
136	Experimental deformation of deuterated ice in 3D and 2D: identification of grain-scale processes. <i>Proceedings of the Royal Society of Victoria</i> , 2015, 127, 99.	0.3	4
137	Oxide enrichment by syntectonic melt-rock interaction. <i>Lithos</i> , 2022, 414-415, 106617.	0.6	4
138	Annealing in a Natural Laboratory: an EBSD and Cl Study of Calcite and Quartz Growth from Volumes of Rock Heated by a Nearby Melt Intrusion. <i>Materials Science Forum</i> , 2007, 550, 333-338.	0.3	3
139	A deep rock laboratory in the Dellen impact crater. <i>Gff</i> , 2010, 132, 45-54.	0.4	3
140	Ductile Deformation Without Localization: Insights From Numerical Modeling. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 5710-5726.	1.0	3
141	New apparatus for controlled general flow modeling of analog materials. , 2001, , .		2
142	Quantitative Analysis of EBSD Data in Rocks and other Crystalline Materials: Investigation of Strain Induced Recrystallisation and Growth of New Phases. <i>Materials Science Forum</i> , 2012, 715-716, 62-71.	0.3	2
143	Two belts of HTLP sub-regional metamorphism in the New England Orogen, eastern Australia: occurrence and characteristics exemplified by the Wongwibinda Metamorphic Complex. <i>Australian Journal of Earth Sciences</i> , 2020, 67, 479-507.	0.4	2
144	Constraints on the Emplacement of Martian Nakhilite Igneous Rocks and Their Source Volcano From Advanced Micro-Petrofabric Analysis. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	2

#	ARTICLE	IF	CITATIONS
145	Role of inherited compositional and structural heterogeneity in shear zone development at mid-low levels of the continental crust (the Anzola shear zone; Ivrea-Verbano Zone, Southern Alps). <i>Lithos</i> , 2022, 422-423, 106745.	0.6	2
146	Non-Destructive Residual Stress Investigations of Natural Polycrystalline Diamonds. <i>Advanced Materials Research</i> , 0, 996, 969-974.	0.3	1
147	Legacy base metal slags can generate toxic leachates. <i>Powder Diffraction</i> , 2017, 32, S70-S77.	0.4	1
148	Can the Magmatic Conditions of the Martian Nakhilites be Discerned via Investigation of Clinopyroxene and Olivine Intracrystalline Misorientations?. <i>Journal of Geophysical Research E: Planets</i> , 2022, 127, .	1.5	1
149	Reply to Comment by Nutman et al. on "Tectonics of the Isua Supracrustal Belt I and II". <i>Tectonics</i> , 0, , .	1.3	1
150	Exploring Innovative and Challenging Applications of EBSD in the Geological and Biological Sciences. <i>Microscopy and Microanalysis</i> , 2011, 17, 412-413.	0.2	0
151	Investigation of fabrics in quartz and ice: comparison and applications of different analytical methods. <i>Geotectonic Research</i> , 2015, 97, 100-102.	0.1	0
152	Quantitative microstructural analysis of geological materials by atom probe: understanding the mechano-chemical behaviour of zircon. <i>Microscopy and Microanalysis</i> , 2015, 21, 1317-1318.	0.2	0
153	The Use of High Speed, High Resolution EBSD to Unlock Hidden Secrets of the Allende Meteorite. <i>Microscopy and Microanalysis</i> , 2018, 24, 2082-2083.	0.2	0
154	The Importance of Physiochemical Processes in Decarbonisation Technology Applications Utilizing the Subsurface: A Review. <i>Earth Science, Systems and Society</i> , 0, 2, .	0.0	0