Nick Petford

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7098689/publications.pdf

Version: 2024-02-01

72 papers	5,406 citations	218381 26 h-index	102304 66 g-index
76 all docs	76 docs citations	76 times ranked	3277 citing authors

#	Article	IF	Citations
1	Origins and Scales of Compositional Variations in Crustally Derived Granitic Rocks: The Example of the Dartmoor Pluton in the Cornubian Batholith of Southwest Britain. Journal of Geology, 2021, 129, 131-169.	0.7	7
2	Igneous differentiation by deformation. Contributions To Mineralogy and Petrology, 2020, 175, 1.	1.2	17
3	Supporting open innovation with the use of a balanced scorecard approach: a study on deep smarts and effective knowledge transfer to SMEs. Production Planning and Control, 2019, 30, 842-853.	5.8	18
4	Image-based modelling of lateral magma flow: the Basement Sill, Antarctica. Royal Society Open Science, 2017, 4, 161083.	1.1	25
5	Threeâ€dimensional visualization of dermal skin structure using confocal laser scanning microscopy. Journal of Microscopy, 2013, 251, 14-18.	0.8	5
6	Numerical analysis of separation and mixing dynamics in multiphase granular systems. , 2013, , .		0
7	The Field Description of Igneous Rocks, Second Edition. Environmental and Engineering Geoscience, 2012, 18, 399-400.	0.3	3
8	Microsegregation rates of liquid Feâ€Niâ€S metal in natural silicateâ€metal systems: A combined experimental and numerical study. Geochemistry, Geophysics, Geosystems, 2011, 12, .	1.0	15
9	An exploratory qualitative study on perceptions about mosquito bed nets in the Niger Delta: what are the barriers to sustained use?. Journal of Multidisciplinary Healthcare, 2011, 4, 73.	1.1	20
10	Deep crustal melting in the Peruvian Andes: Felsic magma generation during delamination and uplift. Lithos, 2011, 125, 272-286.	0.6	50
11	Application of Confocal Microscopy for 3D Assessment of Carotid Plaque Structure: Implications for Carotid Blood Flow and Stroke Research. Journal of Vascular and Interventional Neurology, 2011, 4, 1-4.	1.1	9
12	Development of characteristic volcanic debris avalanche deposit structures: New insight from distinct element simulations. Journal of Volcanology and Geothermal Research, 2010, 192, 191-200.	0.8	46
13	A new method of imaging particle tracks in solid state nuclear track detectors. Journal of Microscopy, 2010, 237, 1-6.	0.8	18
14	3-D imaging of particle tracks in solid state nuclear track detectors. Natural Hazards and Earth System Sciences, 2010, 10, 1033-1036.	1.5	11
15	Which effective viscosity?. Mineralogical Magazine, 2009, 73, 167-191.	0.6	107
16	Analyses on granular mass movement mechanics and deformation with distinct element numerical modeling: implications for large-scale rock and debris avalanches. Acta Geotechnica, 2009, 4, 233-247.	2.9	47
17	Structure and emplacement of high-level magmatic systems: introduction. Geological Society Special Publication, 2008, 302, 1-2.	0.8	0
18	Large-scale mechanics of fracture-mediated felsic magma intrusion driven by hydraulic inflation and buoyancy pumping. Geological Society Special Publication, 2008, 302, 3-29.	0.8	7

#	Article	IF	Citations
19	Deformation-induced mechanical instabilities at the core-mantle boundary. Geophysical Monograph Series, 2007, , 271-287.	0.1	4
20	Shear-induced pressure changes and seepage phenomena in a deforming porous layer-III. Geophysical Journal International, 2007, 171, 943-953.	1.0	5
21	Vibro-agitation of chambered magma. Journal of Volcanology and Geothermal Research, 2007, 167, 24-36.	0.8	33
22	Changing sources of magma generation beneath intra-oceanic island arcs: An insight from the juvenile Kohistan island arc, Pakistan Himalaya. Chemical Geology, 2006, 233, 46-74.	1.4	54
23	Radon track imaging in CR-39 plastic detectors using confocal scanning laser microscopy. Journal of Microscopy, 2005, 217, 179-183.	0.8	6
24	Shear-induced pressure changes and seepage phenomena in a deforming porous layer - II. Geophysical Journal International, 2005, 163, 385-402.	1.0	7
25	Towards a coupled physical and chemical model for tonaliteâ€“trondhjemiteâ€“granodiorite magma formation. Lithos, 2005, 79, 43-60.	0.6	33
26	Shear-induced material transfer across the core-mantle boundary aided by the post-perovskite phase transition. Earth, Planets and Space, 2005, 57, 459-464.	0.9	24
27	Fe-liquid segregation in deforming planetesimals: Coupling Core-Forming compositions with transport phenomena. Earth and Planetary Science Letters, 2005, 239, 185-202.	1.8	53
28	Physical geology of high-level magmatic systems: introduction. Geological Society Special Publication, 2004, 234, 1-4.	0.8	11
29	The effect of internal gas pressurization on volcanic edifice stability: evolution towards a critical state. Terra Nova, 2004, 16, 312-317.	0.9	21
30	Volcanic rock-mass properties from Snowdonia and Tenerife: implications for volcano edifice strength. Journal of the Geological Society, 2004, 161, 939-946.	0.9	45
31	RHEOLOGY OFGRANITICMAGMASDURINGASCENT ANDEMPLACEMENT. Annual Review of Earth and Planetary Sciences, 2003, 31, 399-427.	4.6	216
32	Shear-induced pressure changes and seepage phenomena in a deforming porous layer - I. Geophysical Journal International, 2003, 155, 857-869.	1.0	25
33	Controls on primary porosity and permeability development in igneous rocks. Geological Society Special Publication, 2003, 214, 93-107.	0.8	22
34	Hydrocarbons in crystalline rocks: an introduction. Geological Society Special Publication, 2003, 214, 1-5.	0.8	42
35	Thermally induced primary fracture development in tabular granitic plutons: a preliminary analysis. Geological Society Special Publication, 2003, 214, 143-150.	0.8	8
36	Partial melting of mafic (amphibolitic) lower crust by periodic influx of basaltic magma. Earth and Planetary Science Letters, 2001, 193, 483-499.	1.8	406

#	Article	IF	Citations
37	Investigation of the petrophysical properties of a porous sandstone sample using confocal scanning laser microscopy. Petroleum Geoscience, 2001, 7, 99-105.	0.9	25
38	Granite magma formation, transport and emplacement in the Earth's crust. Nature, 2000, 408, 669-673.	13.7	714
39	Dyke widths and ascent rates of silicic magmas on Venus. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 2000, 91, 87-95.	0.3	8
40	Quantitative analysis and scaling of sheared granitic magmas. Geophysical Research Letters, 2000, 27, 1231-1234.	1.5	15
41	Granites are not diapiric!. Geology Today, 2000, 16, 180-184.	0.3	2
42	A. Castro, C. Fernandez and J.L. Vigneresse (Eds). Understanding Granites: Integrating New and Classical Techniques. Geological Society Special Publication 168, 1999. 278 pp. Price Â£70. ISBN 1-86239-058-4.. Mineralogical Magazine, 2000, 64, 1183-1184.	0.6	0
43	Granitic melt viscosity and silicic magma dynamics in contrasting tectonic settings. Journal of the Geological Society, 1999, 156, 1057-1060.	0.9	108
44	Self-organisation and fracture connectivity in rapidly heated continental crust. Journal of Structural Geology, 1998, 20, 1425-1434.	1.0	48
45	Granular flow and viscous fluctuations in low Bagnold number granitic magmas. Journal of the Geological Society, 1998, 155, 873-881.	0.9	25
46	P. C. Lichtner, C. I. Steefel and E. H. Oelkers (eds). Reactive Transport in Porous Media. Washington, D.C. (Mineralogical Society of America: Reviews in Mineralogy Vol. 34), 1996, xiv + 438 pp. Price US$28.00 (MSA Members $21.00). ISBN 0-939950-42-1.. Mineralogical Magazine, 1998, 62, 576-577.	0.6	0
47	Pore-structure visualization in microdioritic enclaves. Geological Society Special Publication, 1997, 122, 37-46.	0.8	1
48	Mantle underplating, granite tectonics, and metamorphic P-T-tpaths: Comment and Reply. Geology, 1997, 25, 763.	2.0	1
49	Are granitic intrusions scale invariant?. Journal of the Geological Society, 1997, 154, 1-4.	0.9	197
50	Plutonism and the growth of Andean Crust at 9 Â°S from 100 to 3 Ma. Journal of South American Earth Sciences, 1996, 9, 1-9.	0.6	46
51	Rapid magma production rates, underplating and remelting in the Andes: isotopic evidence from northern-central Peru (9â€“11 Â°S). Journal of South American Earth Sciences, 1996, 9, 69-78.	0.6	42
52	Geochemistry of upper palaeozoic-lower triassic granitoids of the central frontal cordillera (33) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 142	0.6	14
53	Dykes or diapirs?. Earth and Environmental Science Transactions of the Royal Society of Edinburgh, 1996, 87, 105-114.	0.3	114
54	Na-rich Partial Melts from Newly Underplated Basaltic Crust: the Cordillera Blanca Batholith, Peru. Journal of Petrology, 1996, 37, 1491-1521.	1.1	826

#	Article	IF	Citations
55	Dykes or diapirs?. , 1996, , .		22
56	Melt infiltration and advection in microdioritic enclaves. European Journal of Mineralogy, 1996, 8, 405-412.	0.4	20
57	W. S. Pitcher, 1993. The Nature and Origin of Granite. xiii + 321 pp. London, Glasgow, New York, Tokyo, Melbourne, Madras: Blackie Academic & Professional. Price Â£39.95 (hard covers). ISBN 0 7514 0800 7.. Geological Magazine, 1995, 132, 245-245.	0.9	0
58	Some aspects of the application of image analysis to the study of fission tracks. Mineralogical Magazine, 1995, 59, 197-201.	0.6	2
59	Segregation of tonalitic-trondhjemitic melts in the continental crust: The mantle connection. Journal of Geophysical Research, 1995, 100, 15735-15743.	3.3	45
60	Preliminary confocal scanning laser microscopy study of fluid inclusions in quartz. Journal of Microscopy, 1995, 178, 37-41.	0.8	27
61	Title is missing!. Geological Magazine, 1994, 131, 280-281.	0.9	0
62	The ascent of felsic magmas in dykes. Lithos, 1994, 32, 161-168.	0.6	120
63	Dike transport of granitoid magmas: Comment and Reply. Geology, 1994, 22, 473.	2.0	6
64	Counting fission tracks in mica external detectors. Pure and Applied Geophysics, 1993, 140, 667-680.	0.8	4
65	Generation of sodium-rich magmas from newly underplated basaltic crust. Nature, 1993, 362, 144-146.	13.7	1,135
66	The automated counting of fission tracks in an external detector by image analysis. Computers and Geosciences, 1993, 19, 585-591.	2.0	15
67	Dike transport of granitoid magmas. Geology, 1993, 21, 845.	2.0	270
68	The study of fission track and other crystalline defects using confocal scanning laser microscopy. Journal of Microscopy, 1993, 170, 201-212.	0.8	23
69	Fractal analysis in granitoid petrology: a means of quantifying irregular grain morphologies. European Journal of Mineralogy, 1993, 5, 593-598.	0.4	9
70	Proposed methods for correcting external detector fission track counts for tracks lost during etching. Journal of the Geological Society, 1993, 150, 1051-1054.	0.9	2
71	Granitoid emplacement and deformation along a major crustal lineament: The Cordillera Blanca, Peru. Tectonophysics, 1992, 205, 171-185.	0.9	78
72	SLM confocal microscopy: an improved way of viewing fission tracks. Journal of the Geological Society, 1990, 147, 217-218.	0.9	20