

# Oliver Nebel

## List of Publications by Year in descending order

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105  
papers

4,404  
citations

101384

36  
h-index

114278

63  
g-index

105  
all docs

105  
docs citations

105  
times ranked

3237  
citing authors

#	ARTICLE	IF	CITATIONS
1	Testing the advantages of simultaneous in-situ Sm Nd, U Pb and elemental analysis of igneous monazite for petrochronological studies. An example from the late Archean, Penzance granite, Western Australia. <i>Chemical Geology</i> , 2022, 594, 120760.	1.4	4
2	Craton Formation in Early Earth Mantle Convection Regimes. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	1.4	6
3	Iron isotope systematics during igneous differentiation in lavas from K�lauea and Mauna Loa, Hawai'i. <i>Chemical Geology</i> , 2022, 606, 120973.	1.4	2
4	Silica-rich spinel harzburgite residues formed by fractional hybridization-melting of the intra-oceanic supra-subduction zone mantle: New evidence from TUBAF seamount peridotites. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 293, 477-506.	1.6	13
5	Heavy $^{57}\text{Fe}$ in ocean island basalts: A non-unique signature of processes and source lithologies in the mantle. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 292, 309-332.	1.6	36
6	Competing effects of spreading rate, crystal fractionation and source variability on Fe isotope systematics in mid-ocean ridge lavas. <i>Scientific Reports</i> , 2021, 11, 4123.	1.6	11
7	Unravelling depositional setting, age and provenance of the Simlipal volcano-sedimentary complex, Singhbhum craton: Evidence for Hadean crust and Mesoarchean marginal marine sedimentation. <i>Precambrian Research</i> , 2021, 354, 106038.	1.2	24
8	Formation and Evolution of a Neoproterozoic Continental Magmatic Arc. <i>Journal of Petrology</i> , 2021, 62, .	1.1	14
9	Molybdenum isotope systematics in cumulate rock of the 2.8 Windimurra layered intrusion: A test for igneous differentiation and the composition of the Archean mantle. <i>Precambrian Research</i> , 2021, 355, 106087.	1.2	7
10	Crustal rejuvenation stabilised Earth's first cratons. <i>Nature Communications</i> , 2021, 12, 3535.	5.8	45
11	An Early Garnet Redox Filter as an Additive Oxidizer in Lower Continental Arc Crust Traced Through Fe Isotopes. <i>Journal of Geophysical Research: Solid Earth</i> , 2021, 126, e2020JB021217.	1.4	2
12	Alkalinity of ocean island lavas decoupled from enriched source components: A case study from the EM1-PR�MA Tasmantid mantle plume. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 314, 140-158.	1.6	4
13	Magmatic thickening of crust in non-plate tectonic settings initiated the subaerial rise of Earth's first continents 3.3 to 3.2 billion years ago. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	33
14	Decoupled U-Pb date and chemical zonation of monazite in migmatites: The case for disturbance of isotopic systematics by coupled dissolution-precipitation. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 269, 398-412.	1.6	35
15	Simultaneous measurement of neodymium stable and radiogenic isotopes from a single aliquot using a double spike. <i>Journal of Analytical Atomic Spectrometry</i> , 2020, 35, 388-402.	1.6	18
16	Magnesium isotope evidence for enhanced crustal reworking in lowermost Cambrian sedimentary rocks (Kazakhstan). <i>Palaeogeography, Palaeoclimatology, Palaeoecology</i> , 2020, 538, 109452.	1.0	2
17	Using apatite to resolve the age and protoliths of mid-crustal shear zones: A case study from the Taxaquara Shear Zone, SE Brazil. <i>Lithos</i> , 2020, 378-379, 105817.	0.6	7
18	Thermochemical lithosphere differentiation and the origin of cratonic mantle. <i>Nature</i> , 2020, 588, 89-94.	13.7	37

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19	An Early Cretaceous subduction-modified mantle underneath the ultraslow spreading Gakkel Ridge, Arctic Ocean. <i>Science Advances</i> , 2020, 6, .	4.7	27
20	Intraplate volcanism triggered by bursts in slab flux. <i>Science Advances</i> , 2020, 6, .	4.7	32
21	A coherent method for combined stable magnesium and radiogenic strontium isotope analyses in carbonates (with application to geological reference materials SARM 40, SARM 43, SRM 88A, SRM 1B). <i>MethodsX</i> , 2020, 7, 100847.	0.7	1
22	North Atlantic Craton architecture revealed by kimberlite-hosted crustal zircons. <i>Earth and Planetary Science Letters</i> , 2020, 534, 116091.	1.8	22
23	Incremental Growth of Layered Mafic-Ultramafic Intrusions Through Melt Replenishment Into a Crystal Mush Zone Traced by Fe-Hf Isotope Systematics. <i>Frontiers in Earth Science</i> , 2020, 8, .	0.8	7
24	Lithosphere differentiation in the early Earth controls Archean tectonics. <i>Earth and Planetary Science Letters</i> , 2019, 525, 115755.	1.8	38
25	Reconciling thermal regimes and tectonics of the early Earth. <i>Geology</i> , 2019, 47, 923-927.	2.0	44
26	A 60-Myr record of continental back-arc differentiation through cyclic melting. <i>Nature Geoscience</i> , 2019, 12, 215-219.	5.4	56
27	Reconciling petrological and isotopic mixing mechanisms in the Pitcairn mantle plume using stable Fe isotopes. <i>Earth and Planetary Science Letters</i> , 2019, 521, 60-67.	1.8	42
28	Crustal reworking at convergent margins traced by Fe isotopes in I-type intrusions from the Gangdese arc, Tibetan Plateau. <i>Chemical Geology</i> , 2019, 510, 47-55.	1.4	8
29	Assessment of Five Monazite Reference Materials for U-Th/Pb Dating Using Laser-Ablation ICP-MS. <i>Geosciences (Switzerland)</i> , 2019, 9, 391.	1.0	9
30	Iron isotope exchange and fractionation between hematite ( $\hat{\pm}$ -Fe <sub>2</sub> O <sub>3</sub> ) and aqueous Fe(II): A combined three-isotope and reversal-approach to equilibrium study. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 245, 207-221.	1.6	31
31	Radiogenic Sr and Stable C and O Isotopes Across Precambrianâ€Cambrian Transition in Marine Carbonatic Phosphorites of Malyi Karatau (Kazakhstan)â€™Implications for Paleoâ€™environmental Change. <i>Geochemistry, Geophysics, Geosystems</i> , 2019, 20, 3-23.	1.0	22
32	Molybdenum isotope variations in calc-alkaline lavas from the Banda arc, Indonesia: Assessing the effect of crystal fractionation in creating isotopically heavy continental crust. <i>Chemical Geology</i> , 2018, 485, 1-13.	1.4	50
33	Variation in sub-arc mantle oxygen fugacity during partial melting recorded in refractory peridotite xenoliths from the West Bismarck Arc. <i>Chemical Geology</i> , 2018, 486, 16-30.	1.4	45
34	A non-zircon Hf isotope record in Archean black shales from the Pilbara craton confirms changing crustal dynamics ca. 3 Ga ago. <i>Scientific Reports</i> , 2018, 8, 922.	1.6	9
35	The Windimurra Igneous Complex: an Archean Bushveld?. <i>Geological Society Special Publication</i> , 2018, 453, 313-348.	0.8	11
36	Zinc isotope composition of the Earth and its behaviour during planetary accretion. <i>Chemical Geology</i> , 2018, 477, 73-84.	1.4	122

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37	Low-Ca boninite formation by second-stage melting of spinel harzburgite residues at mature subduction zones: new evidence from veined mantle xenoliths from the West Bismarck Arc. <i>Contributions To Mineralogy and Petrology</i> , 2018, 173, 1.	1.2	8
38	Garnet peridotites reveal spatial and temporal changes in the oxidation potential of subduction. <i>Scientific Reports</i> , 2018, 8, 16411.	1.6	14
39	Assessment of O and Fe isotope heterogeneity in garnet from Kakanui (New Zealand) and Erongo (Namibia). <i>European Journal of Mineralogy</i> , 2018, 30, 695-710.	0.4	2
40	Geological archive of the onset of plate tectonics. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2018, 376, 20170405.	1.6	227
41	When crust comes of age: on the chemical evolution of Archaean, felsic continental crust by crustal drip tectonics. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2018, 376, 20180103.	1.6	74
42	Iron isotope variability in ocean floor lavas and mantle sources in the Lau back-arc basin. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 241, 150-163.	1.6	23
43	Oxidising agents in sub-arc mantle melts link slab devolatilisation and arc magmas. <i>Nature Communications</i> , 2018, 9, 3500.	5.8	91
44	Controls on the iron isotopic composition of global arc magmas. <i>Earth and Planetary Science Letters</i> , 2018, 494, 190-201.	1.8	53
45	Sulfur isotope and PGE systematics of metasomatised mantle wedge. <i>Earth and Planetary Science Letters</i> , 2018, 497, 181-192.	1.8	30
46	On the Sr-Nd-Pb-Hf isotope code of enriched, Dupal-type sub-continental lithospheric mantle underneath south-western China. <i>Chemical Geology</i> , 2018, 489, 46-60.	1.4	9
47	Strontium. <i>Encyclopedia of Earth Sciences Series</i> , 2018, , 1377-1379.	0.1	0
48	Rubidium. <i>Encyclopedia of Earth Sciences Series</i> , 2018, , 1316-1318.	0.1	0
49	Strontium Isotopes. <i>Encyclopedia of Earth Sciences Series</i> , 2018, , 1379-1384.	0.1	2
50	Chlorine and fluorine partition coefficients and abundances in sub-arc mantle xenoliths (Kamchatka). <i>Geochimica Et Cosmochimica Acta</i> , 2017, 199, 324-350.	1.6	33
51	Silica-enriched mantle sources of subalkaline picrite-boninite-andesite island arc magmas. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 199, 287-303.	1.6	42
52	Evidence of sub-arc mantle oxidation by sulphur and carbon. <i>Geochemical Perspectives Letters</i> , 2017, , 124-132.	1.0	44
53	Primary Silica-rich Picrite and High-Ca Boninite Melt Inclusions in Pyroxenite Veins from the Kamchatka Sub-arc Mantle. <i>Journal of Petrology</i> , 2016, 57, 1955-1982.	1.1	23
54	On the iron isotope composition of Mars and volatile depletion in the terrestrial planets. <i>Earth and Planetary Science Letters</i> , 2016, 449, 360-371.	1.8	39

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55	Iron isotope systematics in planetary reservoirs. <i>Earth and Planetary Science Letters</i> , 2016, 452, 295-308.	1.8	99
56	The timescales of magma evolution at mid-ocean ridges. <i>Lithos</i> , 2016, 240-243, 49-68.	0.6	15
57	Petrogenesis and Geochemistry of Archean Komatiites. <i>Journal of Petrology</i> , 2016, 57, 147-184.	1.1	96
58	The Flaw in the Crustal "Zircon Archive": Mixed Hf Isotope Signatures Record Progressive Contamination of Late-stage Liquid in Mafic "Ultramafic Layered Intrusions. <i>Journal of Petrology</i> , 2016, 57, 27-52.	1.1	60
59	Strontium Isotopes. <i>Encyclopedia of Earth Sciences Series</i> , 2016, , 1-6.	0.1	1
60	Strontium. <i>Encyclopedia of Earth Sciences Series</i> , 2016, , 1-3.	0.1	0
61	Rubidium. <i>Encyclopedia of Earth Sciences Series</i> , 2016, , 1-2.	0.1	0
62	Redox-variability and controls in subduction zones from an iron-isotope perspective. <i>Earth and Planetary Science Letters</i> , 2015, 432, 142-151.	1.8	74
63	Heterogeneously hydrated mantle beneath the late Archean Yilgarn Craton. <i>Lithos</i> , 2015, 238, 76-85.	0.6	18
64	Selective ingress of a Samoan plume component into the northern Lau backarc basin. <i>Nature Communications</i> , 2015, 6, 6554.	5.8	17
65	Assessment of hafnium and iron isotope compositions of Chinese national igneous rock standard materials GSR-1 (granite), GSR-2 (andesite), and GSR-3 (basalt). <i>International Journal of Mass Spectrometry</i> , 2015, 386, 61-66.	0.7	11
66	Combined Separation of Cu, Fe and Zn from Rock Matrices and Improved Analytical Protocols for Stable Isotope Determination. <i>Geostandards and Geoanalytical Research</i> , 2015, 39, 129-149.	1.7	183
67	Rb "Sr Dating. <i>Encyclopedia of Earth Sciences Series</i> , 2015, , 686-698.	0.1	3
68	Eoarchean within-plate basalts from southwest Greenland: REPLY. <i>Geology</i> , 2014, 42, e331-e331.	2.0	1
69	Refined separation of combined Fe "Hf from rock matrices for isotope analyses using AG-MP-1M and Ln-Spec chromatographic extraction resins. <i>MethodsX</i> , 2014, 1, 144-150.	0.7	18
70	The role of detrital zircons in Hadean crustal research. <i>Lithos</i> , 2014, 190-191, 313-327.	0.6	51
71	Rb "Sr Dating. , 2014, , 1-19.		8
72	Hafnium and iron isotopes in early Archean komatiites record a plume-driven convection cycle in the Hadean Earth. <i>Earth and Planetary Science Letters</i> , 2014, 397, 111-120.	1.8	94

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73	The $^{207}\text{Pb}$ – $^{235}\text{U}$ paths of high-grade gneisses, Kaoko Belt, Namibia: Constraints from mineral data, $^{207}\text{Pb}$ – $^{235}\text{U}$ allanite and monazite and $^{147}\text{Sm}$ – $^{143}\text{Nd}$ / $^{176}\text{Lu}$ – $^{176}\text{Hf}$ garnet ages and garnet ion probe data. <i>Gondwana Research</i> , 2014, 25, 775-796.	3.0	14
74	Maturing Arc Signatures Monitored by Trace Element and Hf Isotope Systematics in the Early Cretaceous Zacatecas Volcanic Field, Mexico. <i>Journal of Geology</i> , 2014, 122, 549-566.	0.7	7
75	Coupled $^{176}\text{Lu}$ – $^{176}\text{Hf}$ – $^{238}\text{U}$ – $^{235}\text{U}$ – $^{207}\text{Pb}$ isotope co-variations of HIMU oceanic island basalts from Mangaia, Cook-Austral islands, suggest an Archean source component in the mantle transition zone. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 112, 87-101.	1.6	40
76	Upper Zone of the Archean Windimurra layered mafic intrusion, Western Australia: insights into fractional crystallisation in a large magma chamber. <i>Neues Jahrbuch Fur Mineralogie, Abhandlungen</i> , 2013, 191, 83-107.	0.1	9
77	Eoarchean within-plate basalts from southwest Greenland. <i>Geology</i> , 2013, 41, 327-330.	2.0	27
78	Seychelles alkaline suite records the culmination of Deccan Traps continental flood volcanism. <i>Lithos</i> , 2013, 182-183, 33-47.	0.6	31
79	$^{176}\text{Lu}$ – $^{176}\text{Hf}$ isotopic memory of plume–lithosphere interaction in the source of layered mafic intrusions, Windimurra Igneous Complex, Yilgarn Craton, Australia. <i>Earth and Planetary Science Letters</i> , 2013, 380, 151-161.	1.8	28
80	$^{87}\text{Rb}$ – $^{87}\text{Sr}$ isotope evidence for a reducing Archean atmosphere in 3.46–2.76 Ga black shales from the Pilbara, Western Australia. <i>Chemical Geology</i> , 2013, 340, 68-76.	1.4	73
81	Iron isotopic evidence for convective resurfacing of recycled arc-front mantle beneath back-arc basins. <i>Geophysical Research Letters</i> , 2013, 40, 5849-5853.	1.5	44
82	Hotspot trails in the South Atlantic controlled by plume and plate tectonic processes. <i>Nature Geoscience</i> , 2012, 5, 735-738.	5.4	78
83	Chalcophile element systematics in volcanic glasses from the northwestern Lau Basin. <i>Geochemistry, Geophysics, Geosystems</i> , 2012, 13, .	1.0	81
84	Origin of Meso-Proterozoic post-collisional leucogranite suites (Kaokoveld, Namibia): constraints from geochronology and Nd, Sr, Hf, and Pb isotopes. <i>Contributions To Mineralogy and Petrology</i> , 2012, 163, 1-17.	1.2	25
85	Coherence of the Dabie Shan UHPM Terrane Investigated by $^{176}\text{Lu}$ – $^{176}\text{Hf}$ and $^{40}\text{Ar}/^{39}\text{Ar}$ Dating of Eclogites. , 2011, , 325-357.		4
86	Evaluation of the $^{87}\text{Rb}$ decay constant by age comparison against the $^{207}\text{Pb}$ – $^{235}\text{U}$ system. <i>Earth and Planetary Science Letters</i> , 2011, 301, 1-8.	1.8	177
87	The effect of sediment recycling in subduction zones on the Hf isotope character of new arc crust, Banda arc, Indonesia. <i>Earth and Planetary Science Letters</i> , 2011, 303, 240-250.	1.8	87
88	Rubidium isotopes in primitive chondrites: Constraints on Earth's volatile element depletion and lead isotope evolution. <i>Earth and Planetary Science Letters</i> , 2011, 305, 309-316.	1.8	46
89	Tracing the provenance and recrystallization processes of the Earth's oldest detritus at Mt. Narryer and Jack Hills, Western Australia: An in situ $^{147}\text{Sm}$ – $^{143}\text{Nd}$ isotopic study of monazite. <i>Earth and Planetary Science Letters</i> , 2011, 308, 350-358.	1.8	23
90	Precambrian sources of Early Paleozoic SE Gondwana sediments as deduced from combined $^{176}\text{Lu}$ – $^{176}\text{Hf}$ and $^{207}\text{Pb}$ – $^{235}\text{U}$ systematics of detrital zircons, Takaka and Buller terrane, South Island, New Zealand. <i>Gondwana Research</i> , 2011, 20, 427-442.	3.0	21

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91	Tungsten isotopes as tracers of core-mantle interactions: The influence of subducted sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 751-762.	1.6	18
92	High-precision high field strength element partitioning between garnet, amphibole and alkaline melt from Kakanui, New Zealand. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 2741-2759.	1.6	38
93	Deep mantle storage of the Earth's missing niobium in late-stage residual melts from a magma ocean. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 4392-4404.	1.6	35
94	Reworking of Earth's first crust: Constraints from Hf isotopes in Archean zircons from Mt. Narryer, Australia. <i>Precambrian Research</i> , 2010, 182, 175-186.	1.2	73
95	Fluid-present melting of meta-igneous rocks and the generation of leucogranites - Constraints from garnet major- and trace element data, Lu-Hf whole rock-garnet ages and whole rock Nd-Sr-Hf-O isotope data. <i>Lithos</i> , 2009, 111, 220-235.	0.6	37
96	Formation and temporal evolution of the Kalahari sub-cratonic lithospheric mantle: Constraints from Venetia xenoliths, South Africa. <i>Lithos</i> , 2009, 112, 1069-1082.	0.6	15
97	Isotope Dilution Determinations of Lu, Hf, Zr, Ta and W, and Hf Isotope Compositions of NIST SRM 610 and 612 Glass Wafers. <i>Geostandards and Geoanalytical Research</i> , 2009, 33, 487-499.	1.7	51
98	An alternative model for silica enrichment in the Kaapvaal subcontinental lithospheric mantle. <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 6894-6917.	1.6	21
99	Timing of thermal stabilization of the Zimbabwe Craton deduced from high-precision Rb-Sr chronology, Great Dyke. <i>Precambrian Research</i> , 2008, 164, 227-232.	1.2	20
100	Hafnium isotope characterization of the GJ-1 zircon reference material by solution and laser-ablation MC-ICPMS. <i>Chemical Geology</i> , 2008, 255, 231-235.	1.4	675
101	Hf-Nd-Pb isotope evidence from Permian arc rocks for the long-term presence of the Indian-Pacific mantle boundary in the SW Pacific. <i>Earth and Planetary Science Letters</i> , 2007, 254, 377-392.	1.8	70
102	Initial Hf isotope compositions in magmatic zircon from early Proterozoic rocks from the Gawler Craton, Australia: A test for zircon model ages. <i>Chemical Geology</i> , 2007, 241, 23-37.	1.4	106
103	Reassessment of the NBS SRM-607 K-feldspar as a high precision Rb/Sr and Sr isotope reference. <i>Chemical Geology</i> , 2006, 233, 337-345.	1.4	24
104	High precision determinations of $^{87}\text{Rb}/^{85}\text{Rb}$ in geologic materials by MC-ICP-MS. <i>International Journal of Mass Spectrometry</i> , 2005, 246, 10-18.	0.7	64
105	Spinel Harzburgite-Derived Silicate Melts Forming Sulfide-Bearing Orthopyroxenite in the Lithosphere. Part 1: Partition Coefficients and Volatile Evolution Accompanying Fluid- and Redox-Induced Sulfide Formation. <i>Frontiers in Earth Science</i> , 0, 10, .	0.8	3