Hubert Staudigel

List of Publications by Year
in descending order

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91 papers	9,290 citations	34100 52 h-index	49904 87 g-index
92 all docs	92 docs citations	92 times ranked	6037 citing authors

#	Article	IF	Citations
1	Isotope and trace element geochemistry of young Pacific seamounts: implications for the scale of upper mantle heterogeneity. Earth and Planetary Science Letters, 1984, 70, 175-195.	4.4	446
2	Alteration of basaltic glass: Mechanisms and significance for the oceanic crust-seawater budget. Geochimica Et Cosmochimica Acta, 1983, 47, 337-350.	3.9	429
3	Composition of altered oceanic crust at ODP Sites 801 and 1149. Geochemistry, Geophysics, Geosystems, 2003, 4, n/a-n/a.	2.5	422
4	Early Life Recorded in Archean Pillow Lavas. Science, 2004, 304, 578-581.	12.6	342
5	Abundance and diversity of microbial life in ocean crust. Nature, 2008, 453, 653-656.	27.8	339
6	Large scale isotopic Sr, Nd and O isotopic anatomy of altered oceanic crust: DSDP/ODP sites417/418. Earth and Planetary Science Letters, 1995, 130, 169-185.	4.4	324
7	The return of subducted continental crust in Samoan lavas. Nature, 2007, 448, 684-687.	27.8	280
8	Strength of the geomagnetic field in the Cretaceous Normal Superchron: New data from submarine basaltic glass of the Troodos Ophiolite. Geochemistry, Geophysics, Geosystems, 2004, 5, n/a-n/a.	2.5	271
9	The Pliocene seamount series of La Palma/Canary Islands. Journal of Geophysical Research, 1984, 89, 11195-11215.	3.3	261
10	A Vestige of Earth's Oldest Ophiolite. Science, 2007, 315, 1704-1707.	12.6	246
11	The control of alkalies and uranium in seawater by ocean crust alteration. Earth and Planetary Science Letters, 1982, 58, 202-212.	4.4	222
12	Testing the fixed hotspot hypothesis using 40Ar/39Ar age progressions along seamount trails. Earth and Planetary Science Letters, 2001, 185, 237-252.	4.4	218
13	Cretaceous ocean crust at DSDP Sites 417 and 418: Carbon uptake from weathering versus loss by magmatic outgassing. Geochimica Et Cosmochimica Acta, 1989, 53, 3091-3094.	3.9	199
14	Diverse Mn(II)-Oxidizing Bacteria Isolated from Submarine Basalts at Loihi Seamount. Geomicrobiology Journal, 2005, 22, 127-139.	2.0	195
15	Short-lived and discontinuous intraplate volcanism in the South Pacific: Hot spots or extensional volcanism?. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	194
16	Alteration of the oceanic crust: Processes and timing. Earth and Planetary Science Letters, 1981, 52, 311-327.	4.4	183
17	The boron isotopic composition of altered oceanic crust. Chemical Geology, 1995, 126, 119-135.	3.3	183
18	The longevity of the South Pacific isotopic and thermal anomaly. Earth and Planetary Science Letters, 1991, 102, 24-44.	4.4	173

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19	3.5Âbillion years of glass bioalteration: Volcanic rocks as a basis for microbial life?. Earth-Science Reviews, 2008, 89, 156-176.	9.1	171
20	Sr and Nd isotope systematics in fish teeth. Earth and Planetary Science Letters, 1985, 76, 45-56.	4.4	166
21	Subduction cycling of U, Th, and Pb. Earth and Planetary Science Letters, 2005, 234, 369-383.	4.4	161
22	Biological mediation in ocean crust alteration: how deep is the deep biosphere?. Earth and Planetary Science Letters, 1999, 166, 97-103.	4.4	155
23	Geochemical Fluxes During Seafloor Alteration of the Basaltic Upper Oceanic Crust: DSDP Sites 417 and 418. Geophysical Monograph Series, 0, , 19-38.	0.1	155
24	He, Pb, Sr and Nd isotope constraints on magma genesis and mantle heterogeneity beneath young Pacific seamounts. Contributions To Mineralogy and Petrology, 1988, 99, 446-463.	3.1	134
25	Dating crystalline groundmass separates of altered Cretaceous seamount basalts by the 40Ar/39Ar incremental heating technique. Chemical Geology, 2000, 166, 139-158.	3.3	128
26	Os isotope systematics of La Palma, Canary Islands: Evidence for recycled crust in the mantle source of HIMU ocean islands. Earth and Planetary Science Letters, 1995, 133, 397-410.	4.4	121
27	Microbial communities in dark oligotrophic volcanic ice cave ecosystems of Mt. Erebus, Antarctica. Frontiers in Microbiology, 2015, 6, 179.	3.5	120
28	Preservation of â^¼3.4â€“3.5 Ga microbial biomarkers in pillow lavas and hyaloclastites from the Barberton Greenstone Belt, South Africa. Earth and Planetary Science Letters, 2006, 241, 707-722.	4.4	118
29	The Geological History of Deep-Sea Volcanoes: Biosphere, Hydrosphere, and Lithosphere Interactions. Oceanography, 2010, 23, 58-71.	1.0	114
30	Bioalteration of basaltic glass in the oceanic crust. Geochemistry, Geophysics, Geosystems, 2001, 2, n/a-n/a.	2.5	112
31	High-resolution40Ar/39Ar dating of the oldest oceanic basement basalts in the western Pacific basin. Geochemistry, Geophysics, Geosystems, 2003, 4, n/a-n/a.	2.5	112
32	The Magellan seamounts: Early Cretaceous record of the South Pacific isotopic and thermal anomaly. Journal of Geophysical Research, 1989, 94, 10501-10523.	3.3	105
33	Comparing petrographic signatures of bioalteration in recent to Mesoarchean pillow lavas: Tracing subsurface life in oceanic igneous rocks. Precambrian Research, 2007, 158, 156-176.	2.7	103
34	40Ar/39Ar ages and paleomagnetism of SÃ£o Miguel lavas, Azores. Earth and Planetary Science Letters, 1998, 160, 637-649.	4.4	100
35	The Magellan seamount trail: implications for Cretaceous hotspot volcanism and absolute Pacific plate motion. Earth and Planetary Science Letters, 1998, 163, 53-68.	4.4	93
36	Dike surface lineations as magma flow indicators within the sheeted dike complex of the Troodos Ophiolite, Cyprus. Journal of Geophysical Research, 1998, 103, 5241-5256.	3.3	89

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37	Direct dating of Archean microbial ichnofossils. Geology, 2007, 35, 487.	4.4	87
38	Agents of low temperature ocean crust alteration. Contributions To Mineralogy and Petrology, 1981, 77, 150-157.	3.1	85
39	Samoa reinstated as a primary hotspot trail. Geology, 2008, 36, 435.	4.4	85
40	Shallow intrusive directions of sheeted dikes in the Troodos ophiolite: Anisotropy of magnetic susceptibility and structural data. Geology, 1992, 20, 841.	4.4	84
41	Fungal Diversity Associated with an Active Deep Sea Volcano: Vailulu'u Seamount, Samoa. Geomicrobiology Journal, 2009, 26, 597-605.	2.0	82
42	Vailulu'u Seamount, Samoa: Life and death on an active submarine volcano. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 6448-6453.	7.1	81
43	Defining the Word "Seamount". Oceanography, 2010, 23, 20-21.	1.0	80
44	Samoan hot spot track on a â€œhot spot highwayâ€• Implications for mantle plumes and a deep Samoan mantle source. Geochemistry, Geophysics, Geosystems, 2010, 11, .	2.5	77
45	Magnesium isotopic composition of altered oceanic crust and the global Mg cycle. Geochimica Et Cosmochimica Acta, 2018, 238, 357-373.	3.9	74
46	Asynchronous Bends in Pacific Seamount Trails: A Case for Extensional Volcanism?. Science, 2005, 307, 904-907.	12.6	72
47	Microbial Ecology of Fe (hydr)oxide Mats and Basaltic Rock from Vailulu'u Seamount, American Samoa. Geomicrobiology Journal, 2009, 26, 581-596.	2.0	70
48	K/Ar and Rb/Sr ages of celadonites from the Troodos ophiolite, Cyprus. Geology, 1986, 14, 72.	4.4	69
49	The upper thermal stability of clinochlore, Mg5Al[AlSi3O10](OH)8, at 10?35 kb $$P_{{ext{H}}_{ext{2}} {ext{O}}} $$. Contributions To Mineralogy and Petrology, 1977, 61, 187-198.	3.1	68
50	Ultrafast subduction: the key to slab recycling efficiency and mantle differentiation?. Earth and Planetary Science Letters, 1992, 109, 517-530.	4.4	62
51	Low-temperature alteration of the upper oceanic crust and the alkalinity budget of seawater. Chemical Geology, 1994, 115, 239-247.	3.3	58
52	Microbes and volcanoes: A tale from the oceans, ophiolites, and greenstone belts. GSA Today, 2006, 16, 4.	2.0	58
53	Age systematics of two young en echelon Samoan volcanic trails. Geochemistry, Geophysics, Geosystems, 2011, 12, n/a-n/a.	2.5	56
54	One hundred million years of mantle geochemical history suggest the retiring of mantle plumes is premature. Earth and Planetary Science Letters, 2008, 275, 285-295.	4.4	55

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55	Vein mineral ages of old oceanic crust. Journal of Geophysical Research, 1980, 85, 7195-7200.	3.3	54
56	Paleomagnetism of the southwestern U.S.A. recorded by 0-5 Ma igneous rocks. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	51
57	Fungal Diversity in a Dark Oligotrophic Volcanic Ecosystem (DOVE) on Mount Erebus, Antarctica. Biology, 2013, 2, 798-809.	2.8	47
58	Submarine Basaltic Glass Colonization by the Heterotrophic Fe(II)-Oxidizing and Siderophore-Producing Deep-Sea Bacterium Pseudomonas stutzeri VS-10: The Potential Role of Basalt in Enhancing Growth. Frontiers in Microbiology, 2017, 8, 363.	3.5	41
59	Oceanic Pillow Lavas and Hyaloclastites as Habitats for Microbial Life Through Time â€“ A Review. Modern Approaches in Solid Earth Sciences, 2008, , 1-68.	0.3	34
60	Jasper Seamount: Seven million years of volcanism. Geology, 1991, 19, 364.	4.4	33
61	An interlaboratory comparison of 16S rRNA geneâ€based terminal restriction fragment length polymorphism and sequencing methods for assessing microbial diversity of seafloor basalts. Environmental Microbiology, 2009, 11, 1728-1735.	3.8	32
62	Magnetization of the La Palma Seamount Series: Implications for seamount paleopoles. Journal of Geophysical Research, 1993, 98, 11743-11767.	3.3	31
63	Utilization of Substrate Components during Basaltic Glass Colonization byPseudomonasandShewanellaIsolates. Geomicrobiology Journal, 2009, 26, 648-656.	2.0	30
64	Ion-exchange experiments and RbSr dating on celadonites from the Troodos ophiolite, Cyprus. Chemical Geology, 1995, 126, 155-167.	3.3	29
65	Paleomagnetism and40Ar/39Ar ages from La Palma in the Canary Islands. Geochemistry, Geophysics, Geosystems, 2000, 1, n/a-n/a.	2.5	27
66	Nonlinear40Ar/39Ar age systematics along the Gilbert Ridge and Tokelau Seamount Trail and the timing of the Hawaii-Emperor Bend. Geochemistry, Geophysics, Geosystems, 2007, 8, n/a-n/a.	2.5	27
67	Geochemical characterization of tubular alteration features in subseafloor basalt glass. Earth and Planetary Science Letters, 2013, 374, 239-250.	4.4	27
68	Short and long baseline tiltmeter measurements on axial seamount, Juan de Fuca Ridge. Physics of the Earth and Planetary Interiors, 1998, 108, 129-141.	1.9	25
69	Reâ€“Os results from ODP Site 801: Evidence for extensive Re uptake during alteration of oceanic crust. Chemical Geology, 2008, 248, 256-271.	3.3	25
70	Geology and petrology of Jasper Seamount. Journal of Geophysical Research, 1991, 96, 4083-4105.	3.3	24
71	A seafloor long-baseline tiltmeter. Journal of Geophysical Research, 1997, 102, 20269-20285.	3.3	23
72	Geochemical Earth Reference Model (GERM): description of the initiative. Chemical Geology, 1998, 145, 153-159.	3.3	23

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73	Paleoarchean trace fossils in altered volcanic glass. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6892-6897.	7.1	21
74	Characterization of alteration textures in Cretaceous oceanic crust (pillow lava) from the N-Atlantic (DSDP Hole 418A) by spatially-resolved spectroscopy. Geochimica Et Cosmochimica Acta, 2012, 96, 80-93.	3.9	20
75	Geochemistry and intrusive directions in sheeted dikes in the Troodos ophiolite: Implications for mid-ocean ridge spreading centers. Geochemistry, Geophysics, Geosystems, 2000, 1, n/a-n/a.	2.5	17
76	The oceanic crust as a bioreactor. Geophysical Monograph Series, 2004, , 325-341.	0.1	17
77	Geographic and Oceanographic Influences on Ferromanganese Crust Composition Along a Pacific Ocean Meridional Transect, 14 N to 14S. Geochemistry, Geophysics, Geosystems, 2020, 21, e2019GC008716.	2.5	17
78	A deep tow magnetic survey of Middle Valley, Juan de Fuca Ridge. Geochemistry, Geophysics, Geosystems, 2001, 2, n/a-n/a.	2.5	16
79	Scalable models of data sharing in Earth sciences. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	16
80	Fe MÃ¶ssbauer spectroscopy as a tool in astrobiology. Planetary and Space Science, 2006, 54, 1622-1634.	1.7	15
81	Seamounts and Island Building. , 2015, , 405-421.		13
82	Biodiversity and Abundance of Cultured Microfungi from the Permanently Ice-Covered Lake Fryxell, Antarctica. Life, 2018, 8, 37.	2.4	13
83	Electronic data publication in geochemistry. Geochemistry, Geophysics, Geosystems, 2003, 4, .	2.5	11
84	Micro-bioerosion in volcanic glass: extending the ichnofossil record to Archaean basaltic crust. , 2008, , 371-396.		10
85	Petrology and Geochemistry of Submarine Lavas from the Lau and North Fiji Back-Arc Basins. Earth Science Series, 1994, , 119-135.	0.3	7
86	Petrology and isotope geochemistry of lavas from the Line Islands Chain, central Pacific basin. Geophysical Monograph Series, 1993, , 217-231.	0.1	5
87	Pillow lavas as a habitat for microbial life. Geology Today, 2007, 23, 143-146.	0.9	3
88	Electronic data publication in geochemistry: A plea for â€œfull disclosureâ€• Geochemistry, Geophysics, Geosystems, 2001, 2, n/a-n/a.	2.5	2
89	MÃ¶ssbauer spectroscopy as a tool in astrobiology. Hyperfine Interactions, 2006, 166, 567-571.	0.5	2
90	7.8 Traces of Life. Frontiers in Earth Sciences, 2013, , 1297-1405.	0.1	0

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91	Reply to Grosch and McLoughlin: Glass bioalteration trace fossils can be preserved by titanite in Paleoarchean greenstones. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E3092-E3092.	7.1	0