

Alexandra Turchyn

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/6844506/publications.pdf>

Version: 2024-02-01

94
papers

4,230
citations

94433

37
h-index

123424

61
g-index

105
all docs

105
docs citations

105
times ranked

4992
citing authors

#	ARTICLE	IF	CITATIONS
1	Intensified microbial sulfate reduction in the deep Dead Sea during the early Holocene Mediterranean sapropel 1 deposition. <i>Geobiology</i> , 2022, 20, 518-532.	2.4	2
2	Modelling the Effects of Non-Steady State Transport Dynamics on the Sulfur and Oxygen Isotope Composition of Sulfate in Sedimentary Pore Fluids. <i>Frontiers in Earth Science</i> , 2021, 8, .	1.8	7
3	Semiquantitative Estimates of Rainfall Variability During the 8.2 kyr Event in California Using Speleothem Calcium Isotope Ratios. <i>Geophysical Research Letters</i> , 2021, 48, e2020GL089154.	4.0	10
4	Controls on the Precipitation of Carbonate Minerals Within Marine Sediments. <i>Frontiers in Earth Science</i> , 2021, 9, .	1.8	21
5	The Carbon-Sulfur Link in the Remineralization of Organic Carbon in Surface Sediments. <i>Frontiers in Earth Science</i> , 2021, 9, .	1.8	6
6	A quantification of the effect of diagenesis on the paleoredox record in mid-Proterozoic sedimentary rocks. <i>Geology</i> , 2021, 49, 1143-1147.	4.4	7
7	On calcium-to-alkalinity anomalies in the North Pacific, Red Sea, Indian Ocean and Southern Ocean. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 303, 1-14.	3.9	2
8	Testing for ocean acidification during the Early Toarcian using $\delta^{44}\text{Ca}$ and $\delta^{88}\text{Sr}$. <i>Chemical Geology</i> , 2021, 574, 120228.	3.3	7
9	Partitioning riverine sulfate sources using oxygen and sulfur isotopes: Implications for carbon budgets of large rivers. <i>Earth and Planetary Science Letters</i> , 2021, 567, 116957.	4.4	27
10	Assessing Sedimentary Boundary Layer Calcium Carbonate Precipitation and Dissolution Using the Calcium Isotopic Composition of Pore Fluids. <i>Frontiers in Earth Science</i> , 2021, 9, .	1.8	4
11	Early diagenesis of sulfur in Bornholm Basin sediments: The role of upward diffusion of isotopically "heavy" sulfide. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 313, 359-377.	3.9	7
12	The microbially driven formation of siderite in salt marsh sediments. <i>Geobiology</i> , 2020, 18, 207-224.	2.4	23
13	The calcium isotopic composition of carbonate hardground cements: A new record of changes in ocean chemistry?. <i>Chemical Geology</i> , 2020, 540, 119490.	3.3	7
14	Dissolved Strontium, Sr/Ca Ratios, and the Abundance of Acantharia in the Indian and Southern Oceans. <i>ACS Earth and Space Chemistry</i> , 2020, 4, 802-811.	2.7	8
15	Large mass-independent sulphur isotope anomalies link stratospheric volcanism to the Late Ordovician mass extinction. <i>Nature Communications</i> , 2020, 11, 2297.	12.8	42
16	Early diagenesis of iron and sulfur in Bornholm Basin sediments: The role of near-surface pyrite formation. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 284, 43-60.	3.9	33
17	Molybdenum geochemistry in salt marsh pond sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 284, 75-91.	3.9	14
18	Triple oxygen isotope insight into terrestrial pyrite oxidation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 7650-7657.	7.1	39

#	ARTICLE	IF	CITATIONS
19	Chemical Composition of Carbonate Hardground Cements as Reconstructive Tools for Phanerozoic Pore Fluids. <i>Geochemistry, Geophysics, Geosystems</i> , 2020, 21, e2019GC008448.	2.5	5
20	High-temperature kinetic isotope fractionation of calcium in epidiosites from modern and ancient seafloor hydrothermal systems. <i>Earth and Planetary Science Letters</i> , 2020, 535, 116101.	4.4	11
21	Glacial influence on the iron and sulfur cycles in Arctic fjord sediments (Svalbard). <i>Geochimica Et Cosmochimica Acta</i> , 2020, 280, 423-440.	3.9	20
22	Strontium stratigraphy of the Oligocene–Early Miocene shellbeds of the Kutch Basin, western India, and its implications. <i>Lethaia</i> , 2020, 53, 382-395.	1.4	3
23	The effect of temperature on sulfur and oxygen isotope fractionation by sulfate reducing bacteria (<i>Desulfococcus multivorans</i>). <i>FEMS Microbiology Letters</i> , 2020, 367, .	1.8	9
24	Calcium isotope fractionation during microbially induced carbonate mineral precipitation. <i>Geochimica Et Cosmochimica Acta</i> , 2020, 277, 37-51.	3.9	9
25	Stable Isotope Analysis of Intact Oxyanions Using Electrospray Quadrupole-Orbitrap Mass Spectrometry. <i>Analytical Chemistry</i> , 2020, 92, 3077-3085.	6.5	30
26	Sub-permafrost methane seepage from open-system pingos in Svalbard. <i>Cryosphere</i> , 2020, 14, 3829-3842.	3.9	18
27	Creek Dynamics Determine Pond Subsurface Geochemical Heterogeneity in East Anglian (UK) Salt Marshes. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	14
28	Large sulfur isotope fractionation by bacterial sulfide oxidation. <i>Science Advances</i> , 2019, 5, eaaw1480.	10.3	57
29	The Sedimentary Carbon-Sulfur-Iron Interplay – A Lesson From East Anglian Salt Marsh Sediments. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	31
30	The Production and Fate of Volatile Organosulfur Compounds in Sulfidic and Ferruginous Sediment. <i>Journal of Geophysical Research G: Biogeosciences</i> , 2019, 124, 3390-3402.	3.0	14
31	Calcium isotopes as a record of the marine calcium cycle versus carbonate diagenesis during the late Ediacaran. <i>Chemical Geology</i> , 2019, 529, 119319.	3.3	8
32	Local and Regional Indian Summer Monsoon Precipitation Dynamics During Termination II and the Last Interglacial. <i>Geophysical Research Letters</i> , 2019, 46, 12454-12463.	4.0	15
33	Seawater Chemistry Through Phanerozoic Time. <i>Annual Review of Earth and Planetary Sciences</i> , 2019, 47, 197-224.	11.0	38
34	Physical weathering of carbonate host-rock by precipitation of soluble salts in caves: A case study in El OrÃn-Arco Cave (Region of Murcia, SE Spain). <i>Chemical Geology</i> , 2019, 521, 1-11.	3.3	4
35	Reevaluating the carbon sink due to sedimentary carbonate formation in modern marine sediments. <i>Earth and Planetary Science Letters</i> , 2019, 519, 40-49.	4.4	35
36	Seasonal Dynamics of Methane and Carbon Dioxide Evasion From an Open System Pingo: Lagoon Pingo, Svalbard. <i>Frontiers in Earth Science</i> , 2019, 7, .	1.8	19

#	ARTICLE	IF	CITATIONS
37	Experimental calibration of clumped isotopes in siderite between 8.5 and 62°C and its application as paleo-thermometer in paleosols. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 254, 1-20.	3.9	19
38	Disentangling Diagenesis From the Rock Record: An Example From the Permian-Triassic Wordie Creek Formation, East Greenland. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 99-113.	2.5	6
39	Two-billion-year-old evaporites capture Earth's great oxidation. <i>Science</i> , 2018, 360, 320-323.	12.6	112
40	Lithium isotopic composition of benthic foraminifera: A new proxy for paleo-pH reconstruction. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 236, 336-350.	3.9	45
41	Spatial and Temporal Dynamics of Dissolved Organic Carbon, Chlorophyll, Nutrients, and Trace Metals in Maritime Antarctic Snow and Snowmelt. <i>Frontiers in Earth Science</i> , 2018, 6, .	1.8	15
42	Extraterrestrial dust, the marine lithologic record, and global biogeochemical cycles. <i>Geology</i> , 2018, 46, 863-866.	4.4	14
43	Comparing Rhizon samplers and centrifugation for pore-water separation in studies of the marine carbonate system in sediments. <i>Limnology and Oceanography: Methods</i> , 2018, 16, 828-839.	2.0	16
44	The Calcium Isotope Systematics of the Late Quaternary Dead Sea Basin Lakes. <i>Geochemistry, Geophysics, Geosystems</i> , 2018, 19, 4260-4273.	2.5	1
45	Water chemistry reveals a significant decline in coral calcification rates in the southern Red Sea. <i>Nature Communications</i> , 2018, 9, 3615.	12.8	26
46	Calcium isotope fractionation in sedimentary pore fluids from ODP Leg 175: Resolving carbonate recrystallization. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 236, 121-139.	3.9	28
47	The role of microbial sulfate reduction in calcium carbonate polymorph selection. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 237, 184-204.	3.9	46
48	The sulfur cycle below the sulfate-methane transition of marine sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 239, 74-89.	3.9	44
49	Cenozoic record of $\delta^{34}\text{S}$ in foraminiferal calcite implies an early Eocene shift to deep-ocean sulfide burial. <i>Nature Geoscience</i> , 2018, 11, 761-765.	12.9	50
50	Constraints on the late Ediacaran sulfur cycle from carbonate associated sulfate. <i>Precambrian Research</i> , 2017, 290, 113-125.	2.7	38
51	Combined ^{34}S , ^{33}S and ^{18}O isotope fractionations record different intracellular steps of microbial sulfate reduction. <i>Geochimica Et Cosmochimica Acta</i> , 2017, 203, 364-380.	3.9	57
52	Remobilization of crustal carbon may dominate volcanic arc emissions. <i>Science</i> , 2017, 357, 290-294.	12.6	152
53	Rates and Cycles of Microbial Sulfate Reduction in the Hyper-Saline Dead Sea over the Last 200 kyrs from Sedimentary $\delta^{34}\text{S}$ and $\delta^{18}\text{O}(\text{SO}_4)$. <i>Frontiers in Earth Science</i> , 2017, 5, .	1.8	6
54	Impact of Aeolian Dry Deposition of Reactive Iron Minerals on Sulfur Cycling in Sediments of the Gulf of Aqaba. <i>Frontiers in Microbiology</i> , 2017, 8, 1131.	3.5	28

#	ARTICLE	IF	CITATIONS
55	Tetrathionate and Elemental Sulfur Shape the Isotope Composition of Sulfate in Acid Mine Drainage. <i>Frontiers in Microbiology</i> , 2017, 8, 1564.	3.5	14
56	Reconstructing Earth's Climate History. Inquiry-Based Exercises for Lab and Class. Kristen St John , R. Mark Leckie , Kate Pound , Megan Jones , Lawrence Krissek . Review by Dr Alexandra V. Turchyn. <i>Geological Magazine</i> , 2016, 153, .	1.5	0
57	Microbial sulfur metabolism evidenced from pore fluid isotope geochemistry at Site U1385. <i>Global and Planetary Change</i> , 2016, 141, 82-90.	3.5	28
58	Isotopic analysis of sulfur cycling and gypsum vein formation in a natural CO ₂ reservoir. <i>Chemical Geology</i> , 2016, 436, 72-83.	3.3	15
59	Geochemical evidence for cryptic sulfur cycling in salt marsh sediments. <i>Earth and Planetary Science Letters</i> , 2016, 453, 23-32.	4.4	42
60	Sulfur isotope patterns of iron sulfide and barite nodules in the Upper Cretaceous Chalk of England and their regional significance in the origin of coloured chalks. <i>Acta Geologica Polonica</i> , 2016, 66, 227-256.	0.9	3
61	Conditional iron and pH-dependent activity of a non-enzymatic glycolysis and pentose phosphate pathway. <i>Science Advances</i> , 2016, 2, e1501235.	10.3	65
62	Diffusive cation fluxes in deep-sea sediments and insight into the global geochemical cycles of calcium, magnesium, sodium and potassium. <i>Marine Geology</i> , 2016, 373, 64-77.	2.1	46
63	Annual sulfur cycle in a warm monomictic lake with sub-millimolar sulfate concentrations. <i>Geochemical Transactions</i> , 2015, 16, 7.	0.7	25
64	A unique isotopic fingerprint of sulfate-driven anaerobic oxidation of methane. <i>Geology</i> , 2015, 43, 619-622.	4.4	55
65	Coupled measurements of $\delta^{18}\text{O}$ and $\delta^2\text{D}$ of hydration water and salinity of fluid inclusions in gypsum from the Messinian Yesares Member, Sorbas Basin (SE Spain). <i>Earth and Planetary Science Letters</i> , 2015, 430, 499-510.	4.4	45
66	Contribution of cyanobacterial alkane production to the ocean hydrocarbon cycle. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015, 112, 13591-13596.	7.1	159
67	Controls on the abiotic exchange between aqueous sulfate and water under laboratory conditions. <i>Limnology and Oceanography: Methods</i> , 2014, 12, 166-173.	2.0	13
68	Significant contribution of authigenic carbonate to marine carbon burial. <i>Nature Geoscience</i> , 2014, 7, 201-204.	12.9	115
69	Non-enzymatic glycolysis and pentose phosphate pathway-like reactions in a plausible Archean ocean. <i>Molecular Systems Biology</i> , 2014, 10, 725.	7.2	182
70	Anaerobic oxidation of methane by sulfate in hypersaline groundwater of the Dead Sea aquifer. <i>Geobiology</i> , 2014, 12, 511-528.	2.4	43
71	Sulfur and oxygen isotope tracing of sulfate driven anaerobic methane oxidation in estuarine sediments. <i>Estuarine, Coastal and Shelf Science</i> , 2014, 142, 4-11.	2.1	63
72	Hydrocarbon-related microbial processes in the deep sediments of the Eastern Mediterranean Levantine Basin. <i>FEMS Microbiology Ecology</i> , 2014, 87, 780-796.	2.7	35

#	ARTICLE	IF	CITATIONS
73	Drilling and sampling a natural CO ₂ reservoir: Implications for fluid flow and CO ₂ -fluid-rock reactions during CO ₂ migration through the overburden. <i>Chemical Geology</i> , 2014, 369, 51-82.	3.3	96
74	Iron oxides stimulate sulfate-driven anaerobic methane oxidation in seeps. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, E4139-47.	7.1	112
75	Multiple sulfur isotope constraints on the modern sulfur cycle. <i>Earth and Planetary Science Letters</i> , 2014, 396, 14-21.	4.4	152
76	The preservation of S^{34} in sulfates from the Marsyandi River, Nepal, Himalayas. <i>Earth and Planetary Science Letters</i> , 2013, 374, 36-46.	4.4	67
77	Isotope evidence for secondary sulfide precipitation along the Marsyandi River, Nepal, Himalayas. <i>Earth and Planetary Science Letters</i> , 2013, 374, 36-46.	4.4	64
78	Sulfur degassing due to contact metamorphism during flood basalt eruptions. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 120, 263-279.	3.9	17
79	Coupled sulfur and oxygen isotope insight into bacterial sulfate reduction in the natural environment. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 118, 98-117.	3.9	155
80	The remarkable longevity of submarine plumes: Implications for the hydrothermal input of iron to the deep-ocean. <i>Earth and Planetary Science Letters</i> , 2013, 382, 66-76.	4.4	23
81	Reconstructing the oxygen isotope composition of late Cambrian and Cretaceous hydrothermal vent fluid. <i>Geochimica Et Cosmochimica Acta</i> , 2013, 123, 440-458.	3.9	21
82	Fire and Brimstone: The Microbially Mediated Formation of Elemental Sulfur Nodules from an Isotope and Major Element Study in the Paleo-Dead Sea. <i>PLoS ONE</i> , 2013, 8, e75883.	2.5	15
83	Recycling of water, carbon, and sulfur during subduction of serpentinites: A stable isotope study of Cerro del Almiraz, Spain. <i>Earth and Planetary Science Letters</i> , 2012, 327-328, 50-60.	4.4	153
84	Late Glacial temperature and precipitation changes in the lowland Neotropics by tandem measurement of $\delta^{18}O$ in biogenic carbonate and gypsum hydration water. <i>Geochimica Et Cosmochimica Acta</i> , 2012, 77, 352-368.	3.9	68
85	Calcium isotope evidence for suppression of carbonate dissolution in carbonate-bearing organic-rich sediments. <i>Geochimica Et Cosmochimica Acta</i> , 2011, 75, 7081-7098.	3.9	56
86	Decarbonation efficiency in subduction zones: Implications for warm Cretaceous climates. <i>Earth and Planetary Science Letters</i> , 2011, 303, 143-152.	4.4	86
87	Calcium isotope constraints on the end-Permian mass extinction. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 8543-8548.	7.1	215
88	Kinetic oxygen isotope effects during dissimilatory sulfate reduction: A combined theoretical and experimental approach. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 2011-2024.	3.9	89
89	Geologic reconnaissance of the island of Velika Palagruža (central Adriatic, Croatia). <i>Geologia Croatica</i> , 2009, 62, 75-94.	0.8	16
90	Stable isotope analysis of the Cretaceous sulfur cycle. <i>Earth and Planetary Science Letters</i> , 2009, 285, 115-123.	4.4	43

#	ARTICLE	IF	CITATIONS
91	A Contemporary Microbially Maintained Subglacial Ferrous "Ocean". Science, 2009, 324, 397-400.	12.6	243
92	Cenozoic evolution of the sulfur cycle: Insight from oxygen isotopes in marine sulfate. Earth and Planetary Science Letters, 2006, 241, 763-779.	4.4	97
93	Oxygen isotopic composition of sulfate in deep sea pore fluid: evidence for rapid sulfur cycling. Geobiology, 2006, 4, 191-201.	2.4	50
94	Oxygen Isotope Constraints on the Sulfur Cycle over the Past 10 Million Years. Science, 2004, 303, 2004-2007.	12.6	123