

# Qun-Ke Xia

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7782464/publications.pdf>

Version: 2024-02-01

84  
papers

2,892  
citations

185998

28  
h-index

182168

51  
g-index

88  
all docs

88  
docs citations

88  
times ranked

1674  
citing authors

#	ARTICLE	IF	CITATIONS
1	Destruction of the North China Craton. <i>Science China Earth Sciences</i> , 2012, 55, 1565-1587.	2.3	440
2	Deep carbon cycles constrained by a large-scale mantle Mg isotope anomaly in eastern China. <i>National Science Review</i> , 2017, 4, 111-120.	4.6	240
3	High water content in Mesozoic primitive basalts of the North China Craton and implications on the destruction of cratonic mantle lithosphere. <i>Earth and Planetary Science Letters</i> , 2013, 361, 85-97.	1.8	169
4	Water in minerals of the continental lithospheric mantle and overlying lower crust: A comparative study of peridotite and granulite xenoliths from the North China Craton. <i>Chemical Geology</i> , 2008, 256, 33-45.	1.4	118
5	Low water content of the Cenozoic lithospheric mantle beneath the eastern part of the North China Craton. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	97
6	Water in the upper mantle and deep crust of eastern China: concentration, distribution and implications. <i>National Science Review</i> , 2019, 6, 125-144.	4.6	88
7	Heterogeneity of water in garnets from UHP eclogites, eastern Dabieshan, China. <i>Chemical Geology</i> , 2005, 224, 237-246.	1.4	84
8	Effect of water on the electrical conductivity of lower crustal clinopyroxene. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	82
9	H <sub>2</sub> O contents and D/H ratios of nominally anhydrous minerals from ultrahigh-pressure eclogites of the Dabie orogen, eastern China. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 2079-2103.	1.6	80
10	Heterogeneous source components of intraplate basalts from NE China induced by the ongoing Pacific slab subduction. <i>Earth and Planetary Science Letters</i> , 2017, 459, 208-220.	1.8	67
11	Water contents of pyroxenes in intraplate lithospheric mantle. <i>European Journal of Mineralogy</i> , 2009, 21, 637-647.	0.4	61
12	H <sub>2</sub> O contents and their modification in the Cenozoic subcontinental lithospheric mantle beneath the Cathaysia block, SE China. <i>Lithos</i> , 2011, 126, 182-197.	0.6	61
13	Water contents of the Cenozoic lithospheric mantle beneath the western part of the North China Craton: Peridotite xenolith constraints. <i>Gondwana Research</i> , 2013, 23, 108-118.	3.0	60
14	Water Content and Oxygen Isotopic Composition of Alkali Basalts from the Taihang Mountains, China: Recycled Oceanic Components in the Mantle Source. <i>Journal of Petrology</i> , 2015, 56, 681-702.	1.1	60
15	Changing recycled oceanic components in the mantle source of the Shuangliao Cenozoic basalts, NE China: New constraints from water content. <i>Tectonophysics</i> , 2015, 650, 113-123.	0.9	56
16	Mantle hydration and the role of water in the generation of large igneous provinces. <i>Nature Communications</i> , 2017, 8, 1824.	5.8	55
17	Water in the lower crustal granulite xenoliths from Nushan, eastern China. <i>Journal of Geophysical Research</i> , 2006, 111, n/a-n/a.	3.3	50
18	Partial melting control of water contents in the Cenozoic lithospheric mantle of the Cathaysia block of South China. <i>Chemical Geology</i> , 2014, 380, 7-19.	1.4	49

#	ARTICLE	IF	CITATIONS
19	Buoyant hydrous mantle plume from the mantle transition zone. <i>Scientific Reports</i> , 2019, 9, 6549.	1.6	43
20	Recycled oceanic crust and marine sediment in the source of alkali basalts in Shandong, eastern China: Evidence from magma water content and oxygen isotopes. <i>Journal of Geophysical Research: Solid Earth</i> , 2015, 120, 8281-8303.	1.4	41
21	Water contrast between Precambrian and Phanerozoic continental lower crust in eastern China. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	40
22	CO <sub>2</sub> -induced small water solubility in olivine and implications for properties of the shallow mantle. <i>Earth and Planetary Science Letters</i> , 2014, 403, 37-47.	1.8	40
23	Recognizing juvenile and relict lithospheric mantle beneath the North China Craton: Combined analysis of H <sub>2</sub> O, major and trace elements and Sr- <sup>87</sup> Sr/ <sup>86</sup> Sr and Nd isotope compositions of clinopyroxenes. <i>Lithos</i> , 2012, 149, 136-145.	0.6	38
24	Continuous supply of recycled Pacific oceanic materials in the source of Cenozoic basalts in SE China: the Zhejiang case. <i>Contributions To Mineralogy and Petrology</i> , 2016, 171, 1.	1.2	36
25	Water concentration profiles in natural mantle orthopyroxenes: A geochronometer for long annealing of xenoliths within magma. <i>Geology</i> , 2017, 45, 87-90.	2.0	35
26	Temporal variation of H <sub>2</sub> O content in the lithospheric mantle beneath the eastern North China Craton: Implications for the destruction of cratons. <i>Gondwana Research</i> , 2015, 28, 276-287.	3.0	32
27	Regional heterogeneity in the water content of the Cenozoic lithospheric mantle of Eastern China. <i>Journal of Geophysical Research: Solid Earth</i> , 2016, 121, 517-537.	1.4	32
28	Oxygen and hydrogen isotope heterogeneity of clinopyroxene megacrysts from Nushan Volcano, SE China. <i>Chemical Geology</i> , 2004, 209, 137-151.	1.4	31
29	Pressure- and stress-induced fabric transition in olivine from peridotites in the Western Gneiss Region (Norway): implications for mantle seismic anisotropy. <i>Journal of Metamorphic Geology</i> , 2013, 31, 93-111.	1.6	29
30	Water contents and electrical conductivity of peridotite xenoliths from the North China Craton: Implications for water distribution in the upper mantle. <i>Lithos</i> , 2014, 189, 105-126.	0.6	28
31	Low water content in the mantle source of the Hainan plume as a factor inhibiting the formation of a large igneous province. <i>Earth and Planetary Science Letters</i> , 2019, 515, 221-230.	1.8	26
32	The Cenozoic lithospheric mantle beneath the interior of South China Block: Constraints from mantle xenoliths in Guangxi Province. <i>Lithos</i> , 2014, 210-211, 14-26.	0.6	24
33	Mantle metasomatism did not modify the initial H <sub>2</sub> O content in peridotite xenoliths from the Tianchang basalts of eastern China. <i>Lithos</i> , 2016, 260, 315-327.	0.6	24
34	High water content in primitive continental flood basalts. <i>Scientific Reports</i> , 2016, 6, 25416.	1.6	21
35	Extremely low structural hydroxyl contents in upper mantle xenoliths from the N-Gr-Ad-Gm-r Volcanic Field (northern Pannonian Basin): Geodynamic implications and the role of post-eruptive re-equilibration. <i>Chemical Geology</i> , 2019, 507, 23-41.	1.4	20
36	Electrical conductivity of melts: implications for conductivity anomalies in the Earth's mantle. <i>National Science Review</i> , 2021, 8, nwab064.	4.6	20

#	ARTICLE	IF	CITATIONS
37	Temperature dependence of IR absorption of OH species in clinopyroxene. <i>American Mineralogist</i> , 2010, 95, 1439-1443.	0.9	19
38	Water contents of Roberts Victor xenolithic eclogites: primary and metasomatic controls. <i>Contributions To Mineralogy and Petrology</i> , 2014, 168, 1.	1.2	19
39	Revisiting Mesozoic felsic intrusions in eastern South China: spatial and temporal variations and tectonic significance. <i>Lithos</i> , 2017, 294-295, 147-163.	0.6	17
40	The distribution of water in the continental lithospheric mantle and its implications for the stability of continents. <i>Science Bulletin</i> , 2013, 58, 3879-3889.	1.7	15
41	Water decreases displacive phase transition temperature in alkali feldspar. <i>European Journal of Mineralogy</i> , 2018, 30, 1071-1081.	0.4	15
42	Lateral H <sub>2</sub> O variation in the Zealandia lithospheric mantle controls orogen width. <i>Earth and Planetary Science Letters</i> , 2018, 502, 200-209.	1.8	15
43	Water content of the Xiaogulihe ultrapotassic volcanic rocks, NE China: implications for the source of the potassium-rich component. <i>Science Bulletin</i> , 2015, 60, 1468-1470.	4.3	14
44	Evolution of OH groups in diopside and feldspars with temperature. <i>European Journal of Mineralogy</i> , 2015, 27, 185-192.	0.4	12
45	Dynamic contribution of recycled components from the subducted Pacific slab: Oxygen isotopic composition of the basalts from 106‰Ma to 60‰Ma in North China Craton. <i>Journal of Geophysical Research: Solid Earth</i> , 2017, 122, 988-1006.	1.4	12
46	Insights into post-magmatic metasomatism and Li circulation in granitic systems from phosphate minerals of the Nanping No. 31 pegmatite (SE China). <i>Ore Geology Reviews</i> , 2017, 91, 864-876.	1.1	12
47	Metasomatism in the sub-continental lithospheric mantle beneath the south French Massif Central: Constraints from trace elements, Li and H in peridotite minerals. <i>Chemical Geology</i> , 2018, 478, 2-17.	1.4	12
48	Quantitative analysis of H-species in anisotropic minerals by unpolarized infrared spectroscopy: An experimental evaluation. <i>American Mineralogist</i> , 2018, 103, 1761-1769.	0.9	12
49	Nature of hydrogen defects in clinopyroxenes from room temperature up to 1000 °C: Implication for the preservation of hydrogen in the upper mantle and impact on electrical conductivity. <i>American Mineralogist</i> , 2019, 104, 79-93.	0.9	12
50	OH in natural orthopyroxene: an in situ FTIR investigation at varying temperatures. <i>Physics and Chemistry of Minerals</i> , 2012, 39, 413-418.	0.3	11
51	Water content in the early Cretaceous lithospheric mantle beneath the south-central Taihang Mountains: implications for the destruction of the North China Craton. <i>Science Bulletin</i> , 2014, 59, 1362-1365.	1.7	11
52	Recycled oceanic crust-derived fluids in the lithospheric mantle of eastern China: Constraints from oxygen isotope compositions of peridotite xenoliths. <i>Lithos</i> , 2015, 228-229, 55-61.	0.6	11
53	The fate of ammonium in phengite at high temperature. <i>American Mineralogist</i> , 2017, 102, 2244-2253.	0.9	11
54	Influence of the subduction of the Pacific plate on the mantle characteristics of South China: Constraints from the temporal geochemical evolution of the Mesozoic basalts in the Jitai Basin. <i>Lithos</i> , 2020, 352-353, 105253.	0.6	11

#	ARTICLE	IF	CITATIONS
55	Anomalously high $\delta D$ values in the mantle. <i>Geophysical Research Letters</i> , 2002, 29, 4-1.	1.5	10
56	In situ FTIR investigations at varying temperatures on hydrous components in rutile. <i>American Mineralogist</i> , 2011, 96, 1851-1855.	0.9	10
57	Temperature dependences of hydrous species in feldspars. <i>Physics and Chemistry of Minerals</i> , 2018, 45, 609-620.	0.3	10
58	Intimate link between ammonium loss of phengite and the deep Earth's water cycle. <i>Earth and Planetary Science Letters</i> , 2019, 513, 95-102.	1.8	10
59	Hydrogen diffusion in clinopyroxene: dehydration experiments. <i>Science in China Series D: Earth Sciences</i> , 2000, 43, 561-568.	0.9	9
60	Water effects on the anharmonic properties of forsterite. <i>American Mineralogist</i> , 2015, 100, 2185-2190.	0.9	9
61	Water concentrations and hydrogen isotope compositions of alkaline basalt-hosted clinopyroxene megacrysts and amphibole clinopyroxenites: the role of structural hydroxyl groups and molecular water. <i>Contributions To Mineralogy and Petrology</i> , 2016, 171, 1.	1.2	9
62	Re-configuration and interaction of hydrogen sites in olivine at high temperature and high pressure. <i>American Mineralogist</i> , 2019, 104, 878-889.	0.9	9
63	The distribution of water in the early Cretaceous lithospheric mantle of the North China Craton and implications for its destruction. <i>Lithos</i> , 2020, 360-361, 105412.	0.6	9
64	Melting of recycled ancient crust responsible for the Gutenberg discontinuity. <i>Nature Communications</i> , 2020, 11, 172.	5.8	8
65	High H <sub>2</sub> O Content in Pyroxenes of Residual Mantle Peridotites at a Mid Atlantic Ridge Segment. <i>Scientific Reports</i> , 2020, 10, 579.	1.6	8
66	Influence of water on the physical properties of olivine, wadsleyite, and ringwoodite. <i>European Journal of Mineralogy</i> , 2021, 33, 39-75.	0.4	8
67	High-temperature phase transition and local structure of a hydrous anorthoclase. <i>Physics and Chemistry of Minerals</i> , 2016, 43, 111-118.	0.3	7
68	Heterogeneity of water in UHP eclogites from Bixiling in Dabieshan: Evidence from garnet. <i>Science Bulletin</i> , 2004, 49, 481-486.	1.7	6
69	Continuous water supply from the subducted Pacific plate to the Eastern Asian big mantle wedge: New insights from the water content of late Cretaceous OIB-like basalts. <i>Lithos</i> , 2020, 352-353, 105249.	0.6	6
70	Typical oxygen isotope profile of altered oceanic crust recorded in continental intraplate basalts. <i>Journal of Earth Science (Wuhan, China)</i> , 2017, 28, 578-587.	1.1	5
71	Machine Learning for Identification of Primary Water Concentrations in Mantle Pyroxene. <i>Geophysical Research Letters</i> , 2021, 48, e2021GL095191.	1.5	5
72	Structural OH in mantle-derived clinopyroxene megacrysts from Nushan. <i>Science Bulletin</i> , 1998, 43, 1742-1745.	1.7	4

#	ARTICLE	IF	CITATIONS
73	Kinetics of deuteration in andradite and garnet. <i>American Mineralogist</i> , 2015, 100, 1400-1410.	0.9	4
74	Variations in the H <sub>2</sub> O Content and H <sub>2</sub> O/Ce Ratio of Mantle Pyroxenites: Implications for Enriched Components in the Mantle. <i>Journal of Geophysical Research: Solid Earth</i> , 2018, 123, 5628-5643.	1.4	4
75	Ammonium Impacts on Vibrations of Hydroxyl and Lattice of Phengite at High Temperature and High Pressure. <i>Journal of Earth Science (Wuhan, China)</i> , 2021, 32, 1278-1286.	1.1	4
76	Highly variable H <sub>2</sub> O/Ce ratios in the Hainan mantle plume. <i>Lithos</i> , 2021, 406-407, 106516.	0.6	4
77	The origins and geodynamic implications of mid-lithospheric discontinuities. <i>Chinese Science Bulletin</i> , 2019, 64, 2305-2315.	0.4	3
78	Nitrogen Retention in Feldspar: Implications for Nitrogen Transport in Subduction Zones. <i>Journal of Geophysical Research: Solid Earth</i> , 2022, 127, .	1.4	3
79	Impact of fluorine on the thermal stability of phlogopite. <i>American Mineralogist</i> , 2022, 107, 815-825.	0.9	2
80	Correction to "Water contrast between Precambrian and Phanerozoic continental lower crust in eastern China". <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	1
81	Fragments of asthenosphere incorporated in the lithospheric mantle underneath the Subei Basin, eastern China: Constraints from geothermobarometric results and water contents of peridotite xenoliths in Cenozoic basalts. <i>Journal of Asian Earth Sciences: X</i> , 2019, 1, 100006.	0.6	1
82	Chukochenite (Li <sub>0.5</sub> Al <sub>0.5</sub> )Al <sub>2</sub> O <sub>4</sub> , a new lithium oxyspinel mineral from the Xianghualing skarn, Hunan Province, China. <i>American Mineralogist</i> , 2021, , .	0.9	1
83	Refined estimation of Li in mica by a machine learning method. <i>American Mineralogist</i> , 2022, 107, 1034-1044.	0.9	1
84	Behavior and origin of hydrogen defects in natural orthopyroxene during high-temperature processes. <i>American Mineralogist</i> , 2021, 106, 1768-1779.	0.9	0