Qun-Ke Xia

List of Publications by Year
in descending order

84	2,892	185998 28	182168 51
papers	citations	h-index	g-index

88	88	88	1674
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Refined estimation of Li in mica by a machine learning method. American Mineralogist, 2022, 107, 1034-1044.	0.9	1
2	Impact of fluorine on the thermal stability of phlogopite. American Mineralogist, 2022, 107, 815-825.	0.9	2
3	Nitrogen Retention in Feldspar: Implications for Nitrogen Transport in Subduction Zones. Journal of Geophysical Research: Solid Earth, 2022, 127, .	1.4	3
4	Ammonium Impacts on Vibrations of Hydroxyl and Lattice of Phengite at High Temperature and High Pressure. Journal of Earth Science (Wuhan, China), 2021, 32, 1278-1286.	1.1	4
5	Influence of water on the physical properties of olivine, wadsleyite, and ringwoodite. European Journal of Mineralogy, 2021, 33, 39-75.	0.4	8
6	Electrical conductivity of melts: implications for conductivity anomalies in the Earth's mantle. National Science Review, 2021, 8, nwab064.	4.6	20
7	Chukochenite (Li.0.5Al0.5)Al2O4, a new lithium oxyspinel mineral from the Xianghualing skarn, Hunan Province, China. American Mineralogist, 2021, , .	0.9	1
8	Machine Learning for Identification of Primary Water Concentrations in Mantle Pyroxene. Geophysical Research Letters, 2021, 48, e2021GL095191.	1.5	5
9	Behavior and origin of hydrogen defects in natural orthopyroxene during high-temperature processes. American Mineralogist, 2021, 106, 1768-1779.	0.9	0
10	Highly variable H2O/Ce ratios in the Hainan mantle plume. Lithos, 2021, 406-407, 106516.	0.6	4
11	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. Lithos, 2020, 352-353, 105249.	0.6	6
12	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. Lithos, 2020, 352-353, 105253.	0.6	11
13	Melting of recycled ancient crust responsible for the Gutenberg discontinuity. Nature Communications, 2020, 11, 172.	5.8	8
14	The distribution of water in the early Cretaceous lithospheric mantle of the North China Craton and implications for its destruction. Lithos, 2020, 360-361, 105412.	0.6	9
15	High H2O Content in Pyroxenes of Residual Mantle Peridotites at a Mid Atlantic Ridge Segment. Scientific Reports, 2020, 10, 579.	1.6	8
16	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. Journal of Asian Earth Sciences: X, 2019, 1, 100006.	0.6	1
17	Re-configuration and interaction of hydrogen sites in olivine at high temperature and high pressure. American Mineralogist, 2019, 104, 878-889.	0.9	9
18	Buoyant hydrous mantle plume from the mantle transition zone. Scientific Reports, 2019, 9, 6549.	1.6	43

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19	Intimate link between ammonium loss of phengite and the deep Earth's water cycle. Earth and Planetary Science Letters, 2019, 513, 95-102.	1.8	10
20	Low water content in the mantle source of the Hainan plume as a factor inhibiting the formation of a large igneous province. Earth and Planetary Science Letters, 2019, 515, 221-230.	1.8	26
21	Nature of hydrogen defects in clinopyroxenes from room temperature up to 1000 Â°C: Implication for the preservation of hydrogen in the upper mantle and impact on electrical conductivity. American Mineralogist, 2019, 104, 79-93.	0.9	12
22	Extremely low structural hydroxyl contents in upper mantle xenoliths from the NÃ³grÃ¡d-GÃ¶mÃ¶r Volcanic Field (northern Pannonian Basin): Geodynamic implications and the role of post-eruptive re-equilibration. Chemical Geology, 2019, 507, 23-41.	1.4	20
23	Water in the upper mantle and deep crust of eastern China: concentration, distribution and implications. National Science Review, 2019, 6, 125-144.	4.6	88
24	The origins and geodynamic implications of mid-lithospheric discontinuities. Chinese Science Bulletin, 2019, 64, 2305-2315.	0.4	3
25	Temperature dependences of hydrous species in feldspars. Physics and Chemistry of Minerals, 2018, 45, 609-620.	0.3	10
26	Metasomatism in the sub-continental lithospheric mantle beneath the south French Massif Central: Constraints from trace elements, Li and H in peridotite minerals. Chemical Geology, 2018, 478, 2-17.	1.4	12
27	Quantitative analysis of H-species in anisotropic minerals by unpolarized infrared spectroscopy: An experimental evaluation. American Mineralogist, 2018, 103, 1761-1769.	0.9	12
28	Water decreases displacive phase transition temperature in alkali feldspar. European Journal of Mineralogy, 2018, 30, 1071-1081.	0.4	15
29	Lateral H2O variation in the Zealandia lithospheric mantle controls orogen width. Earth and Planetary Science Letters, 2018, 502, 200-209.	1.8	15
30	Variations in the H₂O Content and H₂O/Ce Ratio of Mantle Pyroxenites: Implications for Enriched Components in the Mantle. Journal of Geophysical Research: Solid Earth, 2018, 123, 5628-5643.	1.4	4
31	Dynamic contribution of recycled components from the subducted Pacific slab: Oxygen isotopic composition of the basalts from 106â€‰Ma to 60â€‰Ma in North China Craton. Journal of Geophysical Research: Solid Earth, 2017, 122, 988-1006.	1.4	12
32	Heterogeneous source components of intraplate basalts from NE China induced by the ongoing Pacific slab subduction. Earth and Planetary Science Letters, 2017, 459, 208-220.	1.8	67
33	Deep carbon cycles constrained by a large-scale mantle Mg isotope anomaly in eastern China. National Science Review, 2017, 4, 111-120.	4.6	240
34	The fate of ammonium in phengite at high temperature. American Mineralogist, 2017, 102, 2244-2253.	0.9	11
35	Revisiting Mesozoic felsic intrusions in eastern South China: spatial and temporal variations and tectonic significance. Lithos, 2017, 294-295, 147-163.	0.6	17
36	Typical oxygen isotope profile of altered oceanic crust recorded in continental intraplate basalts. Journal of Earth Science (Wuhan, China), 2017, 28, 578-587.	1.1	5

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37	Insights into post-magmatic metasomatism and Li circulation in granitic systems from phosphate minerals of the Nanping No. 31 pegmatite (SE China). Ore Geology Reviews, 2017, 91, 864-876.	1.1	12
38	Mantle hydration and the role of water in the generation of large igneous provinces. Nature Communications, 2017, 8, 1824.	5.8	55
39	Water concentration profiles in natural mantle orthopyroxenes: A geochronometer for long annealing of xenoliths within magma. Geology, 2017, 45, 87-90.	2.0	35
40	High water content in primitive continental flood basalts. Scientific Reports, 2016, 6, 25416.	1.6	21
41	Water concentrations and hydrogen isotope compositions of alkaline basalt-hosted clinopyroxene megacrysts and amphibole clinopyroxenites: the role of structural hydroxyl groups and molecular water. Contributions To Mineralogy and Petrology, 2016, 171, 1.	1.2	9
42	Mantle metasomatism did not modify the initial H2O content in peridotite xenoliths from the Tianchang basalts of eastern China. Lithos, 2016, 260, 315-327.	0.6	24
43	Continuous supply of recycled Pacific oceanic materials in the source of Cenozoic basalts in SE China: the Zhejiang case. Contributions To Mineralogy and Petrology, 2016, 171, 1.	1.2	36
44	Regional heterogeneity in the water content of the Cenozoic lithospheric mantle of Eastern China. Journal of Geophysical Research: Solid Earth, 2016, 121, 517-537.	1.4	32
45	High-temperature phase transition and local structure of a hydrous anorthoclase. Physics and Chemistry of Minerals, 2016, 43, 111-118.	0.3	7
46	Recycled oceanic crust and marine sediment in the source of alkali basalts in Shandong, eastern China: Evidence from magma water content and oxygen isotopes. Journal of Geophysical Research: Solid Earth, 2015, 120, 8281-8303.	1.4	41
47	Water effects on the anharmonic properties of forsterite. American Mineralogist, 2015, 100, 2185-2190.	0.9	9
48	Recycled oceanic crust-derived fluids in the lithospheric mantle of eastern China: Constraints from oxygen isotope compositions of peridotite xenoliths. Lithos, 2015, 228-229, 55-61.	0.6	11
49	Changing recycled oceanic components in the mantle source of the Shuangliao Cenozoic basalts, NE China: New constraints from water content. Tectonophysics, 2015, 650, 113-123.	0.9	56
50	Kinetics of deuteration in andradite and garnet. American Mineralogist, 2015, 100, 1400-1410.	0.9	4
51	Evolution of OH groups in diopside and feldspars with temperature. European Journal of Mineralogy, 2015, 27, 185-192.	0.4	12
52	Water Content and Oxygen Isotopic Composition of Alkali Basalts from the Taihang Mountains, China: Recycled Oceanic Components in the Mantle Source. Journal of Petrology, 2015, 56, 681-702.	1.1	60
53	Water content of the Xiaogulihe ultrapotassic volcanic rocks, NE China: implications for the source of the potassium-rich component. Science Bulletin, 2015, 60, 1468-1470.	4.3	14
54	Temporal variation of H 2 O content in the lithospheric mantle beneath the eastern North China Craton: Implications for the destruction of cratons. Gondwana Research, 2015, 28, 276-287.	3.0	32

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55	The Cenozoic lithospheric mantle beneath the interior of South China Block: Constraints from mantle xenoliths in Guangxi Province. Lithos, 2014, 210-211, 14-26.	0.6	24
56	Water contents of Roberts Victor xenolithic eclogites: primary and metasomatic controls. Contributions To Mineralogy and Petrology, 2014, 168, 1.	1.2	19
57	Partial melting control of water contents in the Cenozoic lithospheric mantle of the Cathaysia block of South China. Chemical Geology, 2014, 380, 7-19.	1.4	49
58	CO 2 -induced small water solubility in olivine and implications for properties of the shallow mantle. Earth and Planetary Science Letters, 2014, 403, 37-47.	1.8	40
59	Water content in the early Cretaceous lithospheric mantle beneath the south-central Taihang Mountains: implications for the destruction of the North China Craton. Science Bulletin, 2014, 59, 1362-1365.	1.7	11
60	Water contents and electrical conductivity of peridotite xenoliths from the North China Craton: Implications for water distribution in the upper mantle. Lithos, 2014, 189, 105-126.	0.6	28
61	The distribution of water in the continental lithospheric mantle and its implications for the stability of continents. Science Bulletin, 2013, 58, 3879-3889.	1.7	15
62	High water content in Mesozoic primitive basalts of the North China Craton and implications on the destruction of cratonic mantle lithosphere. Earth and Planetary Science Letters, 2013, 361, 85-97.	1.8	169
63	Pressureâ€•and stressâ€•induced fabric transition in olivine from peridotites in the Western Gneiss Region (Norway): implications for mantle seismic anisotropy. Journal of Metamorphic Geology, 2013, 31, 93-111.	1.6	29
64	Water contents of the Cenozoic lithospheric mantle beneath the western part of the North China Craton: Peridotite xenolith constraints. Gondwana Research, 2013, 23, 108-118.	3.0	60
65	Recognizing juvenile and relict lithospheric mantle beneath the North China Craton: Combined analysis of H2O, major and trace elements and Srâ€“Nd isotope compositions of clinopyroxenes. Lithos, 2012, 149, 136-145.	0.6	38
66	Destruction of the North China Craton. Science China Earth Sciences, 2012, 55, 1565-1587.	2.3	440
67	OH in natural orthopyroxene: an in situ FTIR investigation at varying temperatures. Physics and Chemistry of Minerals, 2012, 39, 413-418.	0.3	11
68	Effect of water on the electrical conductivity of lower crustal clinopyroxene. Journal of Geophysical Research, 2011, 116, .	3.3	82
69	H2O contents and their modification in the Cenozoic subcontinental lithospheric mantle beneath the Cathaysia block, SE China. Lithos, 2011, 126, 182-197.	0.6	61
70	In situ FTIR investigations at varying temperatures on hydrous components in rutile. American Mineralogist, 2011, 96, 1851-1855.	0.9	10
71	Temperature dependence of IR absorption of OH species in clinopyroxene. American Mineralogist, 2010, 95, 1439-1443.	0.9	19
72	Low water content of the Cenozoic lithospheric mantle beneath the eastern part of the North China Craton. Journal of Geophysical Research, 2010, 115, .	3.3	97

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73	Water contents of pyroxenes in intraplate lithospheric mantle. European Journal of Mineralogy, 2009, 21, 637-647.	0.4	61
74	Water contrast between Precambrian and Phanerozoic continental lower crust in eastern China. Journal of Geophysical Research, 2008, 113, .	3.3	40
75	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. Chemical Geology, 2008, 256, 33-45.	1.4	118
76	Correction to â€œWater contrast between Precambrian and Phanerozoic continental lower crust in eastern Chinaâ€• Journal of Geophysical Research, 2008, 113, .	3.3	1
77	H2O contents and D/H ratios of nominally anhydrous minerals from ultrahigh-pressure eclogites of the Dabie orogen, eastern China. Geochimica Et Cosmochimica Acta, 2007, 71, 2079-2103.	1.6	80
78	Water in the lower crustal granulite xenoliths from Nushan, eastern China. Journal of Geophysical Research, 2006, 111, n/a-n/a.	3.3	50
79	Heterogeneity of water in garnets from UHP eclogites, eastern Dabieshan, China. Chemical Geology, 2005, 224, 237-246.	1.4	84
80	Heterogeneity of water in UHP eclogites from Bixiling in Dabieshan: Evidence from garnet. Science Bulletin, 2004, 49, 481-486.	1.7	6
81	Oxygen and hydrogen isotope heterogeneity of clinopyroxene megacrysts from Nushan Volcano, SE China. Chemical Geology, 2004, 209, 137-151.	1.4	31
82	Anomalously high Î´D values in the mantle. Geophysical Research Letters, 2002, 29, 4-1.	1.5	10
83	Hydrogen diffusion in clinopyroxene: dehydration experiments. Science in China Series D: Earth Sciences, 2000, 43, 561-568.	0.9	9
84	Structural OH in mantle-derived clinopyroxene megacrysts from Nushan. Science Bulletin, 1998, 43, 1742-1745.	1.7	4