

# Renbiao Tao

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9478104/publications.pdf>

Version: 2024-02-01

20  
papers

445  
citations

686830

13  
h-index

794141

19  
g-index

20  
all docs

20  
docs citations

20  
times ranked

451  
citing authors

#	ARTICLE	IF	CITATIONS
1	Cold deep subduction recorded by remnants of a Paleoproterozoic carbonated slab. <i>Nature Communications</i> , 2018, 9, 2790.	5.8	75
2	Formation of abiotic hydrocarbon from reduction of carbonate in subduction zones: Constraints from petrological observation and experimental simulation. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 239, 390-408.	1.6	70
3	Experimental determination of siderite stability at high pressure. <i>American Mineralogist</i> , 2013, 98, 1565-1572.	0.9	43
4	Recovery of an oxidized majorite inclusion from Earth's deep asthenosphere. <i>Science Advances</i> , 2017, 3, e1601589.	4.7	33
5	The effect of Fe on the stability of dolomite at high pressure: Experimental study and petrological observation in eclogite from southwestern Tianshan, China. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 143, 253-267.	1.6	32
6	Significant contrast in the Mg-C-O isotopes of carbonate between carbonated eclogite and marble from the S.W. Tianshan UHP subduction zone: Evidence for two sources of recycled carbon. <i>Chemical Geology</i> , 2018, 483, 65-77.	1.4	26
7	Temperature-induced amorphization in CaCO <sub>3</sub> at high pressure and implications for recycled CaCO <sub>3</sub> in subduction zones. <i>Nature Communications</i> , 2019, 10, 1963.	5.8	24
8	A Review of H <sub>2</sub> , CH <sub>4</sub> , and Hydrocarbon Formation in Experimental Serpentinization Using Network Analysis. <i>Frontiers in Earth Science</i> , 2020, 8, .	0.8	24
9	Experimental investigation of Fe <sup>3+</sup> -rich majoritic garnet and its effect on majorite geobarometer. <i>Geochimica Et Cosmochimica Acta</i> , 2018, 225, 1-16.	1.6	17
10	Redox evolution of western Tianshan subduction zone and its effect on deep carbon cycle. <i>Geoscience Frontiers</i> , 2020, 11, 915-924.	4.3	17
11	High-pressure experimental constraints of partitioning behavior of Si and S at the Mercury's inner core boundary. <i>Earth and Planetary Science Letters</i> , 2021, 562, 116849.	1.8	15
12	Si-Disordering in MgAl <sub>2</sub> O <sub>4</sub> -Spinel under High P-T Conditions, with Implications for Si-Mg Disorder in Mg <sub>2</sub> SiO <sub>4</sub> -Ringwoodite. <i>Minerals (Basel, Switzerland)</i> , 2018, 8, 210.	0.8	14
13	The formation of graphite-rich eclogite vein in S.W. Tianshan (China) and its implication for deep carbon cycling in subduction zone. <i>Chemical Geology</i> , 2020, 533, 119430.	1.4	13
14	Recycled calcium carbonate is an efficient oxidation agent under deep upper mantle conditions. <i>Communications Earth &amp; Environment</i> , 2021, 2, .	2.6	13
15	High-pressure experimental verification of rutile-ilmenite oxybarometer: Implications for the redox state of the subduction zone. <i>Science China Earth Sciences</i> , 2017, 60, 1817-1825.	2.3	10
16	The K <sub>2</sub> CO <sub>3</sub> fusion curve revisited: New experiments at pressures up to 12 GPa. <i>Journal of Mineralogical and Petrological Sciences</i> , 2016, 111, 241-251.	0.4	8
17	Phase relations and formation of K-bearing Al-10 Å... phase in the MORB+H <sub>2</sub> O system: Implications for H <sub>2</sub> O- and K-cycles in subduction zones. <i>American Mineralogist</i> , 2017, 102, 1922-1933.	0.9	5
18	Dataset for H <sub>2</sub> , CH <sub>4</sub> and organic compounds formation during experimental serpentinization. <i>Geoscience Data Journal</i> , 2021, 8, 90-100.	1.8	4

#	ARTICLE	IF	CITATIONS
19	Realization of parallel experiments in a diamond anvil cell and their application to water–mineral interactions at high-pressure and high-temperature conditions. <i>Review of Scientific Instruments</i> , 2022, 93, .	0.6	2
20	An experimental study of trace element mobility during dehydration of lawsonite blueschist along different P-T paths: Implications for geochemical heterogeneity of Earth’s mantle. <i>Journal of Asian Earth Sciences</i> , 2020, 197, 104389.	1.0	0