Simone Tumiati

List of Publications by Year in descending order

35 papers	839 citations	430874 18 h-index	501196 28 g-index
36 all docs	36 docs citations	36 times ranked	831 citing authors

#	Article	IF	Citations
1	An Experimental Study on COH-bearing Peridotite up to 3Â·2 GPa and Implications for Crustâ€“Mantle Recycling. Journal of Petrology, 2013, 54, 453-479.	2.8	101
2	Mantleâ€“crust interactions during Variscan subduction in the Eastern Alps (Nonsbergâ€“Ulten zone): geochronology and new petrological constraints. Earth and Planetary Science Letters, 2003, 210, 509-526.	4.4	80
3	Ultra-oxidized rocks in subduction mÃ©langes? Decoupling between oxygen fugacity and oxygen availability in a Mn-rich metasomatic environment. Lithos, 2015, 226, 116-130.	1.4	47
4	Silicate dissolution boosts the CO2 concentrations in subduction fluids. Nature Communications, 2017, 8, 616.	12.8	45
5	Fluid-controlled crustal metasomatism within a high-pressure subducted mÃ©lange (Mt. Hochwart,) Tj ETQq1 1 0.784314 rgBT /Over	1.4	34
6	Ni-Fe-Cu-PGE ore deposition driven by metasomatic fluids and melt-rock reactions in the deep crust: The ultramafic pipe of Valmaggia, Ivrea-Verbano, Italy. Ore Geology Reviews, 2017, 90, 485-509.	2.7	34
7	Experimental determination of magnesia and silica solubilities in graphite-saturated and redox-buffered high-pressure COH fluids in equilibrium with forsteriteâ€‰+â€‰enstatite and magnesiteâ€‰+â€‰enstatite. Contributions To Mineralogy and Petrology, 2018, 173, 1.	3.1	34
8	Redox processes and the role of carbon-bearing volatiles from the slabâ€“mantle interface to the mantle wedge. Journal of the Geological Society, 2019, 176, 388-397.	2.1	29
9	The redox budget of crust-derived fluid phases at the slab-mantle interface. Geochimica Et Cosmochimica Acta, 2017, 209, 70-84.	3.9	28
10	Fluid-mediated selective dissolution of subducting carbonaceous material: Implications for carbon recycling and fluid fluxes at forearc depths. Chemical Geology, 2020, 549, 119682.	3.3	25
11	Dissakisite-(La) from the Ulten zone peridotite (Italian Eastern Alps): A new end-member of the epidote group. American Mineralogist, 2005, 90, 1177-1185.	1.9	23
12	Hydrothermal origin of manganese in the high-pressure ophiolite metasediments of Praborna ore deposit (Aosta Valley, Western Alps). European Journal of Mineralogy, 2010, 22, 577-594.	1.3	23
13	High-temperature and high-pressure behavior of carbonates in the ternary diagram CaCO₃-MgCO₃-FeCO₃. American Mineralogist, 2016, 101, 1423-1430.	1.9	22
14	Multistage CO2 sequestration in the subduction zone: Insights from exhumed carbonated serpentinites, SW Tianshan UHP belt, China. Geochimica Et Cosmochimica Acta, 2020, 270, 218-243.	3.9	22
15	Environmental factors controlling the precipitation of Cu-bearing hydrotalcite-like compounds from mine waters. The case of the "Eve verda" spring (Aosta Valley, Italy). European Journal of Mineralogy, 2008, 20, 73-94.	1.3	21
16	Magnetite from the Cogne serpentinites (Piemonte ophiolite nappe, Italy). Insights into seafloor fluidâ€“rock interaction. European Journal of Mineralogy, 2015, 27, 31-50.	1.3	21
17	THE ANCIENT MINE OF SERVETTE (SAINT-MARCEL, VAL D'AOSTA, WESTERN ITALIAN ALPS): A MINERALOGICAL, METALLURGICAL AND CHARCOAL ANALYSIS OF FURNACE SLAGS*. Archaeometry, 2005, 47, 317-340.	1.3	20
18	Role of defects in carbon materials during metal-free formic acid dehydrogenation. Nanoscale, 2020, 12, 22768-22777.	5.6	19

#	Article	IF	Citations
19	Dissolution susceptibility of glass-like carbon versus crystalline graphite in high-pressure aqueous fluids and implications for the behavior of organic matter in subduction zones. Geochimica Et Cosmochimica Acta, 2020, 273, 383-402.	3.9	19
20	Fe3+ distribution between garnet and pyroxenes in mantle wedge carbonate-bearing garnet peridotites (Sulu, China) and implications for their oxidation state. Lithos, 2012, 146-147, 11-17.	1.4	18
21	Abiotic methane generation through reduction of serpentinite-hosted dolomite: Implications for carbon mobility in subduction zones. Geochimica Et Cosmochimica Acta, 2021, 311, 119-140.	3.9	18
22	Carbonate pseudotachylytes: evidence for seismic faulting along carbonate faults. Terra Nova, 2011, 23, 187-194.	2.1	17
23	The Cogne magnetite deposit (Western Alps, Italy): A Late Jurassic seafloor ultramafic-hosted hydrothermal system?. Ore Geology Reviews, 2017, 83, 103-126.	2.7	17
24	Subducted organic matter buffered by marine carbonate rules the carbon isotopic signature of arc emissions. Nature Communications, 2022, 13, .	12.8	17
25	Quantitative analysis of COH fluids synthesized at HP â€“ HT conditions: an optimized methodology to measure volatiles in experimental capsules. Geofluids, 2016, 16, 841-855.	0.7	16
26	Granulite-facies Overprint in Garnet Peridotites and Kyanite Eclogites of Monte Duria (Central Alps,) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.8	16
27	The crystal structure of dissakisite-(La) and structural variations after annealing of radiation damage. American Mineralogist, 2006, 91, 104-110.	1.9	13
28	Abiotic and biotic processes that drive carboxylation and decarboxylation reactions. American Mineralogist, 2020, 105, 609-615.	1.9	13
29	Siderite deposits in northern Italy: Early Permian to Early Triassic hydrothermalism in the Southern Alps. Lithos, 2017, 284-285, 276-295.	1.4	10
30	Mantle-Derived Corundum-Bearing Felsic Dykes May Survive Only within the Lower (Refractory/Inert) Crust: Evidence from Zircon Geochemistry and Geochronology (Ivreaâ€“Verbano Zone, Southern Alps,) Tj ETQq0 0 0 rgBT /Overlock 10 T	2.2	10
31	Aqueous concentration of CO2 in carbon-saturated fluids as a highly sensitive oxybarometer. Geochemical Perspectives Letters, 0, 16, 30-34.	5.0	9
32	Carbon-saturated COH fluids in the upper mantle: a review of high-pressure and high-temperature ex situ experiments. European Journal of Mineralogy, 2022, 34, 59-75.	1.3	9
33	High pressure melting of eclogites and metasomatism of garnet peridotites from Monte Duria Area (Central Alps, N Italy): A proxy for melt-rock reaction during subduction. Lithos, 2020, 358-359, 105391.	1.4	6
34	Orthovanadate wakefieldite-(Ce) in symplectites replacing vanadium-bearing omphacite in the ultra-oxidized manganese deposit of Praborna (Aosta Valley, Western Italian Alps). American Mineralogist, 2020, 105, 1242-1253.	1.9	2
35	Reactionâ€Induced Mantle Weakening at Highâ€Pressure Conditions: An Example From Garnet Pyroxenites of Ulten Zone (Eastern Alps, N Italy). Journal of Geophysical Research: Solid Earth, 2021, 126, e2021JB022584.	3.4	1