Chrystele Sanloup

List of Publications by Year
in descending order

61 papers	4,237 citations	136950 32 h-index	144013 57 g-index
64 all docs	64 docs citations	64 times ranked	3476 citing authors

#	Article	IF	Citations
1	Synthesis and characterization of a binary noble metal nitride. Nature Materials, 2004, 3, 294-297.	27.5	500
2	Synthesis of Novel Transition Metal NitridesIrN2andOsN2. Physical Review Letters, 2006, 96, 155501.	7.8	481
3	The chemical composition of the Earth: Enstatite chondrite models. Earth and Planetary Science Letters, 2010, 293, 259-268.	4.4	363
4	Experimentally determined postspinel transformation boundary in Mg2SiO4using MgO as an internal pressure standard and its geophysical implications. Journal of Geophysical Research, 2004, 109, .	3.3	342
5	A simple chondritic model of Mars. Physics of the Earth and Planetary Interiors, 1999, 112, 43-54.	1.9	197
6	Density measurements of liquid Fe-S alloys at high-pressure. Geophysical Research Letters, 2000, 27, 811-814.	4.0	152
7	Structural change in molten basalt at deep mantle conditions. Nature, 2013, 503, 104-107.	27.8	145
8	High P-T transformations of nitrogen to 170GPa. Journal of Chemical Physics, 2007, 126, 184505.	3.0	130
9	A critical evaluation of pressure scales at high temperatures by in situ X-ray diffraction measurements. Physics of the Earth and Planetary Interiors, 2004, 143-144, 515-526.	1.9	127
10	Interstitial dinitrogen makesPtN2an insulating hard solid. Physical Review B, 2006, 73, .	3.2	125
11	Retention of Xenon in Quartz and Earth's Missing Xenon. Science, 2005, 310, 1174-1177.	12.6	99
12	OsN2: Crystal structure and electronic properties. Applied Physics Letters, 2007, 90, 011909.	3.3	87
13	In situ determination of Feâ€“Fe3S phase diagram and liquid structural properties up to 65ÂGPa. Earth and Planetary Science Letters, 2008, 272, 620-626.	4.4	85
14	Structure of eutectic Feâ€“FeS melts to pressures up to 17ÂGPa: Implications for planetary cores. Earth and Planetary Science Letters, 2007, 263, 128-139.	4.4	77
15	Thermal equation of state of cubic boron nitride: Implications for a high-temperature pressure scale. Physical Review B, 2007, 75, .	3.2	73
16	Effect of Si on liquid Fe compressibility: Implications for sound velocity in core materials. Geophysical Research Letters, 2004, 31, n/a-n/a.	4.0	71
17	Structural changes in liquid Fe at high pressures and high temperatures from Synchrotron X-ray Diffraction. Europhysics Letters, 2000, 52, 151-157.	2.0	69
18	High-pressure transformations in xenon hydrates. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 25-28.	7.1	66

#	Article	IF	Citations
19	Physical properties of liquid Fe alloys at high pressure and their bearings on the nature of metallic planetary cores. Journal of Geophysical Research, 2002, 107, ECV 4-1-ECV 4-9.	3.3	65
20	Closure of the Feâ€“Sâ€“Si liquid miscibility gap at high pressure. Physics of the Earth and Planetary Interiors, 2004, 147, 57-65.	1.9	63
21	Neutral buoyancy of titanium-rich melts in the deep lunar interior. Nature Geoscience, 2012, 5, 186-189.	12.9	58
22	Compressibility change in iron-rich melt and implications for core formation models. Earth and Planetary Science Letters, 2011, 306, 118-122.	4.4	56
23	Structure and density of molten fayalite at high pressure. Geochimica Et Cosmochimica Acta, 2013, 118, 118-128.	3.9	51
24	Optimization of Parisâ€“Edinburgh press cell assemblies for<i>in situ</i>monochromatic X-ray diffraction and X-ray absorption. High Pressure Research, 2007, 27, 223-233.	1.2	48
25	Dissociative melting of ice VII at high pressure. Journal of Chemical Physics, 2009, 130, 124514.	3.0	45
26	Structure of (Fe<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 482 Td (display xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow		

#	Article	IF	Citations
37	Viscosity of liquid fayalite up to 9 GPa. Geochimica Et Cosmochimica Acta, 2015, 148, 219-227.	3.9	26
38	Bromine speciation in hydrous silicate melts at high pressure. Chemical Geology, 2015, 404, 18-26.	3.3	26
39	Xenon and Argon: A contrasting behavior in olivine at depth. Geochimica Et Cosmochimica Acta, 2011, 75, 6271-6284.	3.9	25
40	Evidence for xenon silicates at high pressure and temperature. Geophysical Research Letters, 2002, 29, 30-1-30-4.	4.0	24
41	On the Ïµ-Î¶ transition of nitrogen. Journal of Chemical Physics, 2006, 124, 116102.	3.0	21
42	First-principles modeling of chlorine isotope fractionation between chloride-bearing molecules and minerals. Chemical Geology, 2019, 525, 424-434.	3.3	21
43	Properties of molten CaCO3 at high pressure. Geochemical Perspectives Letters, 0, , 17-21.	5.0	18
44	Calibration of a diamond capsule cell assembly for<i>in situ</i>determination of liquid properties in the Parisâ€"Edinburgh press. High Pressure Research, 2010, 30, 332-341.	1.2	14
45	New constraints on Xe incorporation mechanisms in olivine from first-principles calculations. Geochimica Et Cosmochimica Acta, 2018, 222, 146-155.	3.9	14
46	Lutetium incorporation in magmas at depth: Changes in melt local environment and the influence on partitioning behaviour. Earth and Planetary Science Letters, 2017, 464, 155-165.	4.4	13
47	Xenon and iodine behaviour in magmas. Earth and Planetary Science Letters, 2019, 522, 144-154.	4.4	10
48	Bonding of xenon to oxygen in magmas at depth. Earth and Planetary Science Letters, 2018, 484, 103-110.	4.4	9
49	The Xeâ€SiO 2 System at Moderate Pressure and High Temperature. Geochemistry, Geophysics, Geosystems, 2019, 20, 992-1003.	2.5	7
50	Amorpheus: a Python-based software for the treatment of X-ray scattering data of amorphous and liquid systems. High Pressure Research, 2022, 42, 69-93.	1.2	7
51	Kr environment in feldspathic glass and melt: A high pressure, high temperature X-ray absorption study. Chemical Geology, 2018, 493, 525-531.	3.3	6
52	Noble Gas Reactivity in Planetary Interiors. Frontiers in Physics, 2020, 8, .	2.1	6
53	Deep Earth carbon reactions through time and space. American Mineralogist, 2020, 105, 22-27.	1.9	5
54	Behaviour of niobium during early Earthâ€™s differentiation: insights from its local structure and oxidation state in silicate melts at high pressure. Journal of Physics Condensed Matter, 2018, 30, 084004.	1.8	4

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55	Polymerized 4-Fold Coordinated Carbonate Melts in the Deep Mantle. Frontiers in Earth Science, 2019, 7, .	1.8	3
56	High-pressure experimental geosciences: state of the art and prospects. Bulletin - Societie Geologique De France, 2012, 183, 175-187.	2.2	2
57	Amorphous Materials at High Pressure. NATO Science for Peace and Security Series B: Physics and Biophysics, 2010, , 459-468.	0.3	1
58	X-Ray Diffraction Structure Measurements. , 2018, , 137-153.		1
59	Probing of Structure Factor of Water to 57 GPa and 1500 K. Materials Research Society Symposia Proceedings, 2006, 987, 1.	0.1	0
60	The Deep Earth. Scottish Graduate Series, 2012, , 195-208.	0.1	0
61	Hadean isotopic fractionation of xenon retained in deep silicates. Nature, 2022, 606, 713-717.	27.8	0