Silvia Boccato

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/2688589/publications.pdf

Version: 2024-02-01

20 papers	366 citations	840585 11 h-index	794469 19 g-index
21 all docs	21 docs citations	21 times ranked	378 citing authors

#	Article	IF	Citations
1	Solving Controversies on the Iron Phase Diagram Under High Pressure. Geophysical Research Letters, 2018, 45, 11,074.	1.5	65
2	A Practical Review of the Laser-Heated Diamond Anvil Cell for University Laboratories and Synchrotron Applications. Crystals, 2020, 10, 459.	1.0	46
3	The Melting Curve of Nickel Up to 100ÂGPa Explored by XAS. Journal of Geophysical Research: Solid Earth, 2017, 122, 9921-9930.	1.4	35
4	Methodology for in situ synchrotron X-ray studies in the laser-heated diamond anvil cell. High Pressure Research, 2017, 37, 170-180.	0.4	34
5	Measurement of temperature in the laser heated diamond anvil cell: comparison between reflective and refractive optics. High Pressure Research, 2018, 38, 250-269.	0.4	24
6	Ferrous Iron Under Oxygenâ€Rich Conditions in the Deep Mantle. Geophysical Research Letters, 2019, 46, 1348-1356.	1.5	22
7	Laser-heating system for high-pressure X-ray diffraction at the Extreme Conditions beamline I15 at Diamond Light Source. Journal of Synchrotron Radiation, 2018, 25, 1860-1868.	1.0	21
8	Melting Curve and Phase Relations of Feâ€Ni Alloys: Implications for the Earth's Core Composition. Geophysical Research Letters, 2020, 47, e2020GL088169.	1.5	21
9	Experimental and theoretical evidence of the temperature-induced wurtzite to rocksalt phase transition in GaN under high pressure. Physical Review B, 2020, 102, .	1.1	15
10	Melting properties by X-ray absorption spectroscopy: common signatures in binary Feâ€“C, Feâ€“O, Feâ€“S and Feâ€“Si systems. Scientific Reports, 2020, 10, 11663.	1.6	13
11	The Fe-FeSi phase diagram at Mercuryâ€™s core conditions. Nature Communications, 2022, 13, 387.	5.8	13
12	Probing the local, electronic and magnetic structure of matter under extreme conditions of temperature and pressure. High Pressure Research, 2016, 36, 293-302.	0.4	10
13	Eutectic melting of Fe-3 at% Si-4 at% C up to 200 GPa and implications for the Earth's core. Earth and Planetary Science Letters, 2020, 544, 116382.	1.8	9
14	Thermal equation of state of ruthenium characterized by resistively heated diamond anvil cell. Scientific Reports, 2019, 9, 14459.	1.6	8
15	Compression of liquid Ni and Co under extreme conditions explored by x-ray absorption spectroscopy. Physical Review B, 2019, 100, .	1.1	8
16	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.	0.4	7
17	Thermal and magnetic anomalies ofÎ±-iron: an exploration by extended x-ray absorption fine structure spectroscopy and synchrotron x-ray diffraction. Journal of Physics Condensed Matter, 2016, 28, 355401.	0.7	5
18	Picosecond Acoustics Technique to Measure the Sound Velocities of Fe-Si Alloys and Si Single-Crystals at High Pressure. Minerals (Basel, Switzerland), 2020, 10, 214.	0.8	3

#	Article	IF	Citations
19	Picosecond acoustics: a new way to access elastic properties of materials at pressure and temperature conditions of planetary interiors. Physics and Chemistry of Minerals, 2022, 49, .	0.3	2
20	Determination of indium melting curve at high pressure by picosecond acoustics. Physical Review Materials, 2022, 6, .	0.9	1