Silvia Boccato

List of Publications by Year
in descending order

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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	The Fe-FeSi phase diagram at Mercuryâ€™s core conditions. Nature Communications, 2022, 13, 387.	5.8	13
2	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
3	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
4	Determination of indium melting curve at high pressure by picosecond acoustics. Physical Review Materials, 2022, 6, .	0.9	1
5	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
6	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
7	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
8	A Practical Review of the Laser-Heated Diamond Anvil Cell for University Laboratories and Synchrotron Applications. Crystals, 2020, 10, 459.	1.0	46
9	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
10	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
11	Thermal equation of state of ruthenium characterized by resistively heated diamond anvil cell. Scientific Reports, 2019, 9, 14459.	1.6	8
12	Compression of liquid Ni and Co under extreme conditions explored by x-ray absorption spectroscopy. Physical Review B, 2019, 100, .	1.1	8
13	Ferrous Iron Under Oxygenâ€Rich Conditions in the Deep Mantle. Geophysical Research Letters, 2019, 46, 1348-1356.	1.5	22
14	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
15	Solving Controversies on the Iron Phase Diagram Under High Pressure. Geophysical Research Letters, 2018, 45, 11,074.	1.5	65
16	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
17	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
18	The Melting Curve of Nickel Up to 100ÂGPa Explored by XAS. Journal of Geophysical Research: Solid Earth, 2017, 122, 9921-9930.	1.4	35

#	Article	IF	Citations
19	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
20	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