

Bibliometrical data: 45 peer-reviewed articles
total number of citation (ISI) 1100+ (7 papers cited 50+ times)
h-index : 22

among my articles: 2 Science (1 as first author), 3 PNAS (1 as first author), 5 Phys. Rev. Lett. (2 as first author), 2 Sci. Rep. (1 as first author), 8 Earth Planet. Sci. Lett. (3 as first author), 3 Geophys. Res. Lett (1 as first author), 8 Phys. Rev. B (2 as first author), 3 Appl. Phys. Lett. (1 as first author).

Publications in peer review journals

45) “*Structure and density of Fe-C liquid alloys under high pressure*” G. Morard, Y. Nakajima, D. Andrault, D. Antonangeli, A.L. Auzende, E. Boulard, S. Cervera, A. Clark, O.T. Lord, J. Siebert, V. Svitlyk, G. Garbarino, M. Mezouar, J. Geophys. Res. – Solid Earth (accepted).

44) “*Fe-FeO and Fe-Fe₃C melting relations at Earth's Core-Mantle Boundary conditions: implications for a volatile-rich or oxygen-rich core*”, G. Morard, D. Andrault, D. Antonangeli, Y. Nakajima, A.L. Auzende, E. Boulard, S. Cervera, A. Clark, O.T. Lord, J. Siebert, V. Svitlyk, G. Garbarino, M. Mezouar, Earth Planet. Sci. Lett. 473, 94 (2017).

43) “*Elasticity and Poisson's ratio of hexagonal close-packed hydrogen at high pressures*”, A.F. Goncharov, M. Gauthier, D. Antonangeli, S. Ayrinhac, F. Decremps, M. Morand, A. Grechnev, S.M. Tretyak, and Yu.A. Freiman, Phys. Rev. B 95, 214104 (2017).

42) “*Phonon triggered rhombohedral lattice distortion in vanadium at high pressure*”, D. Antonangeli, D.L. Farber, A. Bosak, C.M. Aracne, D.G. Ruddle, M. Krisch, Sci. Rep. 6, 31887 (2016).

41) “*Dynamical and elastic properties of MgSiO₃ perovskite (bridgmanite)*”, B. Wehinger, A. Bosak, S. Nazzareni, D. Antonangeli, A. Mirone, S.L. Chaplot, R. Mittal, E. Ohtani, A. Shatskiy, S. Saxena, S. Ghose, M. Krisch, Geophys. Res. Lett. 43, 2568 (2016).

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38) “*Toward a mineral physics reference model for the Moon's core*”, D. Antonangeli, G. Morard, N.C. Schmerr, T. Komabayashi, M. Krisch, G. Fiquet, Y. Fei, PNAS 112, 3916 (2015).

37) “*Sound velocity of hcp-Fe at high pressure: experimental constraints, extrapolations and comparison with seismic models*”, D. Antonangeli, E. Ohtani, Progress in Earth and Planetary Science 2:3 (2015).

36) “*Positive sound dispersion in vitreous GeO₂ at high pressure*”, F. Bencivenga, D. Antonangeli, Phys. Rev. B 90, 134310 (2014).

35) “*Properties of iron alloys under the Earth's core conditions*”, G. Morard, D. Andrault, D. Antonangeli, J. Bouchet, C. R. Geoscience 346, 130 (2014).

34) “*Sound velocity of iron up to 152 GPa by picosecond acoustics in diamond anvil cell*”, F. Decremps, D. Antonangeli, M. Gauthier, S. Ayrinhac, M. Morand, G. Le Marchand, F. Bergame, J. Philippe, Geophys. Res. Lett. 41, 1459 (2014).

33) “*Density measurements and structural properties of liquid and amorphous metals*

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27) “*Melting of Fe-Ni-Si and Fe-Ni-S alloys at megabar pressures: implications for the Core-Mantle Boundary temperature*”, G. Morard, D. Andrault, N. Guignot, J. Siebert, G. Garbarino, D. Antonangeli, Phys. Chem. Min. 38, 767 (2011).

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24) “*A new host for carbon in the deep Earth*”, E. Boulard, A. Gloter, A. Corgne, D. Antonangeli, A.L. Auzende, J.P. Perrillat, F. Guyot, G. Fiquet, PNAS 108, 5184 (2011).

23) “*Diffusionless $\gamma \leftrightarrow \alpha$ phase transition in poly- and single-crystalline cerium*”, F. Decremps, L. Belhadi, D.L. Farber, K.T. Moore, F. Occelli, M. Gauthier, A. Polian, D. Antonangeli, C.M. Aracne-Ruddle, B. Amadon, Phys. Rev. Lett. 106, 065701 (2011).

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17) “*Role of lattice in the two-steps evolution of γ -cerium under pressure*”, F. Decremps, D. Antonangeli, B. Amadon, G. Schmerber, Phys. Rev. B 80, 132103 (2009).

- 16) “*3D-imaging of the Fermi surface by thermal diffuse scattering*”, A. Bosak, M. Hoesch, M. Krisch, D. Chernishov, P. Pattinson, C. Schulze-Briese, B. Winkler, V. Milman, K. Refson, D. Antonangeli, D. Farber, Phys. Rev. Lett. 103, 076403 (2009).
- 15) “*Lattice dynamics of vanadium: inelastic x-ray scattering measurements*”, A. Bosak, M. Hoesch, D. Antonangeli, D.L. Farber, I. Fischer, M. Krisch, Phys. Rev. B 78, 020301(R) (2008).
- 14) “*An integrated method to determine melting temperature in high pressure laser heating experiments*”, L.R. Benedetti, D. Antonangeli, D.L. Farber, M. Mezouar, Appl. Phys. Lett. 92, 141903 (2008).
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- 11) “*Effect of light elements on the sound velocities in solid iron: implications for the composition of Earth’s core*”, J. Badro, G. Fiquet, F. Guyot, E. Gregoryanz, F. Occelli, D. Antonangeli, M. d’Astuto, Earth Planet. Sci. Lett. 254, 233 (2007).
- 10) “*Elastic anisotropy in hcp metals at high pressure and the sound wave anisotropy of the Earth’s inner core*”, D. Antonangeli, S. Merkel, D.L. Farber, Geophys. Res. Lett. 33, L24303 (2006).
- 9) “*Determination of the high-pressure elasticity of cobalt from measured interfacial acoustic wave velocity*”, J.C. Crowhurst, D. Antonangeli, J.M. Brown, A.F. Goncharov, D.L. Farber, C.M. Aracne, Appl. Phys. Lett. 89, 111920 (2006).
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- 2) “*Application of inelastic x-ray scattering to the measurements of acoustic wave velocities in geophysical materials at very high pressure*”, G. Fiquet, J. Badro, F. Guyot, Ch. Bellin, M. Krisch, D. Antonangeli, H. Requardt, A. Mermet, D.L. Farber, C.M. Aracne-Ruddle, J. Zhang, Phys. Earth Planet. Inter. 143-144, 5 (2004).
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- ◆ “*Physical properties of the inner core*” in “*Deep Earth: Physics and Chemistry of the Lower Mantle and Core*” eds. H. Terasaki and R. Fischer, Geophysical Monograph 217, AGU/Wiley (2016).

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- ◆ “*The core of the moon revealed by synchrotron experiments*”, D. Antonangeli et al., ESRF Highlights 2015.
- ◆ “*Science under extreme conditions of pressures and temperatures at the ESRF*”, D. Andrault et al., Synchrotron Radiation News 26, 39 (2013).
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- ◆ “*Lattice dynamics of cerium metal across the γ - α transition*”, M. Krisch et al., ESRF Highlights 2011.
- ◆ “*New host for carbon in the deep Earth*”, E. Boulard et al., ESRF Highlights 2011.
- ◆ “*Suppression of ferromagnetism in compressed 3d metals*”, R. Torchio et al., ESRF Highlights 2011.
- ◆ “*Composition of the Earth’s inner core from high-pressure sound velocity measurements in Fe-Ni-Si alloys*”, D. Antonangeli et al., ESRF Highlights 2010.
- ◆ “*3D imaging of the Fermi surface by thermal diffuse scattering*”, A. Bosak et al., ESRF Highlights 2008.
- ◆ “*Pressure dependence of phonon anomalies in molybdenum*”, D.L. Farber et al., ESRF Highlights 2006.
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