

Cours no 4 - 2012 - Références bibliographiques

- Andrault, D., M. Munoz et al. (2010) Experimental evidence for perovskite and post-perovskite coexistence throughout the whole D'' region, *Earth Planet. Sci. Lett.*, 293, 90-96.
- Catalli, K., Shim, S.H., Prakapenka, V.B., 2009. Thickness and Clapeyron slope of the post-perovskite boundary, *Nature* 462, 782–U101.
- Ekström, G., Tromp, J. & Larson, E.W.F., 1997. Measurements and global models of surface wave propagation, *J. geophys. Res.*, **102**, 8137–8157.
- Grocholski, B., K. Catalli, S. Shim and V. Prapenka (2012) Mineralogical effects on the detectability of the postperovskite boundary, *Proc. Nat. Acad. Sci.*, 109, 2275-2279.
- Hernlund, J.W., Thomas, C., Tackley, P.J., 2005. A doubling of the post-perovskite phase boundary and structure of the Earth's lowermost mantle. *Nature* 434, 882–886.
- Kawai, K., Geller, R.J., 2010. The vertical flow in the lowermost mantle beneath the Pacific from inversion of seismic waveforms for anisotropic structure. *Earth Planet. Sci. Lett.* 297, 190–198.
- Lay, T. and E. Garnero (2007) Reconciling the Post-Perovskite Phase With Seismological Observations of Lowermost Mantle Structure, in *The Last Mantle Phase Transition*. *Geophys. Monogr.*, vol. 174. American Geophysical Union, Washington, DC, pp. 129–154.
- Lekic, V., S. Cottaar, A. Dziewonski and B. Romanowicz (2012) Cluster analysis of global lower mantle tomography: a new class of structure and implications for chemical heterogeneity *Earth. Planet. Sci. Lett.*, *in press*
- Montagner, J. P. (2002) Upper mantle low anisotropy channels below the Pacific Plate, *Earth Planet. Sci. Lett.*, 202, 263-274.
- Nowacki et al. (2011) New advances in using seismic anisotropy, mineral physics and geodynamics to understand deformation in the lowermost mantle, *J. Geodynamics*, 52, 208-225.
- Ohta, K., Hirose, K., Lay, T., Sata, N., Ohishi, Y., 2008. Phase transitions in pyrolite and MORB at lowermost mantle conditions: Implications for a MORB-rich pile above the core–mantle boundary. *Earth Planet. Sci. Lett.* 267, 107–117.
- Panning, M., Romanowicz, B., 2004. Inferences on flow at the base of Earth's mantle based on seismic anisotropy. *Science* 303, 351–353.

Panning, M., Romanowicz, B., 2006. A three-dimensional radially anisotropic model of shear velocity in the whole mantle. *Geophys. J. Int.* 167, 361–379.

Tateno, S. K. Hirose, N. Sata, Y. Ohishi (2009) Determination of post-perovskite phase transition boundary up to 4400 K and implications for thermal structure in D'' layer, *Earth Planet. Sci. Lett.*, 277, 130-136.

Vinnik, L. P., V. Farra, and B. Romanowicz (1989) Azimuthal anisotropy in the earth from observations of SKS at Geoscope and Nars broadband stations, *Bull. Seism. Soc. Am.*, 79(5), 1542-1558.

Vinnik, L., B. Romanowicz, Y. Le Stunff, and L. Makeyeva (1995) Seismic anisotropy in the D'' layer, *Geophys. Res. Lett.*, 22(13), 1657-1660.

Wookey, J., Kendall, J.M., 2007. Seismic anisotropy of post-perovskite and the lowermost mantle. In: Hirose, K., Brodholt, J., Lay, T., Yuen, D.A. (Eds.), *Post-Perovskite: The Last Mantle Phase Transition*. Geophysical Monograph 174, American Geophysical Union, Washington, D.C., USA, pp. 171–189.

Wookey, J., Stackhouse, S., Kendall, J.M., Brodholt, J., Price, G.D., 2005b. Efficacy of the post-perovskite phase as an explanation for lowermost-mantle seismic properties. *Nature* 438, 1004–1007.

Wysession, M.E., Lay, T., Revenaugh, J., Williams, Q., Garnero, E.J., Jeanloz, R., Kellogg, L., 1998. The D₄ discontinuity and its implications. In: Gurnis, M., Wysession, M.E., Knittle, E., Buffett, B.A. (Eds.), *The Core–Mantle Boundary Region*. Geodynamics Series, 28. American Geophysical Union, Washington, D.C., USA, pp. 273–298.