

## СПИСОК ЛИТЕРАТУРЫ

1. Яновская Т.Б., Кожевников В.М. Анизотропия верхней мантии Азиатского континента по групповым скоростям волн Рэлея и Лява // Геология и геофизика. 2006. Т. 47, № 5. С. 622–629.
2. Becker T.W., Kellogg J.B., Ekstrom G., O'Connell R.J. Comparison of azimuthal seismic anisotropy from surface waves and finite-strain from global mantle-circulation models // Geophys. J. Int. 2003. V. 155. P. 696–714.
3. Becker T.W., Lebedev S., Long M.D. On the relationship between azimuthal anisotropy from shear splitting and surface wave tomography // J. Geophys. Res. 2012. V. 117. B01306. doi:10.1029/2011JB008705.
4. Bowman J.R., Ando M. Shear-wave splitting in the upper-mantle wedge above the Tonga subduction zone // Geophys. J. RAS. 1987. V. 88. P. 25–41.
5. Cordier P., Ungar T., Zsoldos L., Tichy G. Dislocation creep in MgSiO<sub>3</sub> perovskite at conditions of the Earth's uppermost lower mantle // Nature. 2004. N. 428. P. 837–840.
6. Chen W.P., Brudzinski M.R. Seismic anisotropy in the mantle transition zone beneath Fiji-Tonga // Geophys. Res. Lett. 2003. V. 30, N. 13. P. 1682. doi:10.1029/2002GL016330.
7. Crotwell H.P., Owens T.J., Ritsema J. The TauP toolkit: Flexible seismic travel-time and raypath utilities // Seismol. Res. Lett. 1999. V. 70. P. 154–17.
8. Jiang G., Zhao D., Zhang G. Detection of metastable olivine wedge in the western Pacific slab and its geodynamic implications // Phys. Earth Planet. Inter. 2015. V. 238. P. 1–7.
9. Faccenda M. Mid mantle seismic anisotropy around subduction zones // Phys. Earth. Planet. Inter. 2014. V. 227. P. 1–19.
10. Foley B. J., Long M. D. Upper and mid-mantle anisotropy beneath the Tonga slab // Geophys. Res. Lett. 2011. V. 38. L02303. doi:10.1029/2010GL046021.
11. Fukao Y., S. Widjiantoro S., Obayashi M. Stagnant slabs in the upper and lower mantle transition region // Rev. Geophys. 2001. V. 39. P. 291–323.
12. Karato S., Jung H., Katayama I., Skemer P. Geodynamic significance of seismic anisotropy of the upper mantle: new insight from laboratory study // Ann. Rev. Earth. Planet. Sci. 2008. V. 36. P. 59–95.
13. Kawazoe T., Ohuchi T., Nishihara Y., Nishiyama N., Fujino K., Irifune T. Seismic anisotropy in the mantle transition zone induced by shear deformation of wadsleyite // Phys. Earth. Planet. Inter. 2013. V. 216. P. 91–98.
14. Kennett B.L.N., Engdahl E.R. Travel times for global earthquake location and phase identification // Geophys. J. Int. 1991. V. 105. P. 429–465.
15. Kneller E.A., van Keken P.E. The effects of three-dimensional slab geometry on deformation in the mantle wedge: Implications for shear wave anisotropy // Geochem. Geophys. Geosyst. 2008. V. 9, N 1. Q01003. doi:10.1029/2007GC001677.
16. Kustowski B., Ekstrom G., Dziewonski A.M. Anisotropic shear-wave velocity structure of the Earth's mantle: A global model // J. Geophys. Res. 2008. V. 113. doi:10.1029/2007JB005169.
17. Lebedev S., van der Hilst R.D. Global upper-mantle tomography with the automated multimode inversion of surface and S-wave forms // Geophys. J. Int. 2008. V. 173. P. 505–518.
18. Li C., van der Hilst R. D. Structure of the upper mantle and transition zone beneath Southeast Asia from travelttime tomography // J. Geophys. Res. 2010. V. 115. B07308. doi:10.1029/2009JB006882.
19. Liu K.H., Gao S.S., Gao Y., Wu J. Shear wave splitting and mantle flow associated with the deflected Pacific slab beneath northeast Asia // J. Geophys. Res. 2008. V. 113. B01305. doi:10.1029/2007JB005178.
20. Liu X.Q., Zhou H. K., Li H. S. Anisotropy of the upper mantle in Chinese mainland and its vicinity // Acta Seismological Sinica. 2001. V. 14, N. 4. P. 359–370.
21. Mainprice D. Seismic anisotropy of the deep Earth from a mineral and rock physics perspective / Schubert G. (ed.) // Treatise on geophysics. Elsevier. Oxford. 2007. V. 2. P. 437–492.
22. Mainprice D., Tommasi A., Ferte D., Carrez P., Cordier P. Predicted glide system and crystal preferred orientations of polycrystalline silicate Mg-perovskite at high-pressure: implications for the seismic anisotropy in the lower mantle // Earth Planet. Sci. Lett. 2008. V. 271. P. 135–144.
23. Miyagi L., Amulele G., Otsuka K., Du Z., Farla R., Karato S.I. Plastic anisotropy and slip systems in ringwoodite deformed to high shear strain in the Rotational Drickamer Apparatus // Physics Earth Planet. Inter. 2014. V. 228. P. 244–253.
24. Montagner J.P., Nataf H.C. A simple method for inverting the azimuthal anisotropy of surface waves // J. Geophys. Res. 1986. V. 91. P. 511–520.
25. Murakami M. K., Hirose K., Kawamura K., Sata N., Ohishi Y. Post-perovskite phase transition in MgSiO<sub>3</sub> // Science. 2004. N 304. P. 855–858.
26. NEIC, <http://earthquake.usgs.gov/regional/neic>, United States Geological Survey, USA.
27. Oganov A.R., Ono S. Theoretical and experimental evidence for a post-perovskite phase of MgSiO<sub>3</sub> in the Earth's D'' layer // Nature. 2004. V. 430. P. 445–448.

28. Panning M., Romanowicz B. A three-dimensional radially anisotropic model of shear velocity in the whole mantle // *Geophys. J. Int.* 2006. V. 167. P. 361–379.
29. Sandvol E., Hearn T. Bootstrapping shear-wave splitting errors // *Bull. Seismol. Soc.* 1994. V. 84. P. 1971–1977.
30. Shim S.H., Duffy T.S., Jeanloz R., Shen G. Stability and crystal structure of  $\text{MgSiO}_3$  perovskite to the core-mantle boundary // *Geophys. Res. Lett.* 2004. V. 31. L10603. doi:10.1029/2004GL019639.
31. Silver P., Chan W. Shear wave splitting and subcontinental mantle deformation // *J. Geophys. Res.* 1991. V. 96, N 10. P. 16429–16454.
32. Thurel E., Douin J., Cordier P. Plastic deformation of wadsleyite: III. Interpretation of dislocations and slip systems // *Phys. Chem. Miner.* 2003. V. 30. P. 271–279.
33. Tommasi A., Mainprice D., Cordier P., Thoraval C., Couvy H. Strain-induced seismic anisotropy of wadsleyite polycrystals and flow patterns in the mantle transition zone // *J. Geophys. Res.* 2004. V. 109. B12405. doi:10.1029/2004JB003158.
34. Vaucher A., Tommasi A., Mainprice D. Fault (shear zone) in the Earth's mantle // *Tectonophysics.* 2012. V. 558–559. P. 1–27.
35. Vecsey L., Plomerova J., Babuska V. Shear-wave splitting measurements-problems and solutions // *Tectonophysics.* 2008. V. 462. P. 178–196.
36. Vinnik L.P., Romanowicz B., Stunff Y.L., Makeyeva L. Seismic anisotropy in the D" layer // *Geophys. Res. Lett.* 1995. V. 22. P. 1657–1660.
37. Wenk H.R., Lonardelli I., Pehl J., Prakapenka V., Shen G., Mao H.K. In situ observation of texture development in olivine, ringwoodite, magnesiowuestite and silicate perovskite at high pressure // *Earth Planet. Sci. Lett.* 2004. V. 226. P. 507–519.
38. Wookey J., Kendall J.M., Rümpker G. Lowermost mantle anisotropy beneath the North Pacific from differential S–ScS splitting // *Geophys. J. Int.* 2005. N 161. P. 829–838.
39. Wookey J., Kendall J.M. Seismic anisotropy of post-perovskite and the lowermost mantle / K. Hirose et al. (Eds.), Post-perovskite: the last mantle phase transition // *Am. Geophys. Union.* 2007. P. 171–189.
40. Wüstefeld A., Bokelmann G., Zaroli C., Barruol G. Splitlab: A shear-wave splitting environment in matlab // *Comput. Geosci.* 2008. V. 34. P. 515–528. doi:10.1016/j.cageo.2007.08.002.
41. Zhao L., Zheng T. Using shear wave splitting measurements to investigate the upper mantle anisotropy beneath the North China Craton: Distinct variation from east to west // *Geophys. Res. Lett.* 2005. V. 32. L10309. doi:10.1029/2005GL022585.
42. Zhao D., Ohtani E. Deep slab subduction and dehydration and their geodynamic consequences: Evidence from seismology and mineral physics // *Gondwana Res.* 2009. V. 16. P. 401–413.