

BARBARA ROMANOWICZ

Publications

1. Romanowicz, B., and K. Lambeck (1977) The mass and moment of inertia of the Earth, *Phys. Earth Planet. Inter.*, 15(1), 1-4.
2. Dziewonski, A. M., and B. Romanowicz (1977) An exact solution to the problem of excitation of normal modes by a propagating fault, Lincoln Lab., MIT, Semi-annual Report.
3. Romanowicz, B. (1979) Seismic structure of the upper mantle beneath the United States by three-dimensional inversion of body wave arrival times, *Geophys. J. R. astr. Soc.*, 57(2), 479-506.
4. Poirier, J. P., B. A. Romanowicz, and M. A. Taher (1980) Large historical earthquakes and seismic risk in Northwest Syria, *Nature*, 285(5762), 217-220.
5. Romanowicz, B. A. (1980) A study of large-scale lateral variations of P velocity in the upper mantle beneath Western Europe, *Geophys. J. R. astr. Soc.*, 6(1), 217-232.
6. Romanowicz, B. A. (1980) Large scale three dimensional P velocity structure beneath the Western U.S. and the lost Farallon Plate, *Geophys. Res. Lett.*, 7(5), 345-348.
7. Romanowicz, B. A., and M. Cara (1980) Reconsideration of the relations between S and P station anomalies in North America, *Geophys. Res. Lett.*, 7(6), 417-420.
8. Romanowicz, B. (1981) Depth resolution of earthquakes in Central Asia by moment tensor inversion of long-period Rayleigh waves: effects of phase velocity variations across Eurasia and their calibration, *J. Geophys. Res.*, 86(7), 5963-5984.
9. Romanowicz, B. A. (1982) Constraints on the structure of the Tibet Plateau from pure path phase velocities of Love and Rayleigh waves, *J. Geophys. Res.*, 87(8), 6865-6883.
10. Romanowicz, B. A. (1982) Moment tensor inversion of long-period Rayleigh waves: a new approach, *J. Geophys. Res.*, 87(7), 5395-5407.
11. Romanowicz, B. A. (1982) Lateral heterogeneity in continents: moment-tensor inversion of long-period surface waves and depth resolution of crustal events: body-wave modeling and phase-velocity calibrations, *Phys. Earth Planet. Inter.*, 30(2-3), 269-271.
12. Romanowicz, B. (1983) Inversion of surface waves, Il nuovo Ciminto, Proceedings of the International School of Physics "Enrico Fermi", Earthquakes: Observation, Theory and Interpretation, H. Kanamori and E. Boschi, eds.
13. Romanowicz, B., and G. Suarez (1983) On an improved method to obtain the moment tensor and depth of earthquakes from the amplitude spectrum of Rayleigh waves, *Bull. Seism. Soc. Am.*, 73(6), 1513-1526.
14. Romanowicz, B. A. (1984) Pure path attenuation measurements of long-period Rayleigh waves across the Tibet Plateau, *Phys. Earth Planet. Inter.*, 36(2), 116-123.
15. Romanowicz, B. A., M. Cara, J. F. Fels, and D. Rouland (1984) Geoscope: a French initiative in long-period three-component seismic networks, *Eos Trans. AGU*, 65(42), 753-754.
16. Romanowicz, B., and P. Guillemant (1984) An experiment in the retrieval of depth and source mechanism of large earthquakes using very long-period Rayleigh wave data, *Bull. Seism. Soc. Am.*, 74(2), 417-437.
17. Roullet, G., and B. Romanowicz (1984) Very long-period data from the GEOSCOPE network: preliminary results on great circle averages of fundamental and higher Rayleigh and Love modes, *Bull. Seism. Soc. Am.*, 74(6), 2221-2243.
18. Brandon, C., and B. Romanowicz (1986) A "no-lid" zone in the central Chang-Thang platform of Tibet: evidence from pure path phase velocity measurements of long period Rayleigh waves, *J. Geophys. Res.*, 91(B6), 6547-6564.
19. Hadiouche, O., N. Jobert, and B. Romanowicz (1986) First two-station results for long-period surface waves velocity from the GEOSCOPE stations in Africa, *Geophys. Res. Lett.*, 13(6), 547-550.
20. Monfret, T., and B. Romanowicz (1986) Importance of onscale observations of first arriving Rayleigh wave trains for source studies: example of the Chilean event of March 3, 1985, observed on the GEOSCOPE and IDA networks, *Geophys. Res. Lett.*, 13(10), 1015-1018.
21. Nolet, G., B. Romanowicz, E. Wielandt, and R. Kind (1986) ORFEUS Science Plan, Reidel Publ. Co.

22. Romanowicz, B. A., and A. M. Dziewonski (1986) Towards a federation of broadband seismic networks, *Eos Trans. AGU*, 67, 541-542.
23. Romanowicz, B., and T. Monfret (1986) Source process times of large earthquakes by moment tensor inversion for mantle wave data and the effect of lateral heterogeneity, *Ann. Geophys.*, 4, B, 3, 271-283.
24. Romanowicz, B., and G. Roullet (1986) First-order asymptotics for the eigenfrequencies of the Earth and application to the retrieval of large-scale lateral variations of structure, *Geophys. J. R. astr. Soc.*, 87(1), 209-239.
25. Roullet, G., B. Romanowicz and N. Jobert (1986) Observations of departures from classical approximations on very long-period GEOSCOPE records, *Ann. Geophys. Series B*, 4 B3, 241-250.
26. Romanowicz, B. (1987) Multiplet-multiplet coupling due to lateral heterogeneity: asymptotic effects on the amplitude and frequency of the Earth's normal modes, *Geophys. J. R. astr. Soc.*, 90(1), 75-100.
27. Romanowicz, B., and A. M. Dziewonski (1987) Global digital seismographic network: research opportunities and recent initiatives, in *Composition, Structure and Dynamics of the Lithosphere-asthenosphere system*, C. Fuchs, C. Froidevaux, eds., AGU, Public., Geodynamics series, Vol. 16, 99-110.
28. Romanowicz, B., G. Roullet, and T. Kohl (1987) The upper mantle degree two pattern: constraints from Geoscope fundamental spheroidal mode eigenfrequency and attenuation measurements, *Geophys. Res. Lett.*, 14(12), 1219-1222.
29. Romanowicz, B., and G. Roullet (1988) Asymptotic approximations for normal modes and surface waves in the vicinity of the antipode: constraints on global earth models, *J. Geophys. Res.*, 93(B7), 7885-7896.
30. Romanowicz, B., and R. Snieder (1988) A new formalism for the effect of lateral heterogeneity on normal modes and surface waves: II, General anisotropic perturbation, *Geophys. J. R. astr. Soc.*, 93(1), 91-99.
31. Snieder, R., and B. Romanowicz (1988) A new formalism for the effect of lateral heterogeneity on normal modes and surface waves: I, Isotropic perturbations, perturbations of interfaces and gravitational perturbations, *Geophys. J. R. astr. Soc.*, 92(2), 207-222.
32. Cisternas, A., H. Philip, J. C. Bousquet, M. Cara, A. Deschamps, L. Dorbath, C. Dorbath, H. Haessler, E. Jimenez, A. Nercessian, L. Rivera, B. Romanowicz, et al. (1989) The Spitak (Armenia) earthquake of December 7, 1988: field observations, seismology and tectonics, *Nature*, 339(6227), 675-679.
33. Mocquet, A., B. Romanowicz, and J. P. Montagner (1989) Three-dimensional structure of the upper mantle beneath the Atlantic Ocean inferred from long-period Rayleigh waves: 1. Group and phase velocity distributions, *J. Geophys. Res.*, 94(B6), 7449-7468.
34. Neele, F., P. Lognonné, B. Romanowicz, and R. Snieder (1989) Effect of sharp lateral heterogeneity on the Earth's normal modes, *Geophys. Res. Lett.*, 16(5), 397-400.
35. 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.
36. Vinnik, L. P., V. Farra, and B. Romanowicz (1989) Observational evidence for diffracted SV in the shadow of the Earth's core, *Geophys. Res. Lett.*, 16(6), 519-522.
37. Ekström, G., and B. Romanowicz (1990) The 23 May 1989 Macquarie ridge earthquake: a very broad band analysis, *Geophys. Res. Lett.*, 17(7), 993-996.
38. Lognonné, P., and B. Romanowicz (1990a) Modelling of coupled normal modes of the Earth: the spectral method, *Geophys. J. Int.*, 102(2), 365-395.
39. Lognonné, P., and B. Romanowicz (1990b) Effect of a global plume distribution on Earth normal modes, *Geophys. Res. Lett.*, 17(10), 1493-1496.
40. Mocquet, A., and B. Romanowicz (1990) Three-dimensional structure of the upper mantle beneath the Atlantic Ocean inferred from long-period Rayleigh waves: 2. Inversion, *J. Geophys. Res.*, 95(B5), 6787-6798.
41. Monfret, T., A. Deschamps, and B. Romanowicz (1990) The Romanian earthquake of August 30, 1986: a study based on GEOSCOPE very long-period and broadband data, *Pure Appl. Geophys.*,

133(2), 367-379.

42. Romanowicz, B. (1990) Asymptotic Theory of Normal Modes and Surface Waves, in *Oceanographic and Geophysical Tomography*, pp. 134-158, Y. Desaubies, A. Tarantola, eds., Elsevier.
43. Romanowicz, B. (1990) The upper mantle degree two: constraints and inferences from global mantle wave attenuation measurements, *J. Geophys. Res.*, 95(B7), 11,051-11,071.
44. Romanowicz, B., and H. Lyon-Caen (1990) The Loma Prieta earthquake of October 18, 1989: results of teleseismic mantle and body wave inversion, *Geophys. Res. Lett.*, 17(8), 1191-1194.
45. Roullet, G., B. Romanowicz, and J. P. Montagner (1990) 3-D upper mantle shear velocity and attenuation from fundamental mode free oscillation data, *Geophys. J. Int.*, 101(1), 61-80.
46. Bernard, P., J. F. Karczewski, M. Morand, B. Dole, and B. Romanowicz (1991) The G-Calibration: a new method for an absolute in situ calibration of long-period accelerometers, tested on the Streckeisen instruments of the GEOSCOPE network, *Bull. Seism. Soc. Am.*, 81(4), 1360-1372.
47. Farra, V., L. P. Vinnik, B. Romanowicz, G. L. Kosarev, and R. Kind (1991) Inversion of teleseismic S particle motion for azimuthal anisotropy in the upper mantle: a feasibility study, *Geophys. J. Int.*, 106(2), 421-431.
48. Gaulon, R., J. Chorowicz, B. Romanowicz et al. (1991) The south Sudan earthquakes of May-July 1990: evidence of an active intracontinental transform zone, *C.R.Acad. Sci., Serie II*, 312, 377-384.
49. Romanowicz, B. (1991) Seismic tomography of the Earth's mantle, *Ann. Rev. Earth Planet. Sci.*, 19, 77-99.
50. Romanowicz, B., L. Gee, and R. Uhrhammer (1991) Berkeley Digital Seismic Network: a broadband network for northern and central California, *IRIS Newsletter*, XI(1), 1-5.
51. Romanowicz, B., J. F. Karczewski, M. Cara, P. Bernard, J. Borsenberger, J.-M. Cantin, B. Dole, D. Fouassier, J.-C. Koenig, M. Morand, R. Pillet, A. Pyrolley, and D. Rouland (1991) The Geoscope program: present status and perspectives, *Bull. Seism. Soc. Am.*, 81(1), 243-264.
52. Vinnik, L. P., and B. Romanowicz (1991) Origin of precursors to teleseismic S waves, *Bull. Seism. Soc. Am.*, 81(4), 1216-1230.
53. Bourjot, L., and B. Romanowicz (1992) Crust and upper mantle tomography in Tibet using surface waves, *Geophys. Res. Lett.*, 19(9), 881-884.
54. Gaulon, R., J. Chorowicz, G. Vidal, B. Romanowicz, and G. Roullet (1992) Regional geodynamic implications of the May-July 1990 earthquake sequence in southern Sudan, *Tectonophysics*, 209(1-4), 87-103.
55. Romanowicz, B. (1992) Strike-slip earthquakes on Quasi-Vertical transcurrent faults: inferences for general scaling relations, *Geophys. Res. Lett.*, 19(5), 481-484.
56. Bussy, M., J.-P. Montagner, and B. Romanowicz (1993) Tomographic study of upper mantle attenuation in the Pacific Ocean, *Geophys. Res. Lett.*, 20(8), 663-666.
57. Montagner, J.-P., and B. Romanowicz (1993) Degrees 2-4-6 inferred from seismic tomography, *Geophys. Res. Lett.*, 20(7), 631-634.
58. Oppenheimer, D., G. Beroza, G. Carver, L. Dengler, L. Gee, B. Romanowicz, et al. (1993) The Cape Mendocino, California, earthquakes of April 1992: Subduction at the triple junction, *Science*, 261(5120), 433-438.
59. Romanowicz, B. (1993) Spatiotemporal patterns in the energy release of great earthquakes, *Science*, 260(5116), 1923-1926.
60. Romanowicz, B., D. Dreger, M. Pasyanos, and R. Uhrhammer (1993) Monitoring of strain release in central and northern California using broadband data, *Geophys. Res. Lett.*, 20(15), 1643-1646.
61. Romanowicz, B., and J. Rundle (1993) On scaling relations for large earthquakes, *Bull. Seism. Soc. Am.*, 83(4), 1294-1297.
62. Dreger, D., and B. Romanowicz (1994) Source characteristics of events in the San Francisco Bay region, in *USGS Open-file report no. 94-176*, 301-309.
63. Montagner, J. P., J. F. Karczewski, B. Romanowicz, et al. (1994) The French pilot experiment OFM-SISMOBS: first scientific results on noise level and event detection, *Phys. Earth Planet. Inter.*, 84(1-4), 321-336.

64. Montagner, J. P., B. Romanowicz, and J. F. Karczewski (1994) A first step toward an Oceanic Geophysical Observatory, *Eos Trans. AGU*, 75(13), 150-151, 154.
65. Okal, E. A., and B. A. Romanowicz (1994) On the variation of *b*-values with earthquake size, *Phys. Earth Planet. Inter.*, 87(1-2), 55-76.
66. Romanowicz B. (1994) Anelastic tomography: a new perspective on upper mantle thermal structure, *Earth Planet. Sci. Lett.*, 128, 113-121.
67. Romanowicz, B. (1994) On the measurement of anelastic attenuation using amplitudes of low-frequency surface waves, *Phys. Earth Planet. Inter.*, 84(1-4), 179-191.
68. Romanowicz, B. (1994) Comments on: "A reappraisal of large earthquake scaling" by C. Scholz, *Bull. Seism. Soc. Am.*, 84(5), 1675-1676.
69. Romanowicz, B., D. Neuhauser, B. Bogaert, and D. Oppenheimer (1994) Accessing Northern California Earthquake Data Via Internet, *Eos Trans. AGU*, 75(23), 257, 259-260.
70. Romanowicz B., and J. Rundle (1994) Reply to comments on "On scaling relations for large earthquakes" by Sornette and Sornette, *Bull. Seism. Soc. Am.*, 84(5), 1684.
71. Vinnik, L., B. Romanowicz, and L. Breger (1994) Anisotropy in the center of the inner core, *Geophys. Res. Lett.*, 21(16), 1671-1674.
72. Kuo, C., H. J. Crawford, R. Jeanloz, B. Romanowicz, G. Shapiro, and M. L. Stevenson (1995) Extraterrestrial neutrinos and Earth structure, *Earth Planet. Sci. Lett.*, 133(1-2), 95-103.
73. Le Stunff, Y., C. W. Wicks, and B. Romanowicz (1995) P'P' precursors under Africa: evidence for mid-mantle reflectors, *Science*, 270(5233), 74-77.
74. Li, X.-D., and B. Romanowicz (1995) Comparison of global waveform inversions with and without considering cross-branch modal coupling, *Geophys. J. Int.*, 121(3), 695-709.
75. Romanowicz, B. (1995) A global tomographic model of shear attenuation in the upper mantle, *J. Geophys. Res.*, 100(B7), 12,375-12,394.
76. Vinnik, L., B. Romanowicz, Y. Le Stunff, and L. Makeyeva (1995) Seismic anisotropy in the D" layer, *Geophys. Res. Lett.*, 22(13), 1657-1660.
77. Antolik, M., D. Dreger, and B. Romanowicz (1996) Finite fault source study of the great 1994 deep Bolivia earthquake, *Geophys. Res. Lett.*, 23(13), 1589-1592.
78. Gee, L. S., D. S. Neuhauser, D. S. Dreger, M. E. Pasyanos, R. A. Uhrhammer, and B. Romanowicz (1996) Real-time seismology at UC Berkeley: The Rapid Earthquake Data Integration Project, *Bull. Seism. Soc. Am.*, 86(4), 936-945.
79. Li, X.-D., and B. Romanowicz (1996) Global mantle shear velocity model developed using nonlinear asymptotic coupling theory, *J. Geophys. Res.*, 101(B10), 22,245-22,272.
80. Pasyanos, M. E., D. S. Dreger, and B. Romanowicz (1996) Towards real-time estimation of regional moment tensors, *Bull. Seism. Soc. Am.*, 86(5), 1255-1269.
81. Romanowicz, B., X.-D. Li, and J. Durek (1996) Anisotropy in the inner core: could it be due to low-order convection?, *Science*, 274(5289), 963-966.
82. Souriau, A., and B. Romanowicz (1996) Anisotropy in inner core attenuation: a new type of data to constrain the nature of the solid core, *Geophys. Res. Lett.*, 23(1), 1-4.
83. Uhrhammer, R. A., S. J. Loper, and B. Romanowicz (1996) Determination of local magnitude using BDSN broadband records, *Bull. Seism. Soc. Am.*, 86(5), 1314-1330.
84. Jeanloz R., and B. Romanowicz (1997) Geophysical dynamics at the center of the Earth, *Physics Today*, 50(8), 22-27.
85. Mégnin, C., H. P. Bunge, B. Romanowicz, and M. A. Richards (1997) Imaging 3-D spherical convection models: what can seismic tomography tell us about mantle dynamics?, *Geophys. Res. Lett.*, 24(11), 1299-1302.
86. Romanowicz, B., L. Gee, M. Murray, D. Neuhauser, and R. Uhrhammer (1997) Real time access to multiparameter geophysical observatories in northern California, *IRIS Newsletter*, XVI(1), 6-8.
87. Souriau, A., and B. Romanowicz (1997) Anisotropy in the inner core: relation between P-velocity and attenuation, *Phys. Earth Planet. Inter.*, 101(1-2), 33-47.
88. Bréger, L., and B. Romanowicz (1998) Three-dimensional structure at the base of the mantle beneath the central Pacific, *Science*, 282(5389), 718-720.
89. Bréger, L., B. Romanowicz, and L. Vinnik (1998) Tests of tomographic models in D" using differential travel time data, *Geophys. Res. Lett.*, 25(1), 5-8.

90. Bunge, H.-P., M. A. Richards, C. Lithgow-Bertelloni, J. R. Baumgardner, S. P. Grand, and B. Romanowicz (1998), Time scales and heterogeneous structure in geodynamic Earth models, *Science*, 280(5360), 91-95.
91. Dreger, D., R. Uhrhammer, M. Pasyanos, J. Franck, and B. Romanowicz (1998) Regional and far-regional earthquake locations and source parameters using sparse broadband networks: a test on the Ridgecrest sequence, *Bull. Seism. Soc. Am.*, 88(6), 1353-1362.
92. Lognonné, P., V. N. Zharkov, J. F. Karczewski, B. Romanowicz, M. Menvielle, G. Poupinet, B. Brient, C. Cavoit, A. Desautez, B. Dole, D. Franqueville, J. Gagnepain-Beyneix, H. Richard, P. Schibler, and N. Striebig (1998) The seismic OPTIMISM experiment, *Planet. Space Sci.*, 46(6/7), 739-747.
93. Pollitz, F. F., R. Bürgmann, and B. Romanowicz (1998) Viscosity of oceanic asthenosphere inferred from remote triggering of earthquakes, *Science*, 280(5367), 1245-1249.
94. Romanowicz, B. (1998) Attenuation tomography of the Earth's mantle: a review of current status, *Pure Appl. Geophys.*, 153(2-4), 257-272.
95. Romanowicz, B., D. Stakes, J. P. Montagner, P. Tarits, R. Uhrhammer, M. Begnaud, E. Stutzmann, M. Pasyanos, J.-F. Karczewski, S. Etchemendy, and D. Neuhauser (1998) MOISE: A pilot experiment towards long term sea-floor geophysical observatories, *Earth Planets Space*, 50(11-12), 927-937.
96. Stakes, D. S., B. Romanowicz, J.-P. Montagner, P. Tarits, J.-F. Karczewski, S. Etchemendy, C. Dawe, D. Neuhauser, P. McGill, J. C. Koenig, J. Savary, M. Begnaud, and M. Pasyanos (1998) Seismic experiment paves way for long-term seafloor observatories, *Eos Trans. AGU*, 79(26), 301-309.
97. Uhrhammer, R. A., W. Karavas, and B. Romanowicz (1998) Broadband seismic station installation guidelines, *Seism. Res. Lett.*, 69(1), 15-26.
98. Vinnik, L., L. Bréger, and B. Romanowicz (1998) On the inversion of Sd particle motion for seismic anisotropy in D", *Geophys. Res. Lett.*, 25(5), 679-682.
99. Vinnik, L., L. Bréger, and B. Romanowicz (1998) Anisotropic structures at the base of the Earth's mantle, *Nature*, 393(6685), 564-567.
100. Antolik, M., D. Dreger, and B. Romanowicz (1999) Rupture process of large deep-focus earthquakes from inversion of moment rate functions, *J. Geophys. Res.*, 104(B1), 863-894.
101. Bréger, L., B. Romanowicz, and H. Tkalcic (1999) PKP(BC-DF) travel time residuals and short scale heterogeneity in the deep earth, *Geophys. Res. Lett.*, 26(20), 3169-3172.
102. Durek, J., and B. Romanowicz (1999) Inner core anisotropy inferred by direct inversion of normal mode spectra, *Geophys. J. Int.*, 139(3), 599-622.
103. Mégnin, C., and B. Romanowicz (1999) The effects of the theoretical formalism and data selection on mantle models derived from waveform tomography, *Geophys. J. Int.*, 138(2), 366-380.
104. Stidham, C., M. Antolik, D. Dreger, S. Larsen, and B. Romanowicz (1999) Three-dimensional structure influences on the strong-motion wavefield of the 1989 Loma Prieta earthquake, *Bull. Seism. Soc. Am.*, 89(5), 1184-1202.
105. Uhrhammer, R., L. S. Gee, M. Murray, D. Dreger, and B. Romanowicz (1999) The Mw 5.1 San Juan Bautista, California, earthquake of 12 August 1998, *Seism. Res. Lett.*, 70(1), 10-18.
106. Bréger, L., B. Romanowicz, and S. Rousset (2000) New constraints on the structure of the inner core from P'P', *Geophys. Res. Lett.*, 27(17), 2781-2784.
107. Bréger, L., F. Tajima, D. Dreger, and B. Romanowicz (2000) Source rupture of the 17 August Izmit/Turkey earthquake, in *The 1999 Izmit and Duzce Earthquakes: Preliminary Results*, edited by A. Barka, O. Kozaci, S. Akyuz, and E. Altunel, pp. 123-130, ITU publication, ISBN 975-561-182-7, Istanbul, Turkey.
108. Bréger, L., H. Tkalcic, and B. Romanowicz (2000) The effect of D" on PKP(AB-DF) travel time residuals and possible implications for inner core structure, *Earth Planet. Sci. Lett.*, 175(1-2), 133-143.
109. Clévéde É., C. Mégnin, B. Romanowicz, and P. Lognonné (2000) Seismic waveform modeling and surface wave tomography in a three-dimensional Earth: asymptotic and non-asymptotic approaches, *Phys. Earth Planet. Inter.*, 119(1-2), 37-56.
110. Igel, H., N. Takeuchi, R. J. Geller, C. Mégnin, H.-P. Bunge, E. Clévéde, J. Dalkolmo, and B.

- Romanowicz (2000) The COSY Project: verification of global seismic modeling algorithms, *Phys. Earth Planet. Inter.*, 119(1-2), 3-23.
111. Mégnin, C., and B. Romanowicz (2000) The three-dimensional shear velocity structure of the mantle from the inversion of body, surface and higher-mode waveforms, *Geophys. J. Int.*, 143(3), 709-728.
112. Mégnin, C., and B. Romanowicz (2000) A comparison between tomographic and geodynamic models of the Earth's mantle, in *The History and Dynamics of Global Plate Motions*, Geophysical Monograph 121, AGU, 257-276.
113. Romanowicz, B., and L. Bréger (2000) Anomalous splitting of free oscillations: a reevaluation of possible interpretations, *J. Geophys. Res.*, 105(B9), 21,559-21,578.
114. Romanowicz, B., and J. J. Durek (2000) Seismological constraints on attenuation in the earth: a review, in *Earth's Deep Interior: Mineral Physics and Tomography From the Atomic to the Global Scale*, Geophysical Monograph 117, AGU, 161-179.
115. Bréger, L., B. Romanowicz, and C. Ng (2001) The Pacific plume as seen by S, ScS, and SKS, *Geophys. Res. Lett.*, 28(9), 1859-1862.
116. Romanowicz, B. (2001) Can we resolve 3D density heterogeneity in the lower mantle?, *Geophys. Res. Lett.*, 28(6), 1107-1110.
117. Romanowicz, B., and D. Giardini (2001) The future of permanent seismic networks, *Science*, 293(5537), 2000-2001.
118. Stutzmann, E., J.-P. Montagner, et al. (2001) MOISE: A prototype multiparameter ocean-bottom station, *Bull. Seism. Soc. Am.*, 91(4), 885-892.
119. Uhrhammer, R. A., D. Dreger, and B. Romanowicz (2001) Best practice in earthquake location using broadband three-component seismic waveform data, *Pure Appl. Geophys.*, 158(1-2), 259-276.
120. Romanowicz, B., and Y. Gung (2002) Superplumes from the core-mantle boundary to the lithosphere: implications for heat flux, *Science*, 296(5567), 513-516.
121. Gee, L., D. Neuhauser, D. Dreger, M. Pasyanos, R. Uhrhammer, and B. Romanowicz (2002) The Rapid Earthquake Data Integration Project, in *Handbook of Earthquake and Engineering Seismology*, IASPEI, edited by W. H. K. Lee, Vol 1, 1261-1273.
122. Kuo, C., and B. Romanowicz (2002) On the resolution of density anomalies in the Earth's mantle using spectral fitting of normal mode data, *Geophys. J. Int.*, 150, 162-179.
123. Montagner, J. P., J. F. Karczewski, E. Stutzmann, G. Rault, W. Crawford, P. Lognonné, L. Beguery, S. Cacho, J. C. Koenig, J. Savary, B. Romanowicz, and D. Stakes (2002) Geophysical ocean bottom observatories or temporary portable networks?, in *Developments in Marine Technology Series, Erice 8-14 Sept. 1999*, in press.
124. Romanowicz, B. (2002) Global mantle tomography: present status and perspectives, *Acta Geophys. Polonica*, 50(1), 3-21.
125. Romanowicz, B. (2002) Inversion of surface waves: a review, in *Handbook of Earthquake and Engineering Seismology*, IASPEI, edited by W. H. K. Lee, Part A, 149-174.
126. Romanowicz, B., and L. Ruff (2002) On moment-length scaling of large strike slip earthquakes and the strength of faults, *Geophys. Res. Lett.*, 10.1029/2001GL014479.
127. Stakes, D. S., B. Romanowicz, M. Begnaud, K. McNally, J.P. Montagner, E. Stutzmann and M. Pasyanos (2002) The MBARI Margin Seismology Experiment: A prototype seafloor observatory, in "Science-Technology Synergy for Research in the Marine Environment: Challenges for the XXI Century, L. Beranzoli, P. Favali and G. Smiriglio, Eds, *Developments in Marine Technology*, 12, 93-110.
128. Tajima, F., C. Mégnin, D. S. Dreger, and B. Romanowicz (2002) Feasibility of real-time broadband waveform inversion for simultaneous moment tensor and centroid location determination, *Bull. Seism. Soc. Am.*, 92(2), 739-750.
129. Tkalcic, H., and B. Romanowicz (2002) Short scale heterogeneity in the lowermost mantle: insights from PcP-P and ScS-S data, *Earth Planet. Sci. Lett.*, 201(1), 57-68.
130. Tkalcic, H., B. Romanowicz, and N. Houy (2002) Constraints on D" structure using PKP(AB-DF), PKP(BC-DF) and PcP-P travel time data from broadband records, *Geophys. J. Int.*, 148, 599-616.
131. Romanowicz, B., H. Tkalcic, and L. Bréger (2002) On the origin of complexity in PKP travel

- time data from broadband records, AGU Geodynamics Series, vol edited by V. Dehant, K. Creager, 31, 31-44.
132. Romanowicz, B. (2002) The 3D structure of the lower mantle, *C.R.A.S.*, 335, 23-36.
 133. Romanowicz, B. (2003) Global mantle tomography: progress status in the last 10 years, *Annu. Rev. Geoph. Space Phys.*, 31 (1), 303.
 134. Gung, YC, M. Panning and B. Romanowicz (2003) Anisotropy and thickness of the lithosphere, *Nature*, 422, 707-711.
 135. Capdeville, Y., A. To and B. Romanowicz (2003) Coupling spectral elements and modes in a spherical earth: an extension to the "sandwich" case, *Geophys. J. Int.*, 154, 44-57.
 136. Romanowicz, B., D. Stakes, R. Uhrhammer, P. McGill, D. Neuhauser, T. Ramirez, D. Dolenc (2003) The MOBB experiment: a prototype permanent off-shore ocean bottom broadband station, *EOS Trans AGU*, 84, 325-332.
 137. Romanowicz, B., D. Stakes, R. Uhrhammer et al. (2003) Academy report encourages NSF ocean observatories initiative, *EOS*, 84, 326-327.
 138. Gee, L., D. Neuhauser, D. Dreger, B. Romanowicz et al. (2003) The rapid earthquake data integration project, *Intern. Geophys.*, 81, 1261-1273.
 139. Panning, M. and B. Romanowicz (2004) Inference on flow at the base of Earth's mantle based on seismic anisotropy, *Science*, 303, 351-353.
 140. Gung, Y. C., and B. Romanowicz (2004) Q tomography of the upper mantle using three component long period waveforms, *Geophys. J. Int.*, 157, 813-830
 141. Cao, A. and B. Romanowicz (2004) Constraints on Density and Shear Velocity Contrasts at the Inner Core Boundary, *Geophys. J. Int.*, 157, 1-6.
 142. Rhie, J. and B. Romanowicz (2004) Excitation of earth's incessant freeoscillations by Atmosphere-Ocean-Sea-floor coupling, *Nature*, 431, 552-556.
 143. Cao, A. and B. Romanowicz (2004) Hemispherical transition of seismic attenuation at the top of the earth's inner core, *Earth Planet. Sci. Lett.*, 228, 243-253.
 144. To, A., B. Romanowicz, Y. Capdeville and N. Takeuchi (2005) 3D effects of sharp boundaries at the borders of the African and Pacific Superplumes: observation and modeling, *Earth and Planet. Sci. Lett.*, 233, 137-153.
 145. Cao, A., B. Romanowicz and N. Takeuchi (2005) An observation of PKJKP: inferences on inner core shear properties, *Science*, 308, 1453-1455.
 146. Dolenc, D., B. Romanowicz, D. Stakes, P. McGill and D. Neuhauser (2005) Observations of infragravity waves at the Monterey Ocean Bottom broadband station (MOBB), *Geochem. Geophys. Geosyst.*, 5, Q09002, doi:10.1029/2005/2005GC000988.
 147. Capdeville, Y., Y. Gung and B. Romanowicz (2005) Towards global Earth Tomography using the Spectral Element Method: a technique based on source stacking, *Geophys. J. Int.*, 162, 541-554.
 148. Dreger, D. S., L. Gee, P. Lombard, M. H. Murray, and B. Romanowicz (2005), Rapid finite-source analysis and near-fault strong ground motions: Application to the 2003 Mw 6.5 San Simeon and 2004 Mw 6.0 Parkfield earthquakes, *Seismol. Res. Lett.*, 76(1), 40-48.
 149. Romanowicz, B., D. Stakes, D. Dolenc, P. McGill, R. Uhrhammer and T. Ramirez (2006) The Monterey Bay Broadband Ocean Bottom Seismic Observatory, *Annals of Geophysics*, <http://hdl.handle.net/2122/1067>.
 150. Panning, M. and B. Romanowicz (2006) A three dimensional radially anisotropic model of shear velocity in the whole mantle, *Geophys. J. Int.*, 167, 361-379.
 151. Rhie, J. and B. Romanowicz (2006) A study of the relation between ocean storms and the earth's hum, *G-cubed*, 7, doi:10.1029/2006GC001274.
 152. Rhie, J., D. Dreger, R. Burgmann and B. Romanowicz (2006) Joint slip inversion of the 2004 Sumatra-Andaman earthquake from long period global seismic waveforms and GPS static offsets, *Bull. Seism. Soc. Am.*, 97, S115-S127.
 153. Cammarano, F., V. Lekic, M. Manga, M. Panning, and B. Romanowicz (2006) Europa Scenarios: 1. Physically Consistent Interior Models, *J. Geophys. Res.*, 111, E12009, doi:10.1029/2006JE002710.
 154. Panning, M., V. Lekic, M. Manga, F. Cammarano and B. Romanowicz (2006) Long-period

- seismology on Europa: 2. Predicted Seismic Response, *J. Geophys. Res.*, 111, E12008, doi:10.1029/2006JE002712.
155. Hedlin, M. and B. Romanowicz (2006) The sound of silence, *Physics World*, 19, 21-25.
 156. Suyehiro, K., H. P. Montagner, R. A. Stephen, B. Romanowicz et al. (2006) Ocean Seismic Observatories, *Oceanography*, 19, 144-149.
 157. Cao, A., Y. Masson and B. Romanowicz (2007) Short Wavelength Topography on the Inner Core Boundary, *PNAS*, 104, 31-35. (highlighted in *Science*, Jan 2007)
 158. Dolenc, D., B. Romanowicz, R. Uhrhammer, P. McGill, D. Neuhauser and D. Stakes (2007) Identifying and Removing Noise from the Monterey Ocean Bottom Broadband Seismic Station (MOBB) data, *G-cubed*, 8, doi:10.1029/2006GC001403.
 159. Cao A. and B. Romanowicz (2007) Locating scatterers in the mantle using array analysis of PKP precursors from an earthquake doublet, *Earth Planet. Sci. Lett.*, 255, 22-31.
 160. Cammarano, F. and B. Romanowicz (2007) Insights into the nature of the transition zone from physically constrained inversion of long-period seismic data, *PNAS*, doi: 10.1073/pnas.0608075104.
 161. Marone, F. and B. Romanowicz (2007) On the depth distribution of azimuthal anisotropy in the continental upper mantle, *Nature*, 447, 198-201.
 162. Marone, F. and B. Romanowicz (2007) Non-linear crustal corrections in high-resolution waveform seismic tomography, *Geophys. J. Int.*, 170, 460-467.
 163. Marone, F., Y. C. Gung and B. Romanowicz (2007) Three dimensional radial anisotropic structure of the North American upper mantle from inversion of surface waveform data, *Geophys. J. Int.*, 171, 206-222: 10.1111/j.1365-246X.2007.03465.x
 164. Cao, A. and B. Romanowicz (2007) Test of the Innermost Inner Core Models Using Broadband PKIKP travel time residuals, *Geophys. Res. Lett.*, , 34, L08303, doi:10.1029/2007GL029384..
 165. Romanowicz, B. and B. Mitchell (2007) Q in the Earth from crust to core, *Treatise of Geophysics*, Vol. 1, published by Elsevier.
 166. Dziewonski, A. M. and B. Romanowicz (2007) Overview of Volume I: Seismology and structure of the earth, *Treatise of Geophysics*, Vol. 1, published by Elsevier.
 167. Romanowicz, B. (2008) Using seismic waves to image Earth's internal structure, *Nature*, 451, 266-268.
 168. Dolenc, D., B. Romanowicz, P. McGill and W. Wilcock (2008) Observations of infragravity waves at broadband ocean bottom stations Endeavour (KEBB) and Explorer (KXBB), *G-Cubed*, 9, Q05007, doi:10.1029/2008GC001942.
 169. Romanowicz, B., M. Panning, Y. Gung and Y. Capdeville (2008) On the computation of long period seismograms in a 3D earth using normal mode based approximations, *Geophys. J. Int.*, 175, 520-536, DOI: 10.1111/j.1365-246X.2008.03914.x
 170. Cammarano, F. and B. Romanowicz (2008) Radial profiles of seismic attenuation in the upper mantle based on physical models, *Geophys. J. Int.*, 175, 116-134.
 171. Romanowicz, B., P. McGill, D. Neuhauser and D. Dolenc (2009) Acquiring real time data from the broadband ocean bottom seismic observatory in Monterey Bay (MOBB), *Seism. Res. Lett.*, , 80, 196- 204
 172. Romanowicz, B. (2009) The thickness of tectonic plates, *Science*, 324, 474-476.
 173. Panning, M. Y. Capdeville and B. Romanowicz (2009) Seismic waveform modeling in a 3D earth using the Born approximation: potential shortcomings and a remedy, *Geophys. J. Int.*, 177, 161-178. doi: 10.1111/j.1365-246X.2008.04050.x
 174. Lekic, V., J. Matas, M. Panning and B. Romanowicz (2009) Measurement and implications of frequency dependence of attenuation, *Earth Planet. Sci. Lett.*, doi:10.1016/j.epsl.2009.03.030
 175. Cao, A. and B. Romanowicz (2009) Constraints on shear wave attenuation in the Earth's inner core from an observation of PKJKP, *Geophys. Res. Lett.*, 36, L09301, doi:10.1029/2009GL038342.
 176. Cammarano, F., B. Romanowicz, L. Stixrude, C. Lithgow-Bertelloni and W. Xu (2009) Inferring the thermo-chemical structure of the upper mantle from seismic data, *Geophys. J. Int.*, 179, 1169-1185.

177. Forsyth, D., T. Lay, R. Aster, B. Romanowicz et al. (2009) Grand Challenges for Seismology, *EOS Trans AGU*, 90, 361-362
178. To, A. and B. Romanowicz (2009) Finite frequency effects on global S diffracted travel times, *Geophys. J. Int.*, 179, 1645-1657, doi:10.1111/j.1365-246X.2009.04359.x.
179. Montagner, J. P., V. Clouard, J. Campos, A. Cisternas, M. Gerbault and B. Romanowicz (2009) Earthquakes in subduction zones: a multidisciplinary approach, *Phys. Earth Planet. Inter.*, 175, 1-2.
180. Brillinger D. , J.Penzen and B. Romanowicz (2009) Bruce Alan Bolt, 1930-2005 Professor of Seismology, emeritus, *Geotech., Geol. and Earthq. Engin.*, 7, 103-107.
181. Lekic, V., J. Matas, M. Panning and B. Romanowicz (2010) Reply to Comments on "Measurement and implications of frequency dependence of attenuation" by I. Morozov, *Earth Planet. Sci. Lett., Earth Planet. Sci. Lett.*, 293, 216-217..
182. Lekic, V., M. Panning and B. Romanowicz (2010) A simple method for improving crustal corrections in waveform tomography, *Geophys. J. Int.*, 182, 265-278.
183. Abt, D., K. M. Fischer, S. W. French, H. A. Ford, H. Yuan and B. Romanowicz (2010), North American Lithospheric Discontinuity Structure Imaged By Ps and Sp Receiver Functions, *J. Geophys. Res.*, 115, B09301, doi:10.1029/2009JB006914.
184. Roullet, G., J. P. Montagner, B. Romanowicz et al. (2010) GEOSCOPE: Program progress and challenges in the last 30 years, *Seismolog. Res. Lett.* 81, 427-452.
185. Yuan, H. and B. Romanowicz (2010) Lithospheric Layering in the North American Continent, *Nature*. 466, 1063-1069.
186. Chang, S.-J., S. van der Lee, M. P. Flanagan, H. Bedle, F. Marone, E. M. Matzel, M. E. Pasyanos, A. J. Rodgers, B. Romanowicz, and C. Schmid (2010) Joint inversion for 3-dimensional S-velocity mantle structure along the Tethyan margin, *J. Geophys. Res.*, doi:10.1029/2009JB007204.
187. Dziewonski, A. M., V. Lekic and B. Romanowicz (2010) Mantle Anchor Structure: an Argument for Bottom up Tectonics, *Earth and Planetary Science Lett.*, 299, 69-79. (Highlighted in Nature Geosciences)
188. Panning, M., V. Lekic and B. Romanowicz (2010) The importance of crustal corrections in the development of a new global model of radial anisotropy, *J. Geophys. Res.* doi:10.1029/2010JB007520,
189. Yuan, H. and B. Romanowicz (2010) Depth dependent anisotropy in the western U.S. upper mantle, *Earth Planet. Sci. Lett.*, 300, 385-394.
190. Houlié, N. and B. Romanowicz (2011) Asymmetric deformation across the San Francisco Bay Area faults from GPS observations in northern California, *Phys. Earth. Planet. Inter.*, 184, 143-153.
191. Lekic, V. and B. Romanowicz (2011) Inferring mantle structure by full waveform tomography using the Spectral Element Method, *Geophys. J. Int.*, 185, 799-831, doi: 10.1111/j.1365-246X.2011.04969.x.
192. Yuan, H. B. Romanowicz, K. Fischer and D. Abt (2011) 3-D shear wave radially and azimuthally anisotropic velocity model of the north American upper mantle, *Geophys. J. Int.*, 184, 1237-1260, doi:10.1111/j.1365-246X.2010.04901.x
193. Cupillard, P., L. Stehly and B. Romanowicz (2011) "The one-bit noise correlation: a theory based on the concepts of coherent and incoherent noise", *Geophys. J. Int.*, 184, 1397-1414.
194. Wenk, R. S. Cottaar, C. Tome, A. McNamara and B. Romanowicz (2011), Deformation in the Lowermost Mantle: From Polycrystal Plasticity to Seismic Anisotropy, *Earth Planet. Sci Lett.*, 306, 33-45.
195. Lekic, V. and B. Romanowicz (2011) Tectonic regionalization without a priori information: a cluster analysis of upper mantle tomography, *Earth Planet. Sci. Lett.*, 308, 151-160.
196. Stehly, L., P. Cupillard and B. Romanowicz (2011) Towards improving ambient noise tomography using simultaneously curvelet denoising filters and SEM simulation of ambient noise, *C.R. Geoscience*, 343, 591-599.
197. Wang, Z., J. Chong, S. Ni and B. Romanowicz (2011) Determination of focal depth by two waveform based methods: a case study for the 2008 Panzhihua earthquake, *Earthq. Sci.*, 24, 321-328.

198. Romanowicz, B. and H. Yuan (2012) On the interpretation of SKS splitting measurements in the presence of several layers of anisotropy, *Geophys. J. Int.*, 188, 1129-1140.
199. Panning, M., A. Cao, A. Kim and B. Romanowicz (2012) Non-linear 3D Born shear waveform tomography in southeast Asia, *Geophys. J. Int.*, 188, 1129-1140.
200. Montagner, J.P., C. Larmat, Y. Capdeville, M. Fink, H. Phung, B. Romanowicz, E. Clévéde, H. Kawakatsu (2012) Time reversal method and cross-correlation techniques by normal mode theory: a three-point problem, *Geophys. J. Int.*, 191, 637-652.
201. 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* 357-358, 68-77.
202. Zheng Z. and B. Romanowicz (2012) "Do double "SS precursors" mean double discontinuities *Geophys. J. Int.*, 191, 1361-1373.
203. Cottaar, S. and B. Romanowicz (2012) An unusually large ULVZ at the base of the mantle near Hawaii, *Earth. Planet. Sci. Lett.*, 355-356, 213-222.
204. Zhang, R., Q. Wu, Y. Li and B. Romanowicz (2012) Lateral variations in SH velocity structure of the transition zone beneath Korea and adjacent regions, *J. Geophys. Res.*, 117, B09315.
205. Cottaar, S. and B. Romanowicz (2013) Observations of changing anisotropy across the southern margin of the African LLSVP, *Geophys. J. Int.*, doi: 10.1093/gji/ggt285
206. Durand, S., J. Matas, S. Ford, Y. Ricard, J.P. Montagner and B. Romanowicz (2013) Insights from ScS-S measurements on deep mantle attenuation, *Earth Planet. Sci. Lett.*, 374, 101-110.
207. French, S., V. Lekic and B. Romanowicz (2013) Waveform Tomography Reveals Channeled Flow at the Base of the Oceanic Asthenosphere, *Science*, 342, 227- 230.
208. Masson, Y., P. Cupillard, Y. Capdeville and B. Romanowicz (2014) On the numerical implementation of time reversal mirrors for tomographic imaging, *Geophys. J. Int.*, 196, 1580-1599, doi: 10.1093/gji/ggt459.
209. Taira, T., Z. Zheng and B. Romanowicz (2013) On the systematic long period noise reduction on ocean floor broadband seismic sensors collocated with differential pressure gauges, *Bull. Seism. Soc. Am.*, 10.1785/0120130015, 104, 247-259.
210. Bodin, T., H. Yuan and B. Romanowicz (2014) Inversion of receiver functions without deconvolution - application to the Indian craton, *Geophys. J. Int.*, 196, 1025- 1033.
211. Carlson, R. W., E. Garnero, T. M. Harrison, J. Li, M. Manga, W. F. McDonough, S. Mukhopadhyay, B. Romanowicz, D. Rubie, Q. Williams, and S. Zhong (2014) How did Early Earth become our modern World?, *Ann. Rev. Earth Planet. Sci.*, doi: 10.1146/annurev-earth-060313-055016, in press.
212. Yuan, H., S. French, P. Cupillard, B. Romanowicz (2014) Lithospheric expression of geological units in central and eastern North America from full waveform tomography, *Earth and Planet. Sci. Lett.*, 402, 176- 186 <http://dx.doi.org/10.1016/j.epsl.2013.11.057>
213. Cottaar, S., M. Li, A. McNamara, R. Wenk and B. Romanowicz (2014) Synthetic anisotropy models within a slab impinging on the core-mantle boundary, *Geophys. J. Int.*, 199, 164-177.
214. French, S. and B. Romanowicz (2014) Whole-mantle radially anisotropic shear-velocity structure from spectral-element waveform tomography, *GJI*, 199, 1303-1327.
215. Meschede, M. and B. Romanowicz (2015) Lateral heterogeneity scales in regional and global upper mantle shear velocity models, *Geophys. J. Int* , 200, 1078-1095.
216. Weber, M., C. Wicks, Y. LeStunff, B. Romanowicz and F. Krüger (2015) Seismic evidence for a steeply dipping reflector -stagnant slab in the mantle transition zone, *Geophys. J. Int.*, 200, 1237- 1253.
217. Bodin, T., Y. Capdeville, B. Romanowicz, J.P. Montagner (2015). Interpreting radial anisotropy in full-waveform tomographic models, In: "The Earth's heterogeneous Mantle", A. Khan, F. Deschamps and K. Kawai, Eds, Springer Verlag, The Earth's Heterogeneous Mantle, 105--144
218. Ventosa, S. and B. Romanowicz (2015) Extraction of weak PcP phases using the slant-stacklet transform- I Method and examples, *GJI*, 201, 207-223.
219. Zheng, Z., S. Ventosa and B. Romanowicz (2015) High Resolution Upper Mantle Discontinuity

- Images across the Pacific Ocean from *SS* Precursors Using Local Slant Stack Filters, *Geophys. J. Int.*, 202, 175-189.
220. Romanowicz, B. and B. J. Mitchell (2015) Deep Earth structure: Q of the Earth from crust to core, in In: Gerald Schubert (editor-in-chief) *Treatise on Geophysics*, 2nd edition, Oxford: Elsevier; 2015. pp. 789-827.
 221. Dziewonski, A. M. and B. Romanowicz (2015) Deep Earth Seismology: An introduction and Overview, in Gerald Schubert (editor-in-chief) *Treatise on Geophysics*, 2nd edition, Oxford: Elsevier; 2015. 1-28.
 222. French, S. W., Y. Zheng, B. Romanowicz and K. Yelick (2015) Parallel Hessian assembly for Seismic Waveform inversion using Global updates, *Proceedings of the 29th IEEE International Parallel and Distributed Processing Symposium* (2015) doi:10.1109/IPDPS.2015.58.
 223. French, S. W. and B. Romanowicz (2015) Broad plumes Rooted At The Base Of The Earth's Mantle Beneath Major Hotspots, *Nature*, 525, 95-99.
 224. Adam, J. and B. Romanowicz (2015), Global scale observations of scattered energy near the inner core boundary: Seismic constraints on the base of the outer core, *Phys. Earth. Planet. Inter.*, 245, 103-116.
 225. Ventosa, S. and B. Romanowicz (2015), Extraction of weak *PcP* phases using the slant-stacklet transform – II: constraints on lateral variations of structure near the core-mantle boundary, *Geophys. J. Int.*, 203, 1227-1245.
 226. Meschede, M. and B. Romanowicz (2015) Non-Stationary Spherical Random Media and their Effect on Long Period Mantle Waves, *Geophys. J. Int.*, 203, 1605-1625. doi: 10.1093/gji/ggv356.
 227. Romanowicz, B., A. Cao, B. Godwal, R. Wenk, R. Jeanloz and S. Ventosa (2016) Seismic anisotropy in the Earth's innermost inner core: testing structural models against mineral physics predictions *Geophys. Res. Lett.*, 43, 93-100.
 228. Bodin, T., J. Leiva, B. Romanowicz, V. Maupin, and H. Yuan (2016) Imaging Anisotropic Layering with Bayesian Inversion of Multiple Data Types, *Geophys. J. Int.*, 206, 605-629.
 229. To, A., Y. Capdeville and B. Romanowicz (2016) Anomalously low amplitude of S waves produced by the 3D structures in the lower mantle, *Phys. Earth Planet. Inter.*, 256, 26-36.
 230. Caló, M., T. Bodin and B. Romanowicz (2016) Layered structure in the upper mantle across north America from inversion of long and short period seismic data, *Earth Planet. Sci. Lett.*, 449, 164-175.
 231. Masson, Y. and B. Romanowicz (2017) Fast computation of synthetic seismograms within a medium containing remote localized perturbations A numerical solution to the scattering problem, *Geophys. J. Int.*, 208(2), 674-692.
 232. Romanowicz, B. and R. Wenk (2017) Anisotropy in the Deep Earth, *Phys. Earth Planet. Sci.*, in press.
 233. Masson, Y. and B. Romanowicz (2017) Box Tomography: Localised imaging of remote targets buried in an unknown medium, a step forward for understanding key structures in the deep Earth, *Geophys. J. Int.*, in press.
 234. Romanowicz, B., M. Hirschmann, L. Kellogg, M. Manga, S. Mukhopadhyay, B. Buffett (2017) Advancing Geoscience Research through CIDER, *GSA Today*, in press.
 235. Yuan, K. and B. Romanowicz (2017) Seismic evidence for partial melting at the root of Major Hotspot Plumes, *Science*, in press.
 236. Karaoglu, H. and B. Romanowicz (2017) Full Waveform Inversion for Global Attenuation Imaging: A Comparative Assessment of Several Different Approaches, *Geophys. J. Inter.*, submitted.
 237. Adam, J. and B. Romanowicz (2017) Observation of core sensitive phases: constraints on the velocity and attenuation profile in the vicinity of the inner-core boundary, *Phys. Earth Planet. Inter.*, submitted.