

**VITA:** Jeffrey John Park

**ADDRESS:** Dept of Geology & Geophysics, PO Box 208109,  
Yale University, New Haven CT 06520-8109

**EMAIL:** jeffrey.park@yale.edu

**BIRTHPLACE:** Los Angeles, California  
February 10, 1958

**EDUCATION:** A. B. Physics, Princeton University, 1979  
Ph. D. Earth Sciences, Scripps Institution of  
Oceanography, UC San Diego, La Jolla, California 1985

**PROFESSIONAL EXPERIENCE:**

- |           |   |
|-----------|---|
| 1984-85   | Postgraduate Research, IGPP, Scripps Institution of<br>Oceanography, UCSD       |
| 1985-86   | Visiting Scientist, Geophysical Fluid Dynamics<br>Program, Princeton University |
| 1985-90   | Assistant Professor, Department of Geology and<br>Geophysics, Yale University   |
| 1990-2000 | Associate Professor, Department of Geology and<br>Geophysics, Yale University   |
| 2000-     | Professor, Department of Geology and<br>Geophysics, Yale University             |
| 1987-90   | Editorial Board, Geophysical Journal International                              |
| 1995-     | Editorial Board, American Journal of Science                                    |

**MEMBERSHIP IN PROFESSIONAL AND SCIENTIFIC SOCIETIES:**

- American Geophysical Union  
Seismological Society of America  
Royal Astronomical Society

**HONORS AND FELLOWSHIPS:**

- Fellow of the American Geophysical Union (2006-)  
NSF Presidential Young Investigator (1987-92)  
NSF Graduate Fellowship (1979-82)  
Summa cum Laude, Princeton Physics Department

**OFFICES:** (1987-1995, 2000-2003) Member of Board of Directors, Incorporated  
Research Institutions for Seismology (IRIS)  
(2003-) IRIS Member Representative  
(1988-1990) Secretary, IRIS Executive Committee  
(1990-2) Vice-Chairman, IRIS Executive Committee  
(1992-4) Chairman, IRIS Executive Committee

- (1998-2000) President-Elect, Seismology section, American Geophysical Union (AGU)
- (2000-02) President, Seismology section, American Geophysical Union
- (2001-05) Governing Board Member, American Institute of Physics (AIP)
- (2002-08) Chairman, Environmental Studies Program, Yale Univ.
- (2005-07) Chair, Global Seismographic Network Standing Committee, IRIS
- (2008-11) Director, Yale Institute for Biospheric Studies

## PUBLICATIONS:

- Backus, G., J. Park & D. Garbasz, On the relative importance of the driving forces of plate motion, *Geophys. J. Roy. Astron. Soc.*, **67**, 415-435 (1981).
- Masters, G., J. Park & F. Gilbert, Observations of coupled spheroidal and toroidal modes, *J. Geophys. Res.*, **88**, 10285-10298 (1983).
- Park, J., & A. D. Chave, on the estimation of magnetotelluric response functions using the singular value decomposition, *Geophys. J. Roy. Astron. Soc.*, **77**, 683-709 (1984).
- Park, J., Synthetic seismograms from coupled free oscillations: the effects of lateral structure and rotation, *J. Geophys. Res.*, **91**, 6441-6464 (1986).
- Park, J., & F. Gilbert, Coupled free oscillations of an aspherical dissipative rotating earth: Galerkin theory, *J. Geophys. Res.*, **91**, 7241-7260 (1986).
- Park, J., Asymptotic coupled-mode expressions for multiplet amplitude anomalies and frequency shifts on an aspherical earth, *Geophys. J. Roy. Astron. Soc.*, **90**, 129-170 (1987).
- Pollitz, F., J. Park & F. A. Dahlen, Observations of free oscillation amplitude anomalies, *Geophys. Res. Letts.*, **14**, 895-898 (1987).
- Park, J., F. L. Vernon III & C. R. Lindberg, Frequency-dependent polarization analysis of high frequency seismograms, *J. Geophys. Res.*, **92**, 12664-12674 (1987).
- Park, J., C. R. Lindberg & F. L. Vernon III, Multitaper spectral analysis of high frequency seismograms, *J. Geophys. Res.*, **92**, 12675-12684 (1987).
- Park, J., & T. D. Herbert, Hunting for paleoclimatic periodicities in a geologic time series with an uncertain time scale, *J. Geophys. Res.*, **92**, 14027-14040, (1987).
- Park, J., C. R. Lindberg & D. J. Thomson, Multiple taper spectral analysis of terrestrial free oscillations: Part 1, *Geophys. J. Roy. Astron. Soc.*, **91**, 755-794, (1987).
- Lindberg, C. R., & J. Park, Multiple taper spectral analysis of terrestrial free oscillations: Part 2, *Geophys. J. Roy. Astron. Soc.*, **91**, 795-836, (1987).
- Park, J., Free oscillation coupling theory, in **Mathematical Geophysics**, edited by N.J. Vlaar, G. Nolet, M.J.R. Wortel and S.A.P.L. Cloetingh, pp 31-52, D. Riedel, Dordrecht, 1988.
- Hinnov, L., & J. Park, Multi-windowed spectrum estimates of the ILS polar motion, in **The Earth's Rotation and Reference Frames for Geodesy and Geodynamics, IAU Symposium No. 128**, edited by A. K. Babcock and G. A. Wilkins, pp221-226, Kluwer Academic, Amsterdam, 1988.

- Lerner-Lam, A., & J. Park, Frequency-dependent refraction and multipathing of 10-100 sec surface waves in the Western Pacific, **Geophysical Research Letters**, **16**, 527-530, (1989).
- Oglesby, R., & J. Park, Cyclic sedimentation in the Cretaceous: the effect of precessional insolation changes on atmospheric dynamics, **J. Geophys. Res.**, **94**, 14793-14816, (1989).
- Park, J., Roughness constraints in surface wave tomography, **Geophys. Res. Letts.**, **16**, 1329-1332, (1989).
- Park, J., The subspace-projection method for constructing first-order coupled-mode long-period synthetic seismograms, **Geophysical Journal International**, **101**, 111-124, (1990).
- Park, J., Radial mode observations from the 5/23/89 Macquarie Ridge earthquake, **Geophysical Research Letters**, **17**, 1005-1008, (1990).
- Park, J., Observations of the envelopes of coupled free oscillations, **Geophysical Research Letters**, **17**, 1489-1492, (1990).
- Park, J., & R. J. Oglesby, A comparison of precession and obliquity effects in a Cretaceous paleoclimate simulation, **Geophysical Research Letters**, **17**, 1929-1932, (1990).
- Um, J., F. A. Dahlen & J. Park, Normal mode multiplet coupling along a dispersion branch, **Geophysical Journal International**, **106**, 11-36, (1991).
- Shalev, E., J. Park & A. L. Lerner-Lam - Crustal velocity and Moho topography in Central New Hampshire, **Journal of Geophysical Research**, **96**, 16415-16427, (1991).
- Oglesby, R. J., & J. Park, Cyclic sedimentation, climate and orbital insolation changes in the Cretaceous, in **The Encyclopedia of Earth System Science**, Vol 2, ed. W. A. Nierenberg, p13-27, (1991).
- Park, J., & R. J. Oglesby, Milankovitch rhythms in the Mid-Cretaceous: a GCM modelling study, **Global and Planetary Change**, **4**, 329-356, (1991).
- Park, J., Envelope estimation for quasi-periodic geophysical signals in noise: A multitaper approach, pp. 189-219, in **Statistics in the Environmental & Earth Sciences**, eds A. T. Walden and P. Guttorp, Edward Arnold, London, 1992.
- Park, J., & Y. Yu, Anisotropy and coupled free oscillations: Simplified models and surface wave observations, **Geophysical Journal International**, **110**, 401-420, (1992).
- Park, J., & K. A. Maasch, Plio-Pleistocene time evolution of the 100-kyr cycle in marine paleoclimate records, **Journal of Geophysical Research**, **98**, 447-461, (1993).
- Mann, M. E., and J. Park, Spatial correlations of interdecadal variation in global surface temperatures, **Geophysical Research Letters**, **20**, 1055-1058, (1993).
- Yu, Y. & J. Park, Upper mantle anisotropy and coupled-mode long-period surface waves, **Geophysical Journal International**, **114**, 473-489, (1993).
- Park, J., and Y. Yu, Seismic determination of elastic anisotropy and mantle flow, **Science**, **261**, 1159-1162, (1993).
- Park, J., S. L. D'Hondt, J. W. King and C. Gibson, Late Cretaceous precessional cycles in double time: A warm-earth Milankovitch response, **Science**, **261**, 1431-1434, (1993).

- Park, J., The sensitivity of seismic free oscillations to upper mantle anisotropy I. Zonal symmetry, **J. Geophys. Res.**, **98**, 19933-19949, (1993).
- Su, L., J. Park & Y. Yu, Born seismograms using coupled free oscillations: The effects of strong coupling and anisotropy, **Geophysical Journal International**, **115**, 849-862, (1993).
- Park, J., and R. J. Oglesby, The effect of orbital cycles on late and middle Cretaceous climate: A comparative GCM modelling study, in **Orbital Forcing and Cyclic Sequences**, International Association of Sedimentologists Special publication, eds. P. L. deBoer and D. G. Smith, **19**, 509-529, 1994.
- Yu, Y., and J. Park, Hunting for azimuthal anisotropy beneath the Pacific Ocean region, **J. Geophys. Res.**, **99**, 15399-15422, 1994.
- Su, L., and J. Park, Anisotropy and the splitting of PS waves, **Physics of the Earth and Planetary Interiors**, **86**, 263-276, 1994.
- Mann, M., and J. Park, Global-scale modes of surface temperature variability on interannual to century time scales, **Journal of Geophysical Research**, **99**, 25819-25834, 1994.
- Yu, Y., J. Park, and F. Wu, Mantle anisotropy beneath the Tibetan Plateau: Evidence from long-period surface waves, **Physics of the Earth and Planetary Interiors**, **87**, 231-246, 1995.
- Lees, J., and J. Park, Multiple-taper spectral analysis: A stand-alone C-subroutine, **Computers & Geosciences**, **21**, 199-236, 1995.
- Park, J., Seismic Wave Propagation Studies in the US: 1991-1994, **Reviews of Geophysics**, Supplement (US National Report to the IUGG), **33**, 335-340, 1995
- Lilly, J., and J. Park, Multiwavelet spectral and polarization analysis of seismic records, **Geophysical Journal International**, **122**, 1001-1021, 1995.
- Mann, M. E., J. Park and R. Bradley, Global interdecadal and century-scale climate oscillations during the past five centuries, **Nature**, **378**, 266-270, 1995.
- Mann, M. E., and J. Park, Greenhouse warming and the seasonal cycle of temperature: Observations versus model predictions, **Geophysical Research Letters**, **23**, 1111-1114, 1996.
- Park, J., Surface waves in layered anisotropic structures, **Geophys. J. Int.**, **126**, 173-184, 1996.
- Mann, M. E., and J. Park, Joint spatiotemporal modes of surface temperature and sea-level pressure variability in the Northern Hemisphere during the last century, **Journal of Climate**, **9**, 2137-2162, 1996.
- Park, J., Free oscillations in an anisotropic mantle: Path-integral asymptotics, **Geophys. J. Int.**, **129**, 399-411, 1997
- Levin, V., and J. Park, Crustal anisotropy beneath the Ural mtns foredeep from teleseismic receiver functions, **Geophys. Res. Letts**, **24**, 1283-1286, 1997.
- Levin, V., and J. Park, P-SH conversions in a flat-layered medium with anisotropy of arbitrary orientation, **Geophys. J. Int.**, **131**, 253-266, 1997.
- Levin, V., and J. Park, A P-SH conversion in layered media with hexagonally symmetric anisotropy: A cookbook, **Pure and Applied Geophysics**, **151**, 669-697, 1998.
- Hinnov, L. A., and J. Park, Detection of astronomical cycles in the sedimentary record by frequency modulation (FM) analysis, **J. Sedim. Res.**, **68**, 524-539, 1998.

- Levin V., and J. Park, Quasi-Love phases between Tonga and Hawaii: Observations, simulations and explanations, *J. Geophys. Res.*, **103**, 24321-24331, 1998.
- Ague, J. J., J. Park, and D. M. Rye, Regional metamorphic dehydration and seismic hazard, *Geophys. Res. Letts.*, **22**, 4221-4224, 1998.
- Mann, M. E., and J. Park, Oscillatory spatiotemporal signal detection in climate studies, *Advances in Geophysics*, **41**, 1-131, 1999.
- Hinnov, L. A., and J. Park, Strategies for assessing early-middle (Pliensbachian-Aalenian) Jurassic cyclochronologies, in "A Discussion: Astronomical (Milankovitch) Calibration of the Geological Timescale," Shackleton, N. J., McCave, I. N., and Weedon, G. P, eds, *Philosophical Transactions of the Royal Society of London*, Series A, **357**, 1831-1859, 1999.
- Levin, V., W. Menke, and J. Park, Shear-wave splitting in Appalachians and Urals: A case for multilayered anisotropy, *J. Geophys. Res.*, **104**, 17975-17994, 1999.
- Hinnov, L. A., J. Park, and E. Erba, Lower-middle Jurassic rhythmites from the Lombard Basin: A record of orbitally-forced carbonate cycles modulated by secular environmental changes in West Tethys, in **Advances in Jurassic Research 2000, GeoResearch Forum**, edited by R. L. Hall and P. L. Smith, volume **6**, pp. 427-436, Trans Tech Publications, Zurich, 2000.
- Park, J., and M. E. Mann, Interannual temperature events and shifts in global temperature: A multiwavelet correlation approach, *Earth Interactions*, **4**, online paper 4-001, 2000.
- Levin, V., J. Park, M. T. Brandon, and W. Menke, Thinning of the upper mantle during late Paleozoic Appalachian orogenesis, *Geology*, **28**, 239-242, 2000.
- Levin, V., and J. Park, Shear zones in the Proterozoic lithosphere of the Arabian Shield and the nature of the Hales discontinuity, *Tectonophysics*, **323**, 131-148, 2000.
- Levin, V., W. Menke, and J. Park, No regional anisotropic domains in the northeastern US Appalachians, *J. Geophys. Res.*, **105**, 19029-19042, 2000.
- Park, J., and V. Levin, Receiver functions from multiple-taper spectral correlation estimates, *Bulletin of the Seismological Society of America*, **90**, 1507-1520, 2000.
- Peyton, V., V. Levin, J. Park, M. T. Brandon, J. Lees, E. Gordeev and A. Ozerov, Mantle flow at a slab edge: Seismic anisotropy in the Kamchatka region, *Geophys. Res. Letts.*, **28**, 379-382, 2001.
- Park, J., and V. Levin, Receiver functions from regional P phases, *Geophys. J. Int.*, **147**, 1-11, 2001.
- Park, J., and V. Levin, Seismic anisotropy: Tracing plate dynamics in the mantle, *Science*, **296**, 485-489, 2002.
- Levin, V., N. M. Shapiro, J. Park and M. Ritzwoller, Seismic evidence for catastrophic slab loss beneath Kamchatka, *Nature*, **418**, 763-767, 2002.
- Park, J., V. Levin, M. T. Brandon, J. M. Lees, V. Peyton, E. Gordeev, and A. Ozerov, A dangling slab, amplified arc volcanism, mantle flow and seismic anisotropy near the Kamchatka plate corner, *Plate Boundary Zones*, Seth Stein and Jeffrey Freymueller, editors, AGU Geodynamics Series No. 30, AGU, Washington DC, pp. 295-324, 2002.
- Levin, V., J. Park, J. M. Lees, M. T. Brandon, V. Peyton, E. Gordeev, and A. Ozerov, Crust and upper mantle of Kamchatka from teleseismic receiver functions, *Tectonophysics*, **v358**, 233-265, 2002.

- Levin, V., L. Margheriti, J. Park, and A. Amato, Anisotropic seismic structure of the lithosphere beneath the Adriatic coast of Italy constrained with mode-converted body waves, **Geophys. Res. Letts.**, **29**(22), 2058, doi:10.1029/2002GL015438, 2002..
- Koch, D., J. Park, and A. Del Genio, Clouds and sulfate are anti-correlated: A new diagnostic for global sulfur models, **J. Geophys. Research**, **108(D24)**, 4781 doi:10.1029/2003JD003621, 2003
- Shito, A, S.-I. Karato, and J. Park, Frequency dependence of Q in Earth's upper mantle from the continuous spectra of body waves, **Geophys. Res. Letts.**, **31**, L12603, doi: 10.1029/2004GL019582, 2004.
- Levin, V., D. Droznin, J Park, E. Gordeev, Detailed mapping of seismic anisotropy with local shear waves in southeastern Kamchatka, **Geophys J. Int.**, **158**, 1009-1023, 2004.
- Park, J., H. Yuan, and V. Levin, Subduction-zone anisotropy structure under Corvallis, Oregon: A serpentinite skidmark of trench-parallel terrane migration?, **J. Geophys. Res.**, **109**, B10306, 10.1029/2003JB002718, 2004.
- Park, J., K. Anderson, R. Aster, R. Butler, T. Lay, and D. Simpson, Global Seismographic Network Records the Great Sumatra-Andaman Earthquake, **EOS Transactions AGU**, **86(6)**, 57, 60-61, 2005.
- Leahy, G., and J. Park, Hunting for ocean island Moho, **Geophys. J. Int.**, **160**, doi:10.1111/j.1365-246X.2005.02562.x, 2005.
- Levin, V., N. Shapiro, J. Park and M. Ritzwoller, Slab portal beneath the Western Aleutians, **Geology**, **33**, 253-256, doi:10.1130/G20863.1, 2005.
- Park, J., R. Butler, K. Anderson, J. Berger, H. Benz, P. Davis, C. R. Hutt, C. S. McCreery, T. Ahern, G. Ekstrom and R. Aster, Performance review of the Global Seismographic Network for the 26 December 2004 Sumatra-Andaman megathrust earthquake, **Seismological Research Letters**, **76**, 329-340, 2005.
- Park, J., T. R. Song, J. Tromp, E. Okal, S. Stein, G. Roult, E. Clevede, G. Laske, H. Kanamori, P. Davis, J. Berger, C. Braatenberg, M. Van Camp, X. Lei, H. Sun, H. Xu, S. Rosat, Earth's Free Oscillations Excited by the 26 December 2004 Sumatra-Andaman Earthquake, **Science**, **308**, 1139-1144, 2005.
- Kneller, E. A., P. E. van Keken, S.-I. Karato and J. Park, B-type fabric in the mantle wedge: Insights from high-resolution non-Newtonian subduction zone models, **Earth Planet. Sci. Letts.**, **237**, 781-797, 2005.
- Levin, V., A. Henza, J. Park and A. Rodgers, Texture of mantle lithosphere along the Dead Sea Rift: recently imposed or inherited? **Phys Earth Planet. Int.**, **158**, 174-189, 2006.
- Plomerova, J., L. Margheriti, J. Park, V. Babuska, S. Pondrelli, L. Vecsey, D. Piccinini, P. Baccheschi, S. Salimbeni, and V. Levin, Seismic anisotropy beneath the Northern Apennines (Italy): Mantle flow or lithosphere fabric? **Earth Planet. Sci. Letts.**, **247**, 157-170, 2006.
- Margheriti, L., S. Pondrelli, D. Piccinini, N. Piana Agostinetti, F. P. Luente, A. Amato, P. Baccheschi, L. Giovani, S. Salimbeni, J. Park, M. T. Brandon, V. Levin, J. Plomerova, P. Jedlicka, L. Vecsey, V. Babuska, A. Fiaschi, B. Carpani, and P. Ulbricht, Subduction structure of the Northern Apennines: Results from the RETREAT seismic deployment, **Annali di Geofisica**, **49**, N. 4/5, August/October 2006 (printed in 2007, despite 2006 date).

- Savage, M., J. Park, and H. Todd, Velocity and anisotropy structure at the Hikurangi subduction margin, New Zealand from receiver functions, **Geophys. J. Int.**, **168**, 1034-1050, doi: 10.1111/j.1365-246X.2006.03086.x, 2007.
- Levin, V., D. A. Okaya, and J. Park, Cause and effect: Shear wave birefringence in wedge-shaped anisotropic regions, **Geophys. J. Int.**, **168**, 275-286, doi: 10.1111/j.1365-246X.2006.03224.x, 2007.
- Levin, V., J. Park, L. Margheriti, P. Lucente, S. Pondrelli and The RETREAT Seismology Group, The end of subduction in Northern Apennines confirmed by observations of quasi-Love waves from the great 2004 Sumatra-Andaman earthquake, **Geophysical Research Letters**, **34**, No. 4, L04304, 10.1029/2006GL028860, 2007.
- Royer, D. L., R. A. Berner, and J. Park, Climate sensitivity constrained by CO<sub>2</sub> concentrations over the past 420 million years, **Nature**, **v446**, 530-532, 2007.
- Salimbeni, S., S. Pondrelli, L. Margheriti, V. Levin, J. Park, J. Plomerova and V. Babuska, Abrupt change in mantle fabric across northern Apennines detected using seismic anisotropy, **Geophysical Research Letters**, **34**, L07308, doi:10.1029/2007GL029302, 2007.
- Maupin, V., and J. Park, Theory and observations: Wave propagation in anisotropic media, pp 289-321, in **Treatise on Geophysics, Volume 1, Seismology and Structure of the Earth**, B. Romanowicz and A. Dziewonski, eds, Elsevier, Amsterdam, 2007.
- Lees, J. L., J. Vandecar, E. Gordeev, A. Ozerov, M. T. Brandon, J. Park and V. Levin, Three-dimensional images of the Kamchatka-Pacific plate cusp, pp. 65-75, in **Volcanism and Tectonics of the Kamchatka Peninsula and Adjacent Arcs**, AGU Monograph, Editors: J. Eichelberger, E. Gordeev, M. Kasahara, P. Izbekov, and J. Lees, 2007.
- Park, J., A. Amoruso, L. Crescentini, and E. Boschi, Long-period toroidal Earth free oscillations from the great Sumatra-Andaman earthquake observed by paired laser extensometers in Gran Sasso, Italy, **Geophys. J. Int.**, **173**, 887-905, doi: 10.1111/j.1365-246X.2008.03769.x, 2008.
- Shiomi, K., and J. Park, Structural features of the subducting slab beneath the Kii Peninsula, central Japan: Seismic evidence of slab segmentation, dehydration and anisotropy, **J. Geophysical Research**, **113**, B10318, doi:10.1029/2007JB005535, 2008.
- Salimbeni, S., S. Pondrelli, L. Margheriti, J. Park and V. Levin, SKS splitting measurements beneath the Northern Apennines region: A case of oblique trench retreat, **Tectonophysics**, **462**, 68-82, doi:10.1016/j.tecto.2007.11.075, 2008.
- Agostinetti, N. P., J. Park, and F. P. Lucente, Mantle wedge anisotropy in Southern Tyrrhenian subduction zone (Italy), from receiver function analysis, **Tectonophysics**, **462**, 35-48, doi: 10.1016/j.tecto.2008.03.020, 2008.
- Agostinetti, N. P., V. Levin, and J. Park, Crustal structure above a retreating slab: Receiver function study of the northern Apennines orogen, **Earth and Planetary Science Letters**, **275**, 211-220, doi:10.1016/j.epsl.2008.06.02, 2008.

- Nikulin, A., V. Levin, and J. Park, Receiver function study of the Cascadia megathrust: evidence for localized serpentinization, **Geochemistry, Geophysics, Geosystems**, **10**, Q07004, doi:10.1029/2009GC002376, 2009
- Park, J., A re-evaluation of the coherence between global-average atmospheric CO<sub>2</sub> and temperatures at interannual time scales, **Geophys. Res. Lett.**, **36**, L22704, doi:10.1029/2009GL040975, 2009.
- Rieger, D. M., and J. Park, USArray observations of quasi-Love surface wave scattering: Orienting anisotropy in the Cascadia plate boundary, **J. Geophys. Res.**, **115**, B05306, doi:10.1029/2009JB006754, 2010.
- Piccinini, D., M. Di Bona, F. P. Lucente, V. Levin, and J. Park, Seismic attenuation and mantle wedge temperature in the northern Apennines subduction zone (Italy) from teleseismic body wave spectra, **J. Geophys. Res.**, **115**, B09309, doi:10.1029/2009JB007180, 2010.
- Bianchi, I., J. Park, N. P. Agostinetti, V. Levin, Mapping seismic anisotropy using harmonic decomposition of receiver functions: an application to Northern Apennines, Italy, **J. Geophys. Res.**, **115**, B12317, doi:10.1029/2009JB007061, 2010.
- Park, J., and D. L. Royer, Geologic constraints on the glacial amplification of Phanerozoic climate sensitivity, **Amer. J. Sci.**, **311**, 1-26, doi:10.2475/01.2011.01, 2011.
- Benoit, M. H., M. Torpey, K. Liszewski, V. Levin and J. Park, P and S wave upper mantle seismic velocity structure beneath the northern Apennines: New evidence for the end of subduction, **Geochem. Geophys. Geosys.**, **12**, Q06004, doi:10.1029/2010GC003428, 2011.
- Park, J., Evidence for oceanic control of interannual carbon cycle feedbacks, **American Journal of Science**, **311**, 485-516, DOI 10.2475/06.2011.01, 2011.
- Olugboji, T. M., S.-I. Karato, and J. Park, Structures of the lithosphere-asthenosphere boundary: mineral physics modeling and seismological signatures, **Geochem. Geophys. Geosys.**, **14**, doi:10.1002/ggge.20086, 2013.
- Soukup, D. J., R. I. Odom and J. Park, Modal investigation of elastic anisotropy in shallow-water environments: Anisotropy beyond vertical transverse isotropy, **J. Acoustical Soc. Amer.**, **134**, 185-206, doi:10.1121/1.4809721, 2013.
- Chen, X., and J. Park, Observation of quasi-Love surface-wave scattering in Tibet, **Tectonophysics**, **608**, 346-355, doi:10.1016/j.tecto.2013.09.019, 2013.
- Rieger, D. M., and J. Park, An approximation to the general Galerkin method for computing coupled-mode synthetic seismograms, **Bulletin of the Seismological Society of America**, doi: 10.1785/0120130114, in press, 2014.
- Soukup, D. J., R. I. Odom and J. Park, Coupled modes, range dependence, and sediment anisotropy in shallow water acoustic propagation, submitted to **J. Acoustical Soc. Amer.**, 2014.
- Maupin, V., and J. Park, Theory and observations: Wave propagation in anisotropic media, revised chapter accepted for **Treatise on Geophysics, Volume 2, Seismology and Structure of the Earth**, B. Romanowicz and A. Dziewonski, eds, Elsevier, Amsterdam, 2014.

- Park, J., and V. Levin, Receiver functions from multiple-taper spectral correlation: Statistics, single-station migration, and jackknife uncertainty, submitted to **Geophys. J. Int.**, 2014.
- Rieger, D. M., and J. Park, The dependence of Quasi-Love surface-wave scattering on the orientation of anisotropy and its implications for detecting mantle flow, submitted to **Geochemistry, Geophysics, Geosystems**, 2014.
- Royer, D. L., Y. Donnadieu, J. Park, J. Kowalczyk, and Y. Godderis, Error analysis of CO<sub>2</sub> and O<sub>2</sub> estimates from the long-term geochemical model GEOCARBSULF, submitted to **American J. Science**, 2014.
- Chiarabba C., G. Giacomuzzi, I. Bianchi, N. Piana Agostinetti, and J. Park, Delamination-retreat in the northern Apennines, submitted to **Earth and Planetary Science Letters**, 2014.
- Margheriti, L., F. P. Lucente, J. Park, S. Pondrelli, V. Levin, M. Steckler, P. Baccheschi, and S. Salimbeni, Large-scale coherent anisotropy of upper mantle beneath the Italian peninsula, comparing quasi-Love waves and SKS splitting, submitted to **J. Geodynamics**, 2014.
- Salimbeni, S., V. Levin, S. Pondrelli, L. Margheriti, and J. Park, Looking for layered anisotropic structures in the mantle near a slab hinge: an example from the northern Apennines, submitted to **J. Geodynamics**, 2014.

## Other Publications

- Nuclear Testing and Nonproliferation: The Role of Seismology in Deterring the Development of Nuclear Weapons*, report to Congress, by G. Van der Vink, D. Simpson, C. Hennet, J. Park and T. Wallace, 94pp, February 1994.
- "Nuclear Test Ban Monitoring: New Requirements, New Resources" by G. E. van der Vink and J. Park, (Policy Forum Article) **Science**, **263**, 634-635, 4 February 1994.
- "Fallout from Nuclear Non-Event," Op-Ed essay on seismic monitoring of the Comprehensive Test Ban Treaty, published by **Los Angeles Times** newspaper, Thursday, Sept 25, 1997.
- van der Vink, G., J. Park, R. Allen, T. Wallace, C. Hennet, False accusations, undetected tests, and implications for the Comprehensive Test Ban Treaty, **Arms Control Today**, **28**, no 4 (May), pp 7-13, 1998.
- "Nuclear Testing," Park, J., an encyclopedia article in the *McGraw-Hill Yearbook 2000 of Science and Technology*, p 297-300, McGraw-Hill, New York, 1999.
- "Time Series Analysis," J. Park -- article in *The Encyclopedia of Global Change*, Oxford University Press, 2000.
- "Inge Lehmann," "Charles Richter," and "Heat Flow," Park, J., essays in the **Oxford Companion to the Earth**, Oxford University Press, London, 2000.
- Dynamic Earth**, 5<sup>th</sup> edition of physical geology textbook, Brian Skinner, Stephen Porter and Jeffrey Park, published by J. Wiley and Sons, April 2003.
- Book Review: *Time Series Analysis and Cyclostratigraphy*, by Graham Weedon, for *International Geology Review*, v**46**, p.191-2, 2004
- "The Global Seismographic Network Surpasses its Design Goal", Butler, R., Lay, T., Creager, K., Earle, P., Fischer, K., Gaherty, J., Laske, G., Leith, W., Park, J., Ritzwoller, M., Tromp, J., and Wen, L., **EOS Trans. AGU**, **85**, pp. 225-229, 2004.

National Science Foundation Workshop, December 9-12, 2004, Stanford University, Stanford CA, *Report from the Neotectonics Breakout Group*, Principal Authors, Kazuya Fujita, Jeffrey Park, Bernard Coakley, Joanne Bourgeois, Vera Ponomareva, Kevin Mackey, and Elizabeth Miller. WEBSITE: <http://pangea.stanford.edu/research/structure/nerussia/index.html>

Geophysicist Park Responds to the Great 2004 Sumatra-Andaman Earthquake, uncredited article in Spring 2005 issue of *Yale Environmental News*.

The Sumatra-Andaman Earthquake of 26 December 2004, encyclopedia article in 2005 *McGraw-Hill Yearbook of Science and Technology*.

Levin, V., and J. Park, RETREAT: International seismological investigation of northern Apennines, *IRIS Annual Report*, 2006.

Butler, R., K. Anderson and J. Park, Global Seismographic Network status, *IRIS Annual Report*, 2006.

Levin, V., and J. Park, Is it all wet? Searching for hydrated mantle rock within the Cascadia megathrust (essay in 2007 Earthscope operations & maintenance proposal)

YIBS Director's Essay: Spring 2008 edition of **Yale Environmental News**

YIBS Director's Essay: Spring 2009 edition of **Yale Environmental News**

Book Review: "Dead Pool: Lake Powell, Global Warming, and the Future of Water in the West," by John Lawrence Powell, *Amer. J. of Science*, v309, p330-332, 2009.

Park, J., "The North Korean nuclear test: What the seismic data says," **Bulletin of the Atomic Scientists** (online version, 26 May 2009) <http://thebulletin.org/web-edition/features/the-north-korean-nuclear-test-what-the-seismic-data-says>

YIBS Director's Essay: Spring 2010 edition of **Yale Environmental News**

Park, J., Earthquake 9.0: What this magnitude might mean for Japan's future, **Bulletin of the Atomic Scientists**, (online version, 16 March 2011),  
<http://thebulletin.org/web-edition/features/earthquake-90-what-magnitude-might-mean-japans-future>

YIBS Director's Essay: Spring 2011 edition of **Yale Environmental News**

Park, J., A broader reading of seismic waves from North Korea, **Bulletin of the Atomic Scientists**, (online version, 26 February 2013),  
<http://thebulletin.org/web-edition/features/broader-reading-of-seismic-waves-north-korea>