

Curriculum Vitae of Zhigang Peng

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Education

Ph.D. in Geological Sciences, University of Southern California, Los Angeles, CA	2004
M.S. in Electrical Engineering, University of Southern California, Los Angeles, CA	2002
B.S. in Geophysics, University of Science and Technology of China, Hefei, China	1998
B.E. in Computer Application, University of Science and Technology of China, Hefei, China	1998

Employment

Assistant Professor	Georgia Institute of Technology	08/2006 – Present
Postdoctoral Researcher	University of California, Los Angeles	06/2004 – 08/2006
Research Assistant	University of Southern California	09/1998 – 06/2004

Research Interests

High Resolution Imaging of Fault Zone Structures, Temporal Changes of Earth's Properties, Earthquake Source Properties, Spatio-Temporal Seismicity Patterns, Earthquake Triggering, Non-Volcanic Tremor and Slow Earthquakes, Seismological Studies of the Earth's Interior.

Honors and awards

Outstanding Student Paper Award, American Geophysical Union 2002

Teaching Experience

Assistant Professor of Geophysics, 08/2006 – Present: School of Earth and Atmo. Sciences, Georgia Institute of Technology

- Introduction to Geophysics (Fall, 2008): Introduction to methods used to visualize and understand the history, shape, mechanical structure, and dynamics of the solid-earth system. The covered topics include seismology, gravity, magnetism, heat flow, geochronology, and geodesy.
- Advanced Seismology (Spring, 2008): Advanced graduate-level course designed to involve students into seismological research. The covered topics include digital signal processing, seismometers and seismic networks, basic and advanced seismic data processing tools, travel time and synthetic seismogram calculations.
- Earthquake Physics (Fall, 2007): Graduate-level lectures, discussion and presentations of the current status of geophysical and mechanical understanding of processes that control earthquakes.
- Seismology (Fall, 2006, 2008): Graduate-level course in understanding the Earth's interior and earthquakes via seismic waves.

Instructor, Summer 2004: Dept. of Earth and Space Sciences, University of California, Los Angeles

- Earthquakes: Undergraduate course in causes and effects of earthquakes, seismic waves, and damages.

Teaching Assistant, Fall 2003–Spring 2004: Dept. of Earth Sciences, University of Southern California

- Seismic Exploration Geophysics
- Geophysics and Geoengineering
- Seminar in Earthquake Physics

Certificate for participation in “The Professoriate: Preparing for the Future”, Fall 2003–Spring 2004: Center for Excellence in Teaching, University of Southern California

Professional affiliations

American Geophysical Union (AGU)	1999 – present
Seismological Society of America (SSA)	2000 – present
Society of Exploration Geophysicists (SEG)	2003 – present
Sigma Xi (The Scientific Research Society)	2005 – present

Field Experience

Compliant fault zone experiment along the Calico fault zone in the Mojave desert	05/2006
Fault zone trapped wave experiment after the 2004 Parkfield earthquake	10/2004
Los Angeles Region Seismic Experiment II	10/1999
Fault zone trapped wave experiment after the 1999 Hector Mine earthquake	11/1999

Service Activities

Conference session chair:

- “The Debate on to What Extent Static or Dynamic Stresses Triggers Earthquakes” session, AGU Annual Meeting, San Francisco, December, 2009
- “Monitoring Temporal Changes of Earth's Properties with Seismic Waves” session, AGU Annual Meeting, San Francisco, December, 2008
- “Seismological Investigations of the 2008/05/12 Ms8.0 Wenchuan Earthquake” session, AGU Annual Meeting, San Francisco, December, 2008
- “High-Resolution Imaging of Fault Zone Structures” session, AGU Annual Meeting, San Francisco, December, 2007
- “Crustal Structure” session, SSA Annual Meeting, Lake Tahoe, NV, April 2005

Conference award referee:

- Judge for the best student award, School of Earth and Atmospheric Science Annual Symposium, Atlanta, November 2007
- Judge for the best student award, Earthscope National Annual Meeting, Monterey, March 2007

Manuscript referee:

Bulletin of Seismological Society of America (5), Earth, Planets and Space (2), Geology (1), Geophysical Journal International (7), Geophysical Research Letters (7), Journal of Geophysical Research (7), Nature (1), Natural Hazards (1), Pure and Applied Geophysics (2)

Proposal referee:

National Science Foundation (9)

Graduate Students Supervised

Kevin Chao	2006 – present
Peng Zhao	2006 – present
Chunquan Wu	2006 – present

Publications

Peer-Reviewed:

1. Ben-Zion, Y., Z. Peng, D. Okaya, L. Seeber, J. G. Armbruster, N. Ozer, A. J. Michael, S. Baris and M. Aktar (2003), A shallow fault zone structure illuminated by trapped waves in the

- Karadere-Düzce branch of the north Anatolian fault, western Turkey, *Geophys. J. Int.*, 152, 699–717.
2. Peng, Z., Y. Ben-Zion, A. J. Michael and L. Zhu (2003), Quantitative analysis of fault zone waves in the rupture zone of the Landers, 1992, California earthquake: Evidence for a shallow trapping structure, *Geophys. J. Int.*, 155, 1021–1041.
 3. Peng, Z. and Y. Ben-Zion (2004), Systematic analysis of crustal anisotropy along the Karadere-Düzce branch of the north Anatolian fault, *Geophys. J. Int.*, 159, 253–274.
 4. Peng, Z. and Y. Ben-Zion (2005), Spatio-temporal variations of crustal anisotropy from similar events in aftershocks of the 1999 M7.4 İzmit and M7.1 Düzce, Turkey, earthquake sequences, *Geophys. J. Int.*, 160, 1027–1043.
 5. Lewis*, M. A., Z. Peng, Y. Ben-Zion and F. L. Vernon (2005), Shallow seismic trapping structure in the San Jacinto fault zone near Anza, California, *Geophys. J. Int.*, 162, 867–881.
 6. Peng, Z., J. E. Vidale, C. Marone and A. Rubin (2005), Systematic variations in moment with recurrence interval of repeating aftershocks, *Geophys. Res. Lett.*, 32(15), L15301, doi: 10.1029/2005GL022626.
 7. Peng, Z., and Y. Ben-Zion (2006), Temporal changes of shallow seismic velocity around the Karadere-Düzce branch of the north Anatolian fault and strong ground motion, *Pure Appl. Geophys.* “Advances in Studies of Heterogeneities in the Earth's Lithosphere: The Keiiti Aki Volume II”, 163, 567-599.
 8. Peng, Z., J. E. Vidale, and H. Houston (2006), Anomalous early aftershock decay rates of the 2004 M6 Parkfield earthquake, *Geophys. Res. Lett.*, 33, L17307, doi:10.1029/2006GL026744.
 9. Peng, Z., J. E. Vidale, M. Ishii, and A. Helmstetter (2007), Seismicity rate immediately before and after main shock rupture from high-frequency waveforms in Japan, *J. Geophys. Res.*, 112, B03306, doi:10.1029/2006JB004386.
 10. Zhao*, P., and Z. Peng (2008), Velocity contrast along the Calaveras fault from analysis of fault zone head waves generated by repeating earthquakes, *Geophys. Res. Lett.*, 35, L01303, doi:10.1029/2007GL031810.
 11. Gombert, J., J. L. Rubinstein, Z. Peng, K. C. Creager, and J. E. Vidale (2008), Widespread triggering of non-volcanic tremor in California, *Science*, 319, 173, doi: 10.1126/science.1149164.
 12. Fischer*, A., Z. Peng, and C. G. Sammis (2008), Dynamic triggering of high-frequency bursts by strong motions during the 2004 Parkfield earthquake sequence, *Geophys. Res. Lett.*, 35, L12305, doi:10.1029/2008GL033905.
 13. Peng, Z., K. Koper, J. E. Vidale, F. Leyton, and P. M. Shearer (2008), Inner-core fine-scale structure from scattered waves recorded by LASA, *J. Geophys. Res.*, 113, B09312, doi:10.1029/2007JB005412.
 14. Peng, Z., and K. Chao* (2008), Non-volcanic tremor beneath the Central Range in Taiwan triggered by the 2001 Mw7.8 Kunlun earthquake, *Geophys. J. Int.* (Fast track), 175, 825–829, doi: 10.1111/j.1365-246X.2008.03886.x.
 15. Peng, Z., J. E. Vidale, K. C. Creager, J. L. Rubinstein, J. Gombert, and P. Bodin (2008), Strong tremor near Parkfield, CA excited by the 2002 Denali Fault earthquake, *Geophys. Res. Lett.*, 35, L23305, doi:10.1029/2008GL036080.
 16. Wu*, C., Z. Peng and Y. Ben-Zion (2009a), Non-linearity and temporal changes of fault zone site response associated with strong ground motion, *Geophys. J. Int.*, 176, 265-278, doi: 10.1111/j.1365-246X.2008.04005.x.
 17. Yang*, W., Z. Peng, and Y. Ben-Zion (2009), Variations of strain-drops in aftershocks of the 1999 İzmit and Duzce earthquakes along the Karadere-Duzce branch of the North Anatolian fault, *Geophys. J. Int.*, 177, 235–246, doi: 10.1111/j.1365-246X.2009.04108.x.
 18. Peng, Z., J. E. Vidale, A. Wech, R. M. Nadeau and K. C. Creager (2009), Remote triggering of tremor along the San Andreas fault in central California, *J. Geophys. Res.*, 114, B00A06, doi:10.1029/2008JB006049.
 19. Chao*, K., and Z. Peng (2009), Temporal changes of shear wave velocity and anisotropy in the shallow crust induced by the 10/22/1999 M6.4 Chia-Yi, Taiwan, earthquake, *Geophys. J. Int.*, 179, 1800–1816, doi: 10.1111/j.1365-246X.2009.04384.x.

20. Zhao*, P., and Z. Peng (2009), Depth extent of damage zones around the central Calaveras fault from waveform analysis of repeating earthquakes, *Geophys. J. Int.*, 179, 1817–1830, doi: 10.1111/j.1365-246X.2009.04385.x.
21. Wu*, C., Z. Peng, and D. Assimaki (2009b), Temporal changes in site response associated with strong ground motion of 2004 Mw6.6 Mid-Niigata earthquake sequences in Japan, *Bull. Seismol. Soc. Am.*, doi: 10.1785/0120090108.
22. Peng, Z., and P. Zhao* (2009), Migration of early aftershocks following the 2004 Parkfield earthquake, *Nature Geosci.*, doi: 10.1038/ngeo697.
23. Peng, Z., W. Wang, Q.-F. Chen, and T. Jiang (2009), Remotely triggered seismicity in northeast China following the 2008 Mw7.9 Wenchuan earthquake, *Earth Planets Space*, 61, 1-6.
24. Ghosh, A., J. E. Vidale, Z. Peng, K. C. Creager and H. Houston (2009), Complex non-volcanic tremor near Parkfield triggered by the great 2004 Sumatra earthquake, *J. Geophys. Res.*, doi:10.1029/2008JB006194.
25. Zhao*, P., Z. Peng, Z. Shi, M. Lewis, and Y. Ben-Zion (2009), Variations of the velocity contrast and rupture properties of M6 earthquakes along the Parkfield section of the San Andreas fault, *Geophys. J. Int.*, accepted.

In Review:

26. Tao, J., Z. Peng, W. Wang, and Q.-F. Chen (2009), Remotely triggered seismicity in Continental China by the 2008 Mw7.9 Wenchuan earthquake, *Bull. Seismol. Soc. Am.*, submitted.

Non-Peer-Reviewed:

1. Ben-Zion, Y., Z. Peng, M. A. Lewis, and J. J. McGuire (2007), High resolution imaging of fault zone structures with seismic fault zone waves, *Scientific Drilling, Special Issue No. 1*, 78-79, doi:10.2204 /iodp.sd.s01.23.2007.
2. Peng, Z. (2004), High resolution imaging of fault zone structures, *Ph.D. Thesis*, University of Southern California, Los Angeles, CA.

* *students advised or help advised*

Invited Department Seminars

1. Department of Geosciences, Princeton University, Princeton, NJ, September, 2009: “*Remote triggering of tremor and earthquakes*”.
2. Institute of Earth Sciences, Academia Sinica; Taipei; National Central University; National Chung Cheng University; National Taiwan Normal University; Taiwan, March, 2009: “Remote triggering of non-volcanic tremor”, “Temporal changes in the upper crust associated with major earthquakes”.
3. Seismological Laboratory, Caltech, Pasadena, CA, March, 2009: “*Global search of “triggered” non-volcanic tremor*”.
4. Workshop on “New Challenges In Earthquake Dynamics: Observing And Modelling A Multi-Scale System”, Obergurgl, Austria, October, 2008: “*Systematic analysis of early aftershocks: implications for earthquake physics and fault mechanics*”.
5. Institute of Theoretical and Applied Geophysics, Peking University, June, 2008: “*Remote triggering of non-volcanic tremors*”.
6. School of Earth and Space Sciences, University of Science and Technology of China, June, 2008: “Temporal changes in active fault zones and shallow crust associated with strong ground motion of large earthquakes”, “*Remote triggering of non-volcanic tremors*”.
7. Institute of Geology, Chinese Earthquake Administration, June, 2008: “*Remote triggering of non-volcanic tremors*”.
8. Department of Geosciences, Georgia State University, March, 2008: “*Remote triggering of non-volcanic tremors*”.

9. School of Civil and Environmental Engineering, Georgia Tech, March, 2008: “*Temporal changes, high-frequency bursts, and strong ground motion*”.
10. Department of Earth Sciences, University of Southern California, February, 2007: “*Temporal changes in the upper crust associated with major earthquakes: a tale of three stories*”.
11. Geological Sciences, Brown University, Providence, RI, June 2006: “*Time-dependent changes of fault zone properties from systematic analysis of repeating earthquakes*”.
12. Department of Earth Sciences, University of California, Riverside, CA, May 2006: “*Deriving earthquake source physics from short-term earthquake triggering and repeating aftershocks*”.
13. Department of Earth Sciences, University of California, Riverside, CA, May 2006: “*High resolution imaging of fault zone structures and time-dependent changes of fault zone properties*”.
14. School of Earth and Atmospheric Sciences, Georgia Institute of Technology, Atlanta, GA, April 2006: “*High resolution imaging of fault zone structures and time-dependent changes of fault zone properties*”.
15. Department of Earth Sciences, University of Southern California, CA, November 2005: “*Implications for friction and fault zone rheology from short-term triggering and repeating aftershocks*”.
16. IGPP Friday Geophysics Seminar Series, University of California, San Diego, CA, May 2005: “*Implications for friction and fault zone rheology from early and repeating aftershocks*”.
17. USGS Earthquake Hazards Team Seminar Series, Menlo Park, CA, February 2005: “*Anomalous early aftershock decay rates*”.
18. Seismological Laboratory, Caltech, Pasadena, CA, January 2005: “*What can learn from repeating aftershocks?*”
19. Department of Earth and Space Sciences, University of California, Los Angeles, October 2004: “*I: Anomalous early aftershock decay rates; II: repeating aftershocks.*”
20. Seismological Laboratory, Department of Earth and Planetary Science, University of California, Berkeley, CA, August 2004: “*High-resolution imaging of fault zone structures from quantitative analysis of trapped waves.*”
21. The Bellaire Technology Center, Shell Oil Company, Houston, TX, May 2004: “*Spatio-temporal variations of crustal anisotropy and seismic velocity along the Karadere-Düzce branch of the north Anatolian fault.*”
22. Department of Earth and Space Sciences, University of California, Los Angeles, CA, January 2004: “*Spatial and temporal distributions of crustal anisotropy and seismicity rate changes during the 1999 İzmit and Düzce earthquake sequences.*”
23. Scripps Institution of Oceanography, University of California, San Diego, CA, July 2003: “*Quantitative analysis of seismic trapped waves in the Karadere-Düzce branch of the North Anatolian fault, the rupture zone of the Landers, 1992, California earthquake, and in the San Jacinto fault zone near Anza, California: Evidence for a shallow trapping structure.*”

Abstracts (regular and invited talks marked):

1. Chao, K., Z. Peng, C.-H. Lin, and C.-C. Tang (2009), Systematic analysis of triggered and ambient tremor beneath the Central Range in Taiwan, *Eos Trans. AGU*, 90(54), Fall Meet. Suppl., Abstract T11C-1821.
2. Fabian, A., L. Ojha, Z. Peng, and K. Chao (2009), Systematic search of remotely triggered tremor in Northern and Southern California, *Eos Trans. AGU*, 90(54), Fall Meet. Suppl., Abstract T13D-1916.
3. Guilhem, A., Z. Peng, and R. M. Nadeau (2009), Systematic search of non-volcanic tremors triggered by regional earthquakes along the Parkfield-Cholame section of the San Andreas Fault, *Eos Trans. AGU*, 90(54), Fall Meet. Suppl., Abstract T23E-05 (**Talk**).
4. Jiang, T., Z. Peng, W. Wang, Q.-F. Chen, and C. Wu (2009), Remotely triggered seismicity in Continental China, *Eos Trans. AGU*, 90(54), Fall Meet. Suppl., Abstract S51C-1441.

5. Peng, Z., B. Enescu, P. Zhao, and Sebastian Hainzl (2009), Detecting early aftershocks in California and Japan based on a matched filter technique, *Eos Trans. AGU*, 90(54), Fall Meet. Suppl., Abstract S54A-06 **(Talk)**.
6. Simpson, D. W., Z. Peng, D. Kilb, and D. Rohrick (2009), Sonification of earthquake data: from wiggles to pops, booms and rumbles, *Eos Trans. AGU*, 90(54), Fall Meet. Suppl., Abstract D53E-08 **(Talk)**.
7. Wu, C., Z. Peng, and Y. Ben-Zion (2009), Systematic analysis of nonlinear ground motion and temporal changes of material properties produced by small and medium earthquakes, *Eos Trans. AGU*, 90(54), Fall Meet. Suppl., Abstract S24A-03 **(Talk)**.
8. Zhao, P., Z. Peng, and K. Sabra (2009), Detecting temporal changes around the Parkfield section of the San Andreas Fault associated with large teleseismic earthquakes, *Eos Trans. AGU*, 90(54), Fall Meet. Suppl., Abstract S23C-02 **(Talk)**.
9. Yang, W., Z. Peng, and Y. Ben-Zion (2009), Earthquake source quantities derived from spectra of P and S waves generated by aftershocks around the Karadere-Düzce branch of the North Anatolian Fault, *Seis. Res. Lett.*, 80(2), 342.
10. Ben-Zion, Y., M. Lewis, Z. Peng, Z. Shi, and P. Zhao (2008), Variations of velocity contrasts and fault zone damage along the Parkfield section of the San Andreas fault using fault zone trapped waves, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract T51A-1870.
11. Chao, K., and Z. Peng (2008), Remote triggering of non-volcanic tremor around Taiwan, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract U33A-0036.
12. Gerasimenko, I., S. Bagchi, T. Toteva, and Z. Peng (2008), Looking for seismic scatterers: summer research experience for undergraduate students, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract ED51A-0549.
13. Ghosh, A., J. Vidale, Z. Peng, K. Creager, and H. Houston (2008), Complex non-volcanic tremor near San Andreas fault around Parkfield triggered by the Great 2004 Sumatra earthquake, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract U33A-0047.
14. Peng, Z., J. E. Vidale, A. Wech, R. M. Nadeau, and K. C. Creager (2008), Tremor triggered near Parkfield by teleseismic waves, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract U32A-04 **(Talk)**.
15. Jiang, T., Z. Peng, W. Wang, and Q. Chen (2008), Global survey of earthquakes and non-volcanic tremor triggered by the 2008 Mw7.9 Wenchuan earthquake, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract S23E-08 **(Talk)**.
16. Shearer, P., J. Vidale, G. Lin, and Z. Peng (2008), Swarms, Mogi doughnuts, and earthquake triggering models, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract. S53C-01 **(Invited Talk)**
17. Toteva, T., Z. Peng, and P. Zhao (2008), Temporal changes in near-surface layers and deep fault zone scatterers after the 2004 Mw6.0 Parkfield earthquake observed by the UPSAR, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract S53A-1816.
18. Yang, W., Y. Ben-Zion, and Z. Peng (2008), Comparisons of corner frequencies and strain-drops from P and S waves generated by earthquakes along the Karadere-Duzce branch of the North Anatolian fault, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract S23B-1900.
19. Wu, C., Z. Peng, and D. Assimaki (2008), Systematic analysis of temporal changes in site response associated with strong ground motion in Japan, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract S51E-08 **(Talk)**.
20. Vidale, J. E., Z. Peng, and K. C. Creager (2008), Episodic tremor and slip - a kinder and gentler variety of earthquake, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract S34B-01 **(Invited Talk)**.
21. Zhao, P. and Z. Peng (2008), Identification of repeating earthquakes and spatio-temporal variations of fault zone properties around the Parkfield section of the San Andreas fault and the central Calaveras fault, *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract S53A-1817.
22. Peng, Z., and P. Zhao (2008), Early aftershocks of the 2004 Parkfield earthquake detected by a matched filter technique, *Seis. Res. Lett.*, 79(2), 303.

23. Zhao, P., Z. Peng, Y. Ben-Zion, Z. Shi, and M. Lewis (2008), Variations of the velocity contrast and rupture properties of M6 earthquakes along the Parkfield section of the San Andreas fault, *Seis. Res. Lett.*, 79(2).
24. Lewis, M., Y. Ben-Zion, Z. Peng, Z. Shi, and P. Zhao (2008), Variations of fault zone damage and velocity contrasts along the Parkfield Section of the San Andreas Fault, *Seis. Res. Lett.*, 79(2), 352.
25. Shi, Z., Y. Ben-Zion, Z. Peng, M. Lewis and P. Zhao (2008), Joint inversion of fault zone head waves and direct P arrivals along the Parkfield section of the San Andreas Fault, *Seis. Res. Lett.*, 79(2), 326.
26. Peng, Z., J. E. Vidale, J. Rubinstein, and J. Gomberg (2007), Non-volcanic tremor near Parkfield, CA systematically excited by teleseismic waves, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T21A-0357.
27. Ben-Zion, Y., Z. Peng, P. Zhao, Z. Shi, and M. Lewis (2007), Variations of the velocity contrast and rupture properties of M6 earthquakes along the Parkfield section of the San Andreas fault, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T53C-08 (**Talk**).
28. Chao, K. and Z. Peng (2007), Temporal changes of shear wave velocity and anisotropy in the shallow crust Induced by the 10/22/1999 M6.4, and M6.0, Chia-Yi, Taiwan earthquakes, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T51C-0682.
29. Fischer, A., Z. Peng, and C. Sammis (2007), Dynamic triggering of high-frequency bursts by strong motions during the 2004 Parkfield earthquake sequence, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract S13B-1306.
30. Ohlendorf, S., Z. Peng, and Y. Ben-Zion (2007), Velocity contrast along the Hayward fault from analysis of fault zone head waves, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract S21A-0237.
31. Vidale, J. E., Z. Peng, K. Creager, and P. Bodin (2007), Teleseismically-induced tremor near Parkfield, CA - a cacophony or a symphony? *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T12C-03 (**Talk**).
32. Wu, C., Z. Peng, and Y. Ben-Zion (2007), Rapid temporal changes of fault zone site response associated with strong ground motion, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T51C-0681.
33. Zhao, P., Z. Peng, Y. Ben-Zion, M. Lewis, and Z. Shi (2007), Variations of velocity contrast along the rupture zone of the 2004 M6 Parkfield earthquake on the San Andreas Fault, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T51C-0678.
34. Gomberg, J. J. L. Rubinstein, Z. Peng, K. C. Creager, J. E. Vidale, and P. Bodin (2007), Widespread triggered non-volcanic tremor along the California transform plate boundary, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T12C-02 (**Talk**).
35. Koper, K. D., P. M. Shearer, Z. Peng, and J. E. Vidale (2007), Simulations of inner core coda waves with a multiple-scattering phonon based algorithm, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract DI31A-0264.
36. Lewis, M., Y. Ben-Zion, Z. Peng, Z. Shi and P. Zhao (2007), The velocity contrast across the Parkfield section of the San Andreas fault near the SAFOD drill site, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T51C-0680.
37. Shi, Z., Y. Ben-Zion, Z. Peng, M. Lewis, and P. Zhao (2007), Analysis of fault zone head waves in the San Andreas and Southwest Fracture Zone around the hypocenter of the 2006 M6 Parkfield earthquake, *Eos Trans. AGU*, 88(52), Fall Meet. Suppl., Abstract T51C-0679.
38. Peng, Z. (2007), Occurrence patterns of foreshocks and aftershocks in southern California, *Seism. Res. Lett.*, 78, 269 (**Talk**).
39. Chao, K. and Z. Peng (2007), Temporal changes of seismic velocity in the shallow crust induced by the 10/22/1999 M6.4, Chia-Yi, Taiwan earthquake, *Seism. Res. Lett.*, 78, 257.
40. Wu, C., Z. Peng, and Y. Ben-Zion (2007), Temporal changes in fault zone site response caused by strong ground motion of the 1999 Mw7.1 Duzce, Turkey, earthquake, *Seism. Res. Lett.*, 78, 278.

41. Zhao, P. and Z. Peng (2007), Depth extent of the damage and healing processes and velocity contrast along the calaveras fault zone revealed from waveform analysis of repeating earthquakes, *Seism. Res. Lett.*, 78, 316.
42. Yang, W., Z. Peng, and Y. Ben-Zion (2007), Systematic analysis of earthquake source and site properties in the aftershock zones of the 1999 Izmit and Duzce mainshocks, *Seism. Res. Lett.*, 78, 258.
43. Yang, W., Y. Ben-Zion, and Z. Peng (2007), Correcting clipped seismic waveform by using waveforms of similar events, *Seism. Res. Lett.*, 78, 249.
44. Peng, Z., J. E. Vidale, K. Koper, and F. Leyton (2006), Fine-scale heterogeneity and differential rotation of the inner core revealed from scattered waves recorded by the LASA, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract U41D-08 (**Talk**).
45. Zhao, P. and Z. Peng (2006), Structural properties and temporal evolutions of the Calaveras fault zone revealed from waveform analysis of repeating earthquakes in the rupture zone of the 1984 Morgan Hill earthquake, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract T32C-04 (**Talk**).
46. Ben-Zion, Y., Z. Peng, J. McGuire, and M. Lewis (2006), High Resolution Imaging of Fault Zone Structures With Seismic Fault Zone Waves, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract T23E-01 (**Invited Talk**).
47. Ben-Zion Y. and Z. Peng (2006), Source Properties of Repeating Small Earthquakes in the Aftershock Zones of the 1999 Izmit and Duzce Earthquakes, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract S22B-06 (**Talk**).
48. Yang, W., Z. Peng, and Y. Ben-Zion (2006), Source properties of earthquakes and site effects in the aftershock zones of the 1999 Izmit and Duzce earthquakes from iterative spectral stacking for common source and receiver terms, *Eos Trans. AGU*, 87(52), Fall Meet. Suppl., Abstract S31B-0210.
49. Peng, Z. and Y. Ben-Zion (2006), High-resolution imaging of fault zone structures, *submitted to 151st meeting of the Acoustical Society of America*, Providence, RI (**Invited Talk**).
50. Peng, Z. and J. E. Vidale (2006), Anomalous Omori and inverse Omori's law around the time of main shocks, *Seism. Res. Lett.*, 77, 255.
51. Peng, Z., J. E. Vidale, F. Leyton, and K. Koper (2006), Investigating fine-scale heterogeneity of the inner-core structure using inner-core scattered waves recorded by LASA, *Seism. Res. Lett.*, 77, 294.
52. Peng, Z., Y. Ben-Zion, and W. Yang (2006), Source properties of repeating earthquakes in the aftershock zones of the 1999 Izmit and Duzce earthquakes based on stacked spectral-ratios and moving time-window, *Seism. Res. Lett.*, 77, 255-256.
53. Yang, W., Z. Peng, and Y. Ben-Zion (2006) Source spectra of small earthquakes in the aftershock sequences of the 1999 M7.4 Izmit and M7.1 Duzce earthquakes from iterative spectral stacking for common source and receiver terms, *Seism. Res. Lett.*, 77, 255.
54. Yang, W., Z. Peng, and Y. Ben-Zion (2005), Analysis of earthquake source spectra from similar events in the aftershock sequences of the 1999 M7.4 Izmit and M7.1 Duzce earthquakes, *Eos Trans. AGU*, 86(48), Fall Meet. Suppl., Abstract S53A-1085.
55. Vidale, J. E., Z. Peng and M. Ishii (2005), Anomalous aftershock decay rates in the first hundred seconds, *Seism. Res. Lett.*, 76, 217 (**Talk**).
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