

## **CURRICULUM VITAE : TOSHIRO TANIMOTO**

### **EDUCATION**

Ph.D. (Geophysics) University of California, Berkeley, December, 1982  
M.S. (Geophysics) University of Tokyo, March, 1979  
B.S. (Physics) University of Tokyo, March, 1977

### **APPOINTMENTS**

Professor, Department of Earth Science, University of California, Santa Barbara,  
1994-Present.  
Professor, Department of Earth and Planetary Sciences, Faculty of Science,  
University of Tokyo, 2010-2011.  
Professor, Department of Earth and Planetary Sciences, Faculty of Science,  
Tokyo Institute of Technology, 1994-1997.  
Associate Professor, Department of Geological Sciences,  
University of California, Santa Barbara, 1992-1994.  
Assistant Professor of Geophysics, California Institute of Technology,  
1985-1992.  
Assistant Professor of Geophysics, University of Washington, 1984-1985.  
Research Fellow, California Institute of Technology, 1983-1984.

### **SPECIAL APPOINTMENTS**

Visiting Professor, Hokkaido University, Japan, July 1-Aug. 31, 2017.  
Visiting Professor, Academia Sinica, Taipei, Taiwan, Oct. 31-Nov. 18, 2016.  
Visiting Scholar, Department of Geosciences, University of Oslo, Norway,  
Sept. 20-Oct. 12, 2016  
Visiting Fellow, Okinawa Institute of Science and Technology, Japan, Dec., 2014  
Visiting Fellow, Center for Advanced Study,  
Ludwig Maximilian University of Munich, Sept.-Nov., 2014.  
Visiting Professor, Hokkaido University, Apr.-Jun., 2009 and Jul.-Sept., 2012.  
Visiting Professor, Earthquake Research Institute, University of Tokyo,  
Aug.-Nov., 2005.  
Visiting Professor, Institut de Physique du Globe de Strasbourg, France,  
Jun.-July, 2005.  
Visiting Professor, Institut de Physique du Globe de Paris, France, Apr.-Jun., 2004.  
Visiting Professor, Earthquake Research Institute, University of Tokyo,  
Jun.-Aug., 1998.  
Visiting Associate Professor, Institut de Physique du Globe de Paris,  
University of Paris, Apr.-Jun., 1992.

### **HONOR**

The 2015 Editors' Citation for Excellence in Refereeing, Journal of Geophysical Research,  
Solid Earth.  
Fellow, American Geophysical Union (2012)  
Outstanding Reviewer, Geophysical Journal International,  
Oxford University Press (2010, 2011, 2013)

## **PART I. RESEARCH**

### **Cumulative List of Publications**

<b>#</b>	<b>Year</b>	<b>Title and Authors</b>	<b>Publisher</b>	<b>Category</b>
1	1979	Tanimoto, T., and R. Sato, Numerical noise which appears in the evaluation of the wavenumber integral along the real-sin gamma axis, (in Japanese).	Zisin, Vol. 32, p. 365	ARTICLE
2	1980	Matsu'ura, M., and T. Tanimoto, Quasi-static deformations due to an inclined, rectangular fault in a viscoelastic halfspace.	Journal of Physics of the Earth, Vol. 28, p. 103.	ARTICLE
3	1980	Tanimoto, T., and R. Sato, Ocean bottom displacements and velocities due to underwater explosions.	Journal of Physics of the Earth, Vol. 28, p. 201.	ARTICLE
4	1981	Kawasaki, I., and T. Tanimoto, Radiation pattern of body waves due to the seismic dislocation occurring in an anisotropic source medium.	Bulletin of the Seismological Society of America, Vol. 71, p. 37.	ARTICLE
5	1981	Matsu'ura, M., T. Tanimoto and T. Iwasaki, Quasi-static displacements due to faulting in a layered halfspace with an intervenient viscoelastic layer.	Journal of Physics of the Earth, Vol. 29, p. 23.	ARTICLE
6	1981	Bolt, B. A. and T. Tanimoto, Atmospheric oscillations after the May 18, 1980 eruption of Mount St. Helens.	EOS, Vol. 62, No. 23, p. 529.	ARTICLE
7	1982	Tanimoto, T., Cagniard de-Hoop method for a Haskell type vertical fault.	Geophysical Journal of the Royal Astronomical Society, Vol. 70, p. 639-646.	ARTICLE
8	1982	Tanimoto, T., Coupling and attenuation of torsional modes in a heterogeneous Earth, Ph.D. thesis.	Department of Geology and Geophysics, University of California, Berkeley.	ARTICLE
9	1983	Tanimoto, T., and B. A. Bolt, Coupling of torsional modes in the Earth.	Geophysical Journal of the Royal Astronomical Society, Vol. 34, p. 83-95.	ARTICLE
10	1984	Tanimoto, T., and D. L. Anderson, Mapping convection in the mantle.	Geophysical Research Letters, Vol. 11, p. 287-290.	ARTICLE
11	1984	Tanimoto, T., A simple derivation of the formula to calculate synthetic long-period seismograms in a heterogeneous Earth by	Geophysical Journal of the Royal Astronomical Society,	ARTICLE

- normal mode summation. Vol. 77, p. 275-278.
- 12    1984    Tanimoto, T., Waveform inversion of mantle Love waves: L=2 heterogeneity, spherically symmetric Q and multipathing    Geophysical Journal of the Royal Astronomical Society, Vol. 78, p. 641-660.    ARTICLE
  - 13    1985    Tanimoto, T., and D. L. Anderson, Lateral Heterogeneity and Azimuthal Anisotropy of the Upper Mantle: Love and Rayleigh Waves 100-250 s.    Journal of Geophysical Research, Vol. 90, p. 1842-1858.    ARTICLE
  - 14    1985    Tanimoto, T., The Backus-Gilbert approach to the three dimensional structure in the upper mantle: I. Lateral variation of surface wave phase velocity with its error and resolution.    Geophysical Journal of the Royal Astronomical Society, Vol. 82, p. 105-123.    ARTICLE
  - 15    1986    Tanimoto, T., The Backus-Gilbert approach to the three dimensional structure in the upper mantle: II. SH and SV velocity.    Geophysical Journal of the Royal Astronomical Society, Vol. 84, p. 49-69.    ARTICLE
  - 16    1986    Tanimoto, T., and H. Kanamori, Linear programming approach to moment tensor inversion of earthquake sources and some tests on the three dimensional structure of the upper mantle.    Geophysical Journal of the Royal Astronomical Society, Vol. 84, No. 2, p. 413-430.    ARTICLE
  - 17    1986    Tanimoto, T., Free oscillations in a slightly anisotropic Earth.    Geophysical Journal of the Royal Astronomical Society, Vol. 87, p. 493-517.    ARTICLE
  - 18    1987    Tanimoto, T., Surface wave ray tracing equations and Fermat's principle in an anisotropic Earth.    Geophysical Journal of the Royal Astronomical Society, Vol. 88, p. 231-240.    ARTICLE
  - 19    1987    Tanimoto, T., Three dimensional reconstruction of Pangea.    Geophysical Research Letters, Vol. 14, p. 235-238.    ARTICLE
  - 20    1987    Tanimoto, T., The three-dimensional shear wave structure in the mantle by overtone waveform inversion. I. Radial seismogram inversion.    Geophysical Journal of the Royal Astronomical Society, Vol. 89, p. 713-740.    ARTICLE

21	1987	Honda, S., and T. Tanimoto, Regional 3-D heterogeneities by the waveform inversion - Application to the Atlantic area.	Geophysical Journal of the Royal Astronomical Society, Vol. 91, p. 737-753.	ARTICLE
22	1988	Tanimoto, T., The three-dimensional shear wave structure in the mantle by overtone waveform inversion. II. Inversion of X waves, R waves and G waves.	Geophysical Journal of the Royal Astronomical Society, Vol. 93, No. 2, p. 321-333.	ARTICLE
23	1989	Tanimoto, T., Structure of the Earth and its dynamics of the interior (in Japanese).	Kagaku, February issue.	ARTICLE
24	1989	Tanimoto, T., Splitting of normal modes and travel time anomaly due to the magnetic field of the Earth.	Journal of Geophysical Research, Vol. 94, p. 3030-3036.	ARTICLE
25	1989	Tanimoto, T., Moment of inertia of the three-dimensional models of the Earth.	Geophysical Research Letters, Vol. 16, p. 389-392.	ARTICLE
26	1989	Yu-Shen Zhang, and T. Tanimoto, Three-dimensional modeling of upper mantle structure under the Pacific Ocean area.	Geophysical Journal of the Royal Astronomical Society, Vol. 98, p. 255-269.	ARTICLE
27	1989	Tanimoto, T., Reply.	Geophysical Research Letters, Vol. 16, p. 1077-1078.	ARTICLE
28	1990	Tanimoto, T., Long wavelength S-wave velocity structure throughout the mantle.	Geophysical Journal International, Vol. 100, p. 327-336.	ARTICLE
29	1990	Montagner, J. P., and T. Tanimoto, Global anisotropy in the upper mantle inferred from the regionalization of phase velocities.	Journal of Geophysical Research, Vol. 95, p. 4797-4819.	ARTICLE
30	1990	Tanimoto, T., Lateral variation of Q from singlet modal Q measurements of ${}_0S_2$ .	Geophysical Research Letters, Vol. 17, p. 669-672.	ARTICLE
31	1990	Tanimoto, T., Modeling curved surface wave paths: membrane surface wave synthetics.	Geophysical Journal International, Vol. 102, p. 89-100.	ARTICLE
32	1990	Tanimoto, T., and Yu-Shen Zhang, Lithospheric thickness and thermal anomalies in the upper mantle inferred from the Love wave data.	Geophysical Research Letters, Vol. 17, p. 2405-2408.	ARTICLE

33	1990	Tanimoto, T., Predominance of large-scale heterogeneity and the shift of velocity anomaly between the upper mantle and the lower mantle.	Journal of Physics of the Earth, Vol. 38, p. 493-509.	ARTICLE
34	1991	Zhang, Yu-Shen and T. Tanimoto, Global Love wave phase velocity variations and its significance to plate tectonics.	Physics of the Earth and Planetary Interior, Vol. 66, p. 160-202.	ARTICLE
35	1991	Tanimoto, T., Waveform inversion for three-dimensional density and S-wave structure.	Journal of Geophysical Research, Vol. 96, p. 8167-8189.	ARTICLE
36	1991	Montagner, J. P. and T. Tanimoto, Global upper mantle tomography of seismic velocities and anisotropies.	Journal of Geophysical Research, 96, 20337-20351.	ARTICLE
37	1992	Zhang Yu-Shen and T. Tanimoto, Ridges, hotspots and their interaction as observed in seismic velocity maps.	Nature, 355, 45-49.	ARTICLE
38	1992	Morin, P. J., T. Tanimoto, D. A. Yuen and Yu-Shen Zhang, Hotspots in the Earth's upper mantle.	Pixel, 20-26, March/April.	ARTICLE
39	1992	Morin, P. J., T. Tanimoto, D. A. Yuen and Yu-Shen Zhang, Charting the Earth's interior.	Supercomputing Review, 36-43, February.	ARTICLE
40	1992	Morin, P. J., T. Tanimoto, D. A. Yuen and Yu-Shen Zhang, Visualization of the Earth's upper mantle with IRIS Explorer,	IRIS Universe, 19, 50-55.	ARTICLE
41	1992	Tanimoto, T., Mantle plumes (in Japanese).	Kagaku, May.	ARTICLE
42	1992	Anderson, D. L., T. Tanimoto and Yu-Shen Zhang, Plate tectonics and hotspots: the third dimension.	Science, 256, 1645-1651.	ARTICLE
43	1992	Tanimoto, T. and Yu-Shen Zhang, Cause of low velocity anomaly along the South Atlantic hotspots.	Geophysical Research Letters, August.	ARTICLE
44	1992	Kohler, M. D. and T. Tanimoto, One-layer global inversion for outermost core velocity.	Physics of the Earth and Planetary Interior, 72, 173-184.	ARTICLE
45	1992	Anderson, D. L., Yu-Shen Zhang and T. Tanimoto, Plume heads, continental lithosphere, flood basalts and tomography, 'magmatism and the causes of continental break-up'.	Geological Society Special Publication, 68, 99-124.	ARTICLE
46	1993	Li, X.-D. and T. Tanimoto, Waveforms of long-period body waves in a slightly aspherical Earth	Geophysical Journal International, 112, 92-	ARTICLE

		model.	102.	
47	1993	Li, X.-D. and T. Tanimoto, Waveform inversion of long-period seismic data for global structure, in the book "Seismic Tomography: Theory and Practice" edited by H. M. Iyer and K. Hirahara.	Chapman and Hall	Book Chapter
48	1993	Zhang, Yu-Shen and T. Tanimoto, High Resolution Global Upper Mantle Structure and Plate Tectonics.	Journal of Geophysical Research, 98, 9793-9823.	ARTICLE
49	1994	Tanimoto, T. and D. J. Stevenson, Seismic constraints on partial melts under ridge axes.	Journal of Geophysical Research, 99, 4549-4558.	ARTICLE
50	1994	Kedar, S., S. Watada and T. Tanimoto, Seismic Moment Estimation from Long Period Free Oscillations.	Journal of Geophysical Research, 99, 17893-17907.	ARTICLE
51	1994	Zhang, Y.-S., T. Tanimoto and E. Stolper, S-wave velocity, Basalt chemistry and Bathymetry along the Mid-Atlantic Ridge.	Phys. Earth Planet. Interior, 84, 79-93.	ARTICLE
52	1995	Tanimoto, T., Crustal Structure of the Earth.	Global Earth Physics A Handbook of Physical Constants, 214-224, AGU Publication.	HANDBOOK
53	1995	Tanimoto, T., Formalism for traveltime inversion with finite frequency effects.	Geophysical Journal International, 121, 103-110.	ARTICLE
54	1995	Tanimoto, T., Probing the interior of the Earth by seismic waves.	KAGAKU ASAHI (Monthly Journal of Science in Japanese), 5 (May), 15-18.	ARTICLE
55	1996	Tanimoto, T., Continuum mechanics in Earth Science (in Japanese).	Vol.6 in Iwanami series in Earth and Planetary Sciences (in Japanese), Chapter 4, Iwanami Publishing Co.	CHAPTER IN BOOK
56	1997	Tanimoto, T., Investigating the Earth's Interior (in Japanese).	Suuri Kagaku (Mathematical Science), No. 398, 35-42.	ARTICLE
57	1997	Tanimoto, T., Bending Spherical Lithosphere - Axisymmetric case.	Geophysical Journal International, 129, 305-310.	ARTICLE
58	1997	Tanimoto, T., Mantle Dynamics,	Vol.10 in Iwanami series in Earth and	CHAPTER IN BOOK

- |    |      |   |  |             |
|----|------|---|--|-------------|
| 59 | 1997 | Tanimoto, T., Mantle structure by seismic tomography (in Japanese).   | Kagaku, July, page 507-512.                              | ARTICLE     |
| 60 | 1997 | Tanimoto, T., Global Long-Wavelength Images of the Upper 200 km in the Earth.   | Journal of Physics of the Earth, 45, 1-25, 1997          | ARTICLE     |
| 61 | 1998 | Tanimoto, T., J. Um, K. Nishida and N. Kobayashi, Earth's Continuous Oscillations observed on Seismically Quiet Days.   | Geophysical Research Letters, 25, 1553-1556.             | ARTICLE     |
| 62 | 1998 | Tanimoto, T., Atmospheric excitation of Earth's Normal Modes (in Japanese).   | Gekkan Chikyu (Chikyu Monthly), Vol. 20, No. 6, 367-371. | ARTICLE     |
| 63 | 1998 | Tanimoto, T., State of stress within bending spherical shell and its implications to subducting lithosphere.  | Geophysical Journal International, 134, No. 1, 199-206.  | ARTICLE     |
| 64 | 1999 | Tanimoto, T., Excitation of Normal Modes by Atmospheric Turbulence: Source of Long Period Noise.  | Geophysical Journal International, 136, 395-402.         | ARTICLE     |
| 65 | 1999 | Tanimoto, T., Ringing Earth's Bell without Earthquakes (in Japanese).   | Parity, April issue.                                     | ARTICLE     |
| 66 | 1999 | Shao, J.-C., M. Fuller, T. Tanimoto, J. R. Dunn and D. B. Stone, Spherical Harmonic analysis of Paleomagnetic Data: The time-averaged geomagnetic field for the past 5 Myr and the Matuyama-Brunhes Reversal. | Journal of Geophysical Research, 104, 5015-5030.         | ARTICLE     |
| 67 | 1999 | Tanimoto, T. and Junho Um, The Cause of Continuous Oscillations of the Earth.   | Journal of Geophysical Research, 104, 28723-28739.       | ARTICLE     |
| 68 | 2000 | Tanimoto, T. and T. Okamoto, Change of crustal potential energy by earthquakes: An indicator for extensional and compressional tectonics.   | Geophysical Research Letters, 27, 2313-2316, 2000.       | ARTICLE     |
| 69 | 2000 | Tanimoto, T., "Principles of Seismology" by A. Udias and "Introduction to Seismology" by P. M. Shearer (Book Review).   | Physics Today, v.53,56-57.                               | Book Review |

70	2001	Tanimoto, T., Earth Oscillations.	McGraw-Hill 2001 Yearbook of Science and Technology, p134- 137	Encyclopedia
71	2001	Tanimoto, T. and Thorne Lay, Mantle Dynamics and Seismic Tomography.	Proceedings of the National Academy of Sciences, 97, 12409- 12410.	ARTICLE
72	2001	Tanimoto, T., Continuous Free Oscillations: Atmosphere-Solid Earth Coupling.	Annual Review of Earth and Planetary Sciences, 29, 563-584.	ARTICLE
73	2002	Tanimoto, T., T. Okamoto and F. Terra, Tectonic signatures in crustal potential energy change by earthquakes.	Geophysical Journal International, 149, 490- 498. Previously listed as B1.	ARTICLE
74	2002	Prindle Sheldrake, K., C. Marcinkovich, and T. Tanimoto, Regional Wavefield reconstruction for teleseismic P-waves and Surface waves.	Geophysical Research Letters, 29, 391-394. Previously listed as B2.	ARTICLE
75	2002	Tanimoto, T. and K. Prindle Sheldrake, Three- dimensional S-wave Velocity Structure in Southern California	Geophysical Research Letters, 29, 8, 641-644. Previously listed as B3.	ARTICLE
76	2002	Okamoto, T. and T. Tanimoto, Crustal potential energy change by earthquakes in the western United States and Japan	Earth and Planetary Science Letters, 195, 17-27. Previously listed as B4.	ARTICLE
77	2002	Tanimoto, T., Structure of Earth's Mantle by Seismic Tomography (in Japanese),	"Plume Tectonics and Earth's History" edited by M. Kumazawa and S. Maruyama, p261-266, Iwanami Publishing Co.	Book Chapter
78	2003	Tanimoto, T., Geometrical Approach to Surface Wave Finite Frequency Effects	Geophysical Research Letters, vol. 30, No. 19, 1993, doi:10.1029/2003GL01 7475	ARTICLE
79	2004	Tanimoto, T., The azimuthal dependence of surface wave polarization in a slightly anisotropic medium.	Geophysical Journal International, vol. 156, p73-78.	ARTICLE
80	2004	Tanimoto, T., Reply	Geophysical Journal International, 159, 369- 369	ARTICLE
81	2005	Tanimoto, T., The Oceanic Excitation Hypothesis for the Continuous Oscillations of the Earth	Geophysical Journal International, 160, 276- 288.	ARTICLE
82	2005	Tanimoto, T. and L. Rivera, Prograde Rayleigh Wave Particle Motion	Geophysical Journal International, 162, 399- 405	ARTICLE
83	2006	Tanimoto, T. and C. Alvizuri, Inversion of the	Geophysical Journal	ARTICLE



		HZ ratio of Microseisms for S-wave Velocity in the Crust	International, 165, 323-335, doi:10.1111/j.1365-246X.02905.x	
84	2006	Tanimoto, T., S. Ishimaru, and C. Alvizuri, Seasonality in Particle Motion of Microseisms	Geophysical Journal International, 166, 253-266, doi:10.1111/j.1365-246X.2006.02931.x	ARTICLE
85	2006	Prindle, K. and T. Tanimoto, Teleseismic surface wave study for S-wave velocity structure under an array: Southern California	Geophysical Journal International, 166, 601-621, doi:10.1111/j.1365-246X.2006.02947.x	ARTICLE
86	2007	Tanimoto, T., Excitation of Normal Modes by Nonlinear Interaction of Ocean Waves	Geophysical Journal International, vol. 168, 571-582, doi:10.1111/j.1365-246X.2006.03240.x	ARTICLE
87	2007	Tanimoto, T., Excitation of Microseisms	Geophysical Research Letters, 34, L05308, doi:10.1029/2006GL029046	ARTICLE
88	2007	Tanimoto, T. and J. Artru-Lambin, Interaction of Solid Earth, Atmosphere and Ionosphere	Treatise on GEOPHYSICS, vol. 4, p421-444	Book Chapter (Review article)
89	2007	Tanimoto, T. and Kenton Prindle, Surface wave analysis with beamforming	Earth Planets Space, 59, 453-458	ARTICLE
90	2007	Gerstoft, P. and T. Tanimoto, A year of microseisms in southern California	Geophysical Research Letters, 34, L20304, doi:10.1029/2007GL031091	ARTICLE
91	2008	Tanimoto, T. and L. Rivera, The ZH ratio method for long-period seismic data: sensitivity kernels and observational techniques	Geophysical Journal International, 172, 187-198, doi:10.1111/j.1365-246X.2007.03609.x	ARTICLE
92	2008	Tanimoto, T., Humming a different tune	Nature, 452, 539-540, News and Views	COMMENTARY
93	2008	Tanimoto, T., M. Eitzel, and T. Yano, The Noise Cross-Correlation Approach for Apollo 17 LSPE Data: Diurnal Change in Seismic parameters in Shallow Lunar Crust	J. Geophys. Res., Planets, 113, E08011, doi:10.1029/2007JE003016	ARTICLE
94	2008	Tanimoto, T., Normal-mode solution for the seismic noise cross-correlation method	Geophysical Journal International, 175, 1169-1175, doi:10.1111/j.1365-246X.2008.03959.x	ARTICLE
95	2009	Yano, Tomoko, T. Tanimoto, and L. Rivera, The	Geophysical Journal	ARTICLE

		ZH ratio method for long-period seismic data: Inversion for S-wave velocity structure	International, 179, 413-424, doi:10.1111/j.1365-246X.2009.04293.x.	
96	2009	Tanimoto, T. and Seiji Tsuboi, Variational Principle for Rayleigh Wave Ellipticity	Geophysical Journal International, 179, 1658-1668, doi: 10.1111/j.1365-246X.2009.04360.x	ARTICLE
97	2010	Tanimoto, T., Equivalent forces for colliding ocean waves	Geophysical Journal International, 181, 468-478, 2010. doi:10.1111/j.1365-246X.2010.04505.x	ARTICLE
98	2010	Tanimoto, T. and Chen Ji, Afterslip of the 2010 Chilean Earthquake	Geophysical Research Letters, 37, L22312, doi:10.1029/2010GL045244	ARTICLE
99	2010	Tanimoto, T., Theory of Elastic Vibration (in Japanese).	Vol. 6 in Earth and Planetary Sciences, published by Iwanami Publishing Co., Tokyo. Revised second edition.	CHAPTER IN BOOK
100	2011	Tanimoto, T., Mantle Dynamics (in Japanese).	Vol.10 in Earth and Planetary Sciences, published by Iwanami Publishing Co., Tokyo, Revised second edition.	CHAPTER IN BOOK
101	2011	Kosarian, M., P. M. Davis, T. Tanimoto, and R. W. Clayton, The relationship between upper mantle anisotropic structures beneath California, Transpression and absolute plate motions	J. Geophys. Res., v. 116, B08307 Doi:10.1029/2010JB007742	ARTICLE
102	2011	Celso Alvizuri and T. Tanimoto, Azimuthal anisotropy from array analysis of Rayleigh waves in Southern California	Geophys. J. Int., v. 186, 1135-1151.	ARTICLE
103	2012	Tanimoto, T., Chen Ji and M. Igarashi, An Approach to detect afterslips in giant earthquakes in the normal-mode frequency band	Geophys. J. Int., v. 190, 1097-1110 doi: 10.1111/j.1365-246X.2012.05524.x	ARTICLE
104	2013	Tanimoto, T., T. Yano and T. Hakamata, An approach to improve Rayleigh-wave ellipticity estimates from seismic noise: Application to the Los Angeles Basin	Geophys. J. Int., 193, 407-420, doi:10.1093/gji/ggs123	ARTICLE
105	2013	Tanimoto, T., Excitation of microseisms: views	Geophys. J. Int., 194,	ARTICLE

		from the normal-mode approach	1755-1759, doi:10.1093/gji/ggt185	
106	2014	Tanimoto, T. and T. Okamoto, The Millikan Shaking Experiments and high-frequency seismic wave propagation in Southern California	Geophys. J. Int., 198, 1081-1095	ARTICLE
107	2014	Tanimoto, T. and A. Lamontagne, Temporal and spatial evolution of an on-land hurricane observed by seismic data	Geophys. Res. Lett., 41, 7532–7538, doi:10.1002/2014GL061934	ARTICLE
108	2015	John H. Shaw, Andreas Plescha, Carl Tape, M. Peter Suess, Thomas H. Jordan, Geoffrey Ely, Egill Haukssson, Jeroen Tromp, <b>Toshiro Tanimoto</b> , Robert Graves, Kim Olsen, Craig Nicholson, Philip J. Maechling, Carlos Rivero, Peter Lovely, Charles M. Brankman, and Jason Munster, Unified Structural Representation of the southern California crust and upper mantle	Earth and Planetary Science Letters, 415, 1-15, doi:10.1016/j.epsl.2015.01.016	ARTICLE
109	2015	Tanimoto, T., K. Heki, and J. Artru-Lambin, Interaction of Solid Earth, Oceans, Atmosphere and Ionosphere	In: Gerald Schubert (editor-in-chief) Treatise on Geophysics, 2nd edition, Oxford: Elsevier; 2015. pp. 421-443.	ARTICLE in a book chapter
110	2015	Toshiro Tanimoto, Céline Hadziioannou, Heiner Igel, Joachim Wasserman, Ulrich Schreiber, and André Gebauer, Estimate of Rayleigh-to-Love wave ratio in the secondary microseism by co-located ring laser and seismograph	Geophysical Research Letters, 42, doi:10.1002/2015GL063637	ARTICLE
111	2015	Toshiro Tanimoto and Anne Valovcin, Stochastic excitation of seismic waves by a hurricane	Journal of Geophysical Research, Solid Earth, 120, doi:10.1002/2015JB012177	ARTICLE
112	2016	Toshiro Tanimoto, Céline Hadziioannou, Heiner Igel, Joachim Wasserman, Ulrich Schreiber, André Gebauer, and Bryant Chow, Seasonal variations in the Rayleigh-to-Love wave ratio in the secondary microseism by co-located ring laser and seismograph	Journal of Geophysical Research, Solid Earth, 121, 2447–2459, doi:10.1002/2016JB012885.	ARTICLE
113	2016	Tanimoto, T., C.-J. Lin, C. Hadziioannou, H. Igel, and F. Vernon, Estimate of Rayleigh-to-Love wave ratio in the secondary microseism by a small array at Pinon Flat Observatory, California	Geophysical Research Letters, 43, doi:10.1002/2016GL071133	ARTICLE
114	2016	Tanimoto, T. and A. Valovcin, Existence of the Threshold Pressure for Seismic Excitation by Atmospheric Disturbances	Geophysical Research Letters, 43, doi:10.1002/2016GL070858	ARTICLE

## SEMINARS and LECTURES

Year	Date/Place	
2012	Mar. 24,	“Analysis of Recent Giant Earthquakes in the Normal-mode Frequency Band, National Research Institute for Earth Science and Disaster Prevention (NIED)”, Tsukuba, Japan
	July 23,	“Source Process of Giant Earthquakes from Normal mode Frequency Band”, Hokkaido University.
	***July 26,	“Earthquakes”, Qualia Kyoto Institute.
	Oct. 30,	“Unique monochromatic high-frequency shaking data for the Los Angeles Basin”, SCEC-ERI Workshop in Matsushima, Japan
	Dec. 14,	“Earth Structure from Seismic Noise Seminar”, Kobe University
2013	May 19,	“Understanding high-frequency seismic waves generated by building shaking, International conference on 3D wave propagation and imaging through the Earth’s interior”, Wuhan, China
	Oct. 15,	“The Millikan Shaking Experiments and High-Frequency Seismic Wave Propagation”, USC.
	Oct. 16,	“The Millikan experiments and the Cross-Correlation technique”, SCEC workshop, USC
	Nov. 8,	“Millikan Shaking and High-Frequency Seismic Wave Propagation”, Caltech
	March 4-6,	“Cross correlation approach in frequency domain”, Disaster Prevention Research Institute, Uji, Kyoto University
2014	March 24,	“Active source experiments by shaking a building”, Okayama University, Okayama, Japan.
	***May 18,	“Earthquakes in Japan and California”, Goleta Public Library
	Sept. 12,	“The origin of the hum”, Center for Advanced Study, Ludwig-Maximilians-University (LMU), Munich
	Oct. 10,	“Role of Observation in Seismology”, The 75 <sup>th</sup> Anniversary of Geophysical Observatory in Fuerntenfeldbruck (LMU)
	Oct. 21,	“Active Source Study by Shaking a Building: the Millikan Library Experiments”, Dept. of Earth and Environmental Sciences, Ludwig-Maximilians-University of Munich.
	***Oct. 30,	“The 2011 M9.0 Japan Earthquake”, Center for Advanced Study, Ludwig-Maximilians-University of Munich.
	Nov. 4,	“Collapse of the eyewall of a hurricane observed by seismic data”, Ludwig-Maximilians-University of Munich
	***Nov. 21,	“Earthquakes in Japan and California”, Science-on-the-beach (a group of Japanese students/researchers/faculty at UCSB)
	Dec. 9,	“Earthquakes in the Tohoku region and in the Ryukyu arc”, Okinawa Institute of Science and Technology (OIST)
	*April 17,	“Estimates of Rayleigh-to-Love wave ratio in microseisms by co-located Ring Laser and STS-2”, European Geosciences Union, Vienna.
2015	*May 26,	“Stochastic excitation of seismic waves by an intense Hurricane: Seismic amplitudes proportional to the cube of surface pressure”, Japan Geosciences Union Annual Meeting
	*June 26,	“Estimates of Rayleigh-to-Love wave ratio in microseism”, International Union of Geodesy and Geophysics, Prague, Czech.
	*Oct. 28,	“Joint Analysis of Microseism by Ring Laser and Seismograph”,

		Toshiro Tanimoto, Céline Hadziioannou, Heiner Igel, Joachim Wasserman, Ulrich Schreiber, André Gebauer, and Bryant Chow, Annual Meeting of Seismological Society of Japan, Kobe, Japan.
	Oct. 30,	“Seismic Noise and Earth Structure”, Osaka University, Japan.
	*Dec. 16,	“Seasonal variation in Rayleigh-to-Love wave ratio in the secondary Microseism”, Toshiro Tanimoto, Céline Hadziioannou, Heiner Igel, Joachim Wasserman, Ulrich Schreiber, André Gebauer, and Bryant Chow
<b>2016</b>	March 17	“Interaction of atmosphere, oceans and solid earth”, National Autonomous University of Mexico (UNAM), Mexico.
	*April 22	“Study of strong interaction between atmosphere and solid Earth by using hurricane data”, European Geosciences Union, Vienna, Austria.
	*June 23	“Seismic Noise in Rotation Data”, The 4th International Working Group on Rotational Seismology (IWGoRS) Meeting in Tutzing, Germany.
	Sept. 30	“The 2011 Tohoku-Oki Earthquake and our shattered preconceptions”, CEED, University of Oslo
	Nov. 10	“Natural Hazards in the Coupled Earth System: a seismologist's perspective on Hurricanes/Typhoons”, Academia Sinica, Taiwan.
	Nov. 15	“Hums and Microseisms: Effects of the Land-Ocean Coupling”, Institute of Oceanography, National Taiwan University, Taiwan.
	Nov. 21	“The 2011 Tohoku-Oki Earthquake and our shattered preconceptions”, Department of Earth and Space Science, Osaka University, Japan
	*Dec. 16,	“Estimate of Rayleigh-to-Love wave energy ratio based on array-derived rotation and vertical component seismograms”, AGU Meeting, San Francisco.
<b>2017</b>	March 23	“Seismic signals from Hurricanes”, seminar at NIED, Tsukuba, Japan
	*April 25	“Seismic and pressure signals when a hurricane goes over an array”, EGU, Vienna, Austria. Paper EGU2017-3078
	*May 24	“Strong Land-Atmosphere Coupling in Low Frequency Band below 0.05 Hz”, JpGU-AGU, Makuhari, Japan
	June 29	“Seismic and acoustic waves in the whole Earth system“, Kilma Campus Colloquium, University of Hamburg, Germany <a href="https://lecture2go.uni-hamburg.de/l2go/-/get/v/21756">https://lecture2go.uni-hamburg.de/l2go/-/get/v/21756</a>
	**July 14,15	Three lectures on “Earth structure from Seismic Noise”, Hokkaido University
	July 24	“Seismic signals from tropical cyclones”, Hokkaido University
	***July 26	“Internet and graduate education: Comparison between US and Japan”, Hokkaido University
	Aug. 2	“Land-atmosphere coupling and source of low-frequency seismic noise from the analysis of co-located barometers and seismometers”, IAG-IASPEI meeting, Kobe, Japan
	Aug. 8	“Land-atmosphere coupling as revealed in seismic noise”, AOGS 2017, Singapore

**No star : Seminars that lasted 45-90 min.**

**\* Short presentations at conferences that lasted 15-30 minutes.**

**\*\* A series of lectures presented at other schools and institutions**

**\*\*\* Talk for general public**

## **SERVICE**

### **Department Service**

<b>Years</b>	<b>Type of Service</b>
2005-	Undergraduate and Graduate Advisor in Geophysics
2009-	Executive Committee
2013-2014	Geodynamics Search Committee (Chair)
2015-2016	Geophysics Search Committee (Member)

### **University Service**

<b>Years</b>	<b>Type of Service</b>
2012	Central Fellowship Committee (Continuing Fellowship)
2012	Committee on Faculty Grants (Council of Research and Instructional Resources, Academic Senate)
2014-2017	Committee on Courses and General Education (CCGE, Academic Senate)
2017	Reviewer for the 2017-2018 UC President's Postdoctoral Fellowship (UCOP)

### **Public Service** (Talks for General Public)

<b>Date</b>	<b>Location</b>	<b>Type of Service</b>
July 26, 2012	Qualia Kyoto Institute	Public Lecture on Earthquakes ( <a href="http://www.goodkyoto.com/">http://www.goodkyoto.com/</a> ) in Kyoto, Japan
May 18, 2014	Goleta Public Library	Public lecture on earthquakes in Japan and California
Oct. 10, 2014	Ludwig Maximilian University of Munich	Public Lecture at Center for Advanced Study
Nov. 21, 2014	UCSB	Science-On-The-Beach
Mar. 17, 2017	UCSB	Lecture for visiting students to UCSB from Japan