

## Curriculum Vitae

**GEOFFREY A. ABERS**

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Cornell University

Department of Earth and Atmospheric Sciences

Ithaca, NY 14853 USA

*Research Interests* Processes of lithospheric deformation; subduction mechanics and structure; active collisions and rifts; earthquake sources; relating geophysical observables to physical properties; great earthquake fault zones; deep magmatic plumbing.

*Education* **Massachusetts Institute of Technology**, Cambridge, MA 1984-1989  
Ph.D., Geophysics.

**Brown University**, Providence, RI 1979-1983  
Sc.B. degree magna cum laude in Geology-Physics/Mathematics.

### *Experience*

**Cornell University**, Ithaca NY  
Chair, Department of Earth and Atmospheric Sciences 2020-  
William and Katherine Snee Professor in Geological Sciences 2018-  
Professor of Earth and Atmospheric Sciences 2014-2018  
Adjunct Professor of Earth and Atmospheric Sciences 2013-2014

**University of Tokyo**, Earthquake Research Institute, Japan 2020  
Visiting Research Professor, ERI

**Lamont-Doherty Earth Observatory of Columbia University**, Palisades, NY  
Adjunct Senior Research Scientist 2015-  
Associate Director for Division of Seismology, Geology, and Tectonophysics 2011-2013  
Lamont Research Professor (on leave, 2014-15) 2010-2015  
Doherty Senior Research Scientist 2008-2010  
Adjunct Professor, Department of Earth & Environ. Sci., Columbia Univ. 2008-2014

**Boston University**, Boston, MA  
Adjunct Professor, Department of Earth Sciences 2008-2009  
Professor of Earth Sciences 2004-2007  
Associate Chairman, Department of Earth Sciences 2000-2006  
Associate Professor of Earth Sciences 1999-2004

**Université Joseph Fourier**, Grenoble France summer 2002  
Visiting Research Professor, LGIT

**University of Kansas**, Lawrence, KS 1994-1999  
Assistant Professor, Department of Geology

**Lamont-Doherty Earth Observatory of Columbia University**, Palisades, NY  
Adjunct Associate Research Scientist 1994-2003  
Associate Research Scientist 1991-1994  
Post Doctoral Research Scientist in Seismology 1989-1991

**City College, City Univ. of New York**, New York, NY 1992  
Adjunct Lecturer, Department of Earth and Planetary Sciences

**Massachusetts Institute of Technology**, Cambridge, MA 1984-1989  
Graduate Research Assistant in Geophysics.

*Honors and Professional Service*

Honors and Awards

ERI Visiting Researcher Fellow, Univ. Tokyo	2020
Tuve Fellow, Carnegie Science, Department of Terrestrial Magnetism	2019
Research Excellence Award, Cornell College of Engineering	2017
Fellow, American Geophysical Union	2015
Elected to Board of Directors, IRIS	2013
Earth Planet. Sci. Let. "Top-50 Most Cited Articles 2006-10" (Abers et al., 2006)	2010
Visiting Research Scientist, LGIT, Univ. Joseph Fourier, Grenoble France	2002
Fellow, Geological Society of America	elected 2000
National Science Foundation Graduate Fellow	1984-1987
Sigma Xi, Phi Beta Kappa	1983
William Gaston Prize in Geological Science, Brown Univ.	1983
Incorporated Research Institutions for Seismology (IRIS)	
Transportable Array Advisory Committee (Chair)	2019-20
Board of Directors	2013-17
Board of Directors, Vice-chair (elected to full term, 2015-17)	2014-17
Coordinating Committee (Chair, 2014-17)	2013-17
Presidential Search Committee	2013-14
Planning Committee	2011-13
PASSCAL Strategic Plan Working Group	2005
PASSCAL Standing Committee	2000-02
Working Group Chair, Rocky Mountains USArray, 14th Annual IRIS Workshop	2002
Data Management System Standing Committee	1993-95
Institutional Member Representative (BU, LDEO)	1999-7, 2013-14
MARGINS/GeoPRISMS	
GeoPRISMS Distinguished Lecturer	2011-13
Co-convener, GeoPRISMS-Earthscope Cascadia Workshop	2012
Chairman, MARGINS Steering Committee and MARGINS Office Director	2006-2010
U.S. representative to InterMARGINS	2006-2010
MARGINS Steering Committee	2003-6
Co-convener, "Interpreting Mantle Images" Workshop	2006
Planning Committee, Subduction Factory MARGINS Theoretical Institute	2000
Other Committee Service	
SZ4D Faults & Earthquake Cycles Working Group	2020
American Geophysical Union, Seismology Fellowship Committee (Chair)	2019
American Geophysical Union, Seismology Fellowship Committee	2016-7
Planning Committee Chair, Amphibious Array Future Workshop	2014
Program Committee, Seismological Society of America Annual Meeting	2014
Aleutians Logistics mini-workshop co-organizer	2013
Co-organizer, CIDER workshop on Upper Mantle Attenuation mechanisms	2013

Amphibious Array Steering Committee, Chair	2012-13
Amphibious Array Steering Committee, member	2010-12
Marine Geophysics Data Management System oversight committee	2004-7
Regional Advisory Committee, Advanced National Seismic System – Northeast	2000
Program Committee, AGU Chapman Conference "Active Tectonics and Seismic Potential of Alaska", May 2006	2004-2006
Technical Program Committee, Seismological Society of America meeting	1998
<i>Other Service</i>	
Editor, Seismol. Res. Lett. special issue on EarthScope in Alaska	2019-2020
SAGE/GAGE (IRIS/UNAVCO) workshop, session convener	2019
GRC – Earth Interior, session convener	2019
CIDER (Coop. Inst. Deep Earth Res.), summer lecturer	2011, 2017, 2019
PhD selection comm. external member, UiB Norway	2012
Co-Editor, G-Cubed Theme on exhumation of UHP metamorphic rocks	2012-15
ILP Task Force, The Subduction Channel	2010-11
Associate Editor, Journal of Geophysical Research – Solid Earth	2003-2006
Coordinator, Outstanding Student Paper Award (Seismology), Spring AGU	2001
Associate Editor, Journal of Geophysical Research – Solid Earth	1995-98

*Member:*

American Geophysical Union (Fellow)  
Geological Society of America (Fellow)  
Seismological Society of America

*Service to Cornell University*

Chair, Department of Earth & Atmospheric Sciences	2020-
Director of Graduate Studies, Field of Geological Sciences	2015-19
EAS Geochemistry Search Committee	2018-19
CEE Subsurface Energy Search Committee	2018-19
Chair, EAS High-T Geochemistry Search Committee	2016-7
EAS Strategic Plan Writing Committee	2016-7
Ad Hoc tenure review committee, College of Engineering	2016
Advisor for Snee Graduate Organization (SGO)	2015-19
EAS Committee on off-campus conduct policy	2015
College Arts & Sciences new student orientation – EAS representative	2014,2015, 2018

*Invited Talks and Invited Conferences, since 2015*

U Alaska Fairbanks (virtual)	10/20
Seoul National Univ. Korea [canceled due to COVID19]	2/20
Tohoku Univ. Japan	2/20
Earthquake Research Inst., Univ. Tokyo Japan	1/20
Tokyo Institute of Technology Japan	1/20
Carnegie Institution for Science	10/19
Univ. Maryland	10/19
Smithsonian, National Museum of Natural History	10/19
SAGE/GAGE Workshop, Portland OR	10/19
UK Volatiles in the Lesser Antilles (VoiLa) wrapup workshop, Trinidad	9/19
Alaska-Aleutian Synthesis Workshop, LDEO, Palisades NY	8/19

CIDER (Cooperative Institute for Dynamic Earth Interior), volcanoes, Berkeley	6/19
Gordon Research Conference on Earths Interior, S Hadley MA	6/19
Mantle water workshop, LDEO, Palisades NY	4/19
GeoPRISMS synthesis TEI, San Antonio	2/19
Community Volcano Experiments Workshop, Albuquerque	11/18
Michigan State Univ. Dept. Colloquium	9/18
NIED (Nat. Res. Inst. for Earth Sci. and Disaster Resil.), Tsukuba Japan	9/18
Science of Slow Earthquakes 2018 Workshop, Fukuoka Japan	9/18
University of Washington Dept. Colloquium	3/18
University of Minnesota Dept. Colloquium	1/18
Fall, 2017 American Geophysical Union meeting, New Orleans	12/17
Washington University of St. Louis Brownbag Seminar	11/17
Binghamton University	10/17
CIDER (Cooperative Institute for Dynamic Earth Interior), Berkeley	6-7/17
Geophysical Institute University of Alaska Fairbanks	6/17
2017 JpGU/AGU meeting, Chiba Japan	5/17
2017 Subduction Interface Process workshop, Barcelona	4/17
Fall, 2016 American Geophysical Union meeting, San Francisco	12/16
INSTOC Symposium 2016, Ithaca NY	10/16
Subduction Zone Observatory planning workshop, Boise ID	9/16
GeoPRISMS Webinar ( <a href="http://geoprisms.org/research/community-projects/alaska/">http://geoprisms.org/research/community-projects/alaska/</a> )	4/16
Syracuse University	2/16
Fall, 2015 American Geophysical Union meeting, San Francisco	12/15
GeoPRISMS Theoretical & Experimental Inst. for Subduction Cycles & Defm., Redondo Beach, CA	10/15
Future Seismic and Geodetic Facility Needs in the Geosciences, Lansdowne VA	5/15
Rensselaer Polytechnic Institute	4/15

### *Field Experience*

<b>Gulf of Alaska:</b> Chief scientist, AASCE OBS recovery, R/V Marcus G. Langseth	2019
<b>Kodiak Alaska:</b> AASCE amphibious seismic deployment	2018
<b>Central Alaska:</b> WVLF broadband seismic deployment	2016, 2017
<b>Mt St Helens WA:</b> iMUSH broadband seismic deployment	2014-2016
<b>Western Washington:</b> Cascadia ship-to-shore wide-angle reflection array	2012
<b>SE Papua New Guinea:</b> CDPapua broadband seismic deployment	2010-2011
<b>Western Washington:</b> Cascadia Arrays For EarthScope (CAFE) seismic deployment	2006-8
<b>Southern Alaska:</b> MOOS broadband PASSCAL deployment	2006-8
<b>Costa Rica, Nicaragua:</b> TUCAN broadband PASSCAL deployment	2004-2006
<b>Costa Rica, Nicaragua:</b> seismological site survey	2003
<b>Papua New Guinea:</b> Woodlark Rift, PASSCAL deployment	1999,2000
<b>Alaska Range:</b> BEAAR, PASSCAL deployment	1999,2000
<b>Alaska Range:</b> seismological site survey	1998
<b>Kansas River:</b> exploratory paleoseismology	1997-8
<b>Central Kansas:</b> broad-band seismograph deployments	1996-1998
<b>Greater Caucasus, Russia:</b> seismic network	1993
<b>Shumagin Islands, Alaska:</b> Strong motion array	1993
<b>Alaska Peninsula Region:</b> Seismic network and broad-band station maintenance	1991
<b>Greater Caucasus, USSR:</b> PASSCAL aftershock survey	1991

<b>Southern California:</b> STRC GPS experiment	1991
<b>Alaska Peninsula Region:</b> seismic network maintenance	1990
<b>Papua New Guinea:</b> microseismic and gravity survey	1988
<b>Central Arizona:</b> PACE crustal refraction experiment	1987
<b>Southeast Pacific:</b> Marine geophysical survey, R/V Conrad	1985
<b>Panamint Valley, California:</b> Regional geophysical survey	1985
<b>Southwest Montana:</b> Field Geology Course	1982

*Graduate Students Supervised, and partial list of theses*

*Cornell:* S. Nale, K. Crosbie, M. Leitner, M.E. Mann, R. Soto Castaneda, K. Abdulrahman, K. Daly

Nale, S.M., *Distribution of seismicity on a megathrust: characterizing the seismogenic zone in the Shumagin Gap, Alaska with precise earthquake locations*, MS thesis, Cornell Univ., 2017.

Crosbie, K.J., *Shear velocity structure from ambient noise and teleseismic surface wave tomography in the Cascades around Mount St. Helens*, MS Thesis, Cornell Univ., 93pp., 2018.

Soto-Castaneda, R., *Teleseismic P and S wave attenuation constraints on temperature and melt of the upper mantle in the Alaska Subduction Zone*, MS Thesis, Cornell Univ., ##pp., 2019.

*Lamont:* E. Triep, X. Hu, J. Garroway, H. Janiszewski, J. Li, Z. Eilon

Triep, E., *Intracontinental seismotectonics*, PhD thesis, 193 pp., 1996

Li, J., *Seismicity and seismic imaging of the Alaska megathrust fault*, PhD thesis, 2016

Eilon, Z.E., *New constraints on extensional tectonics through analysis of teleseisms*, PhD thesis, 2016.

Janiszewski, H., *New Insights on the Structure of the Cascade Subduction Zone from Amphibious Seismic Data*, PhD thesis, 2017.

*Kansas:* G. Sarker, Z. Yu, B. Schlotterbeck, A. Ferris

Sarker, G., *Seismic attenuation variations at range fronts in central Eurasia*, PhD Thesis, 166 pp., 1998

Schlotterbeck, BA, *Seismic attenuation variations in southern California*, MA Thesis, 111 pp., 1999.

*Boston:* A. Ferris, J. Stachnik, G. Rossi, L. (Auger) MacKenzie, E. Syracuse, Z. Zhang

Ferris, A., *Moho topography beneath active metamorphic core complexes: D'Entrecasteaux Islands, Papua New Guinea*, MA Thesis, 79 pp., 2002

Stachnik, J.C., *Seismic attenuation in central Alaska*, MA Thesis, 122 pp., 2002

Rossi, G., *Measuring the Mantle Wedge Poisson's Ratio and Slab Depth: Central Alaska*, MA thesis, 2004

Ferris, A., *Seismic Imaging of Active Continental Breakup in the Woodlark Rift System of Papua New Guinea*, PhD theis, 2007

MacKenzie, L.A., *A Receiver Function Study of the Central America and Cascadia Subduction Zone Systems*, PhD Thesis Boston Univ., 162 pp., 2008

Syracuse, E.M. *The Global Systematics of Subduction Zones*, Boston Univ., PhD thesis 304 pp., 2008

*Post-Doc's Mentored*

*Cornell:* D. Kim

*Lamont:* J. Calkins, YH. Kim, M. Obrebski

*PhD Advisors:*

R. McCaffrey and P. Molnar

*Post-Doctoral Advisor:*

K. Jacob

## COURSES TAUGHT

### *Cornell University*

EAS 4740/5740 Quantitative Data Analysis in Geosciences	2016-19: 5 -22 students
EAS 6920 Special Topics in EAS: Subduction Zones (seminar) Fall, 2015 Seeing Volcanoes (seminar/projects), Fall 2017	
EAS 6677, Seismic risk in energy development (co-taught IGERT module)	Spring 2015
EAS 4040/5041 Geodynamics	2015-20: 8-14 students
EAS 7800 Earthquake Record Reading	2014-20

### *Lamont-Doherty Earth Observatory*

EESC G9945, Topics in Global and Regional Seismology ( <i>seminar</i> each semester)	
EESC G4949, Introduction to Seismology	2012: 9 students
EESC G4947, Plate Tectonics	2009-14: 6-11 students

### *Boston University (not including ES699-Teaching Fellowship)*

ES 101, The Dynamic Earth	2000: 76 students
ES 140, Earthquakes, Volcanoes and Natural Disasters	2001-05: 95-225 students
ES 303, Field Methods ( <i>co-taught</i> )	1999: 15 students
ES 360, Geodynamics I	1999-2001: 13-17 students
ES505, Plate Tectonics and Kinematics	2000: 4 students
ES581, Solid Earth Geophysics	2005-7: 5 students
ES 781, Seismology	2000-5: 2-5 students

### *University of Kansas*

GEOL 101, Introduction to Geology	1995-7: 45-125 students
GEOL 571: Earthquakes and Natural Disasters	1996-98: 9-20 students
GEOL 573: Physics of the Earth	1994: 4 students
GEOL 573: Geodynamics and Plate Tectonics	1996-8: 15-18 students
GEOL 773: Seismology	1995-9: 4-6 students

### *City College of New York:*

Geophysics	1992, 15 students
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## PUBLICATIONS

### *Manuscripts in Preparation (Sept. 2020)*

Soto Castaneda, R.A., G.A. Abers, Z. Eilon, and D. H. Christensen, Teleseismic attenuation, temperature, and melt of the upper mantle in the Alaska subduction zone, *in prep.*, 2020.

Janiszewski, H., G.A. Abers, A. Becel, and H. Carton, Seismic reflectivity heterogeneity along the Cascadia Plate Interface, *for J. Geophys. Res.*, 2018.

### *Submitted Papers*

Nakajima, J. and G.A. Abers, Subduction Zone: seismicity and arc magmatism, *Encyclopedia of Complexity and Systems Science*, *subm.*, 2014 (expected publication date 2020).

Miller, P.K., D.M. Saffer, G. Abers, D. Shillington, K. Keranen, A. Bécel J. Li, & C. Bate (2019), Entrained and foliated sediment: a cause of low velocity zones on subduction megathrusts *Nat. Geosci.*, *subm.*, 2019.

Richards, C., C. Tape, Z. Ross & G.A. Abers, Anisotropy in the Alaska subduction zone: shear-wave splitting observations from local and teleseismic earthquakes, *Earth & Planet. Sci. Lett.*, *subm.* 2020.

### *Published or In Press in Peer-Reviewed Literature*

(my students & postdocs underlined)

1. Miller, M.S., G.A. Abers & N. Ruppert (2020), Introduction to the Special Section on EarthScope Alaska and Canada, *Seism. Res. Lett.*, *91*, in press, doi: 10.1785/0220200307.
2. Abers, G.A., P.E. van Keken & C.R. Wilson (2020), Deep decoupling in subduction zones: observations and temperature limits, *Geosphere*, *in press*, 2020.
3. Barcheck, C.G., G.A. Abers, A.N. Adams, A. Bécel, J. Collins, J.B. Gaherty, P.J. Haeussler, Z. Li, G. Moore, E. Onyango, E. Roland, D.E. Sampson, S.Y. Schwartz, A.F. Sheehan, D.J. Shillington, P.J. Shore, S. Webb, D.A. Wiens, & L.L. Worthington (2020), The Alaska Amphibious Community Seismic Experiment (Data Mine), *Seism. Res. Lett.*, *91*, doi: 10.1785/022020018 (online).
4. McPherson, A.M., D.H. Christensen, G.A. Abers and C. Tape (2020). Shear wave splitting and mantle flow in Alaska, *J. Geophys. Res.*, *123*, e2019JB018329, doi:10.1029/2019JB018329.
5. Ulberg, C.W., K.C. Creager, S.C. Moran, G.A. Abers, A. Levander, E. Kiser, B. Schmandt, S. Hansen and R. Crosson (2020), Local source  $V_p$  and  $V_s$  tomography in the Mount St Helens region with the iMUSH broadband array, *Geochem. Geophys. Geosys.*, *21*, e2019GC008888. doi: 10.1029/2019GC008888.
6. Mann, M.E. and G.A. Abers (2020), First-order mantle subduction zone structure effects on ground motion: the Alaska 2016 Iniskin and 2018 Anchorage Mw 7.1 earthquakes, *Seismol. Res. Lett.*, *91*, 85-93.
7. Eakin, C.M., E.A. Wirth, A. Wallace, C.W. Ulberg, K.C. Creager and G.A. Abers (2019), SKS Splitting beneath Mount St. Helens: Constraints on Sub-Slab Mantle Entrainment, *Geochem. Geophys. Geosys.*, *20*, 4203-4217.

8. Crosbie, K.J., G.A. Abers, M.E. Mann, H.A. Janiszewski, K.C. Creager, C. Ulberg, and S. Moran (2019), Shear velocity structure from ambient noise and teleseismic surface wave tomography in the Cascades around Mount St. Helens, *J. Geophys. Res. – Solid Earth*, *124*, 8358-8375. doi: 10.1029/2019JB017836
9. van Keken, P.E., I. Wada, N. Sime and G.A. Abers (2019), Thermal structure of the forearc in subduction zones: a comparison of methodologies, *Geochem. Geophys. Geosys.*, *20*, 3268-3288 doi: 10.1029/2019GC008334
10. Mann, M.E., G.A. Abers K.J. Crosbie, K. Creager, C. Ulberg, S. Moran and S. Rondenay (2019), Imaging subduction beneath Mount St. Helens: implications for slab dehydration and magma transport, *Geophys. Res. Lett.*, *46*, 3163-3171, doi: 10.1029/2018GL081471.
11. Till, C., Kent, A., Abers, G., Janiszewski, H., Gaherty, J., & Pitcher, B. (2019). The causes of spatiotemporal variations in erupted fluxes and compositions along a volcanic arc. *Nature Communications*, *10*(1), 1350, doi:10.1038/s41467-019-09113-0.
12. Janiszewski, H., J. Gaherty and G.A. Abers (2019), Surface-wave phase velocities and structure of the Juan de Fuca plate and Cascadia subduction zone from joint inversion of sea floor and onshore seismometers, *Geophys. J. Int.*, *217*(3), 1929–1948, doi:10.1093/gji/ggz051.
13. Abers, G.A., A.N. Adams, P.J. Haeussler, E. Roland, P.J. Shore, S.Y. Schwartz, A.F. Sheehan, D.J. Shillington, S. Webb, D.A. Wiens and L.L. Worthington (2019). AACSE: The Alaska amphibious community seismic experiment, *Eos Trans. AGU, Online publ .26 March 2019*. <https://eos.org/project-updates/examining-alaskas-earthquakes-on-land-and-sea> PUBLISHED IN PRINT AS: Abers, G. A., Adams, A. N., Haeussler, P. J., Roland, E., Shore, P. J., Wiens, D. A., Schwartz, S.Y., Sheehan, A.F., Shillington, D.J., Webb S., and L.L. Worthington (2019). Understanding Alaska’s Earthquakes. *Eos*, *100*(10), 30–35.
14. Kim, D., K.M. Keranen, G.A. Abers and L.D. Brown (2018), Enhanced resolution of the subducting plate interface in Central Alaska from autocorrelation of local earthquake coda, *J. Geophys. Res.*, *124*, doi:10.1029/2018JB016167.
15. van Keken, P.E., I. Wada, G.A. Abers, B.R. Hacker and K. Wang (2018), Mafic high-pressure rocks are preferentially exhumed from warm subduction settings, *Geochem. Geophys. Geosys.*, *19*, 2934-2961, doi:10.1029/2018GC007624.
16. Li, J., D. J. Shillington, D. M. Saffer, A. Becel, M. R. Nedimovic, H. Kuehn, S. C. Webb, K. M. Keranen, and G. A. Abers (2018), Connections between subducted sediment, pore-fluid pressure, and earthquake behavior along the Alaska megathrust, *Geology*, *46*, 299-302, doi:10.1130/G39557.1.
17. Bécel, A., D.J. Shillington, M. Delescluse, M.R. Nedimovic, G.A. Abers, D.M. Saffer, S.C. Webb, K.M. Keranen, P.-H. Roche, J. Li, and H. Kuehn (2017), Tsunamigenic structures in a creeping section of the Alaska subduction zone, *Nat. Geosci.*, *10*, 609-613, doi:10.1038/ngeo2990.
18. Abers, G.A., P.E. van Keken and B.R. Hacker (2017) The cold and relatively dry nature of mantle forearcs in subduction zones, *Nat. Geosci.*, *10*, 333-337, doi:10.1038/NGEO2922.
19. Eilon, Z.C., and G.A. Abers (2017). High seismic attenuation at a mid-ocean ridge reveals the distribution of deep melt, *Sci. Adv.*, *3*, e1602829.
20. Hansen, S. M., Schmandt, B., Levander, A., Kiser, E., Vidale, J. E., Abers, G. A., & Creager, K. C. (2016). Seismic evidence for a cold serpentized mantle wedge beneath Mount St Helens. *Nature Communications*, *7*, 13242. <http://doi.org/10.1038/ncomms13242>.



21. Eilon, Z., G.A. Abers and J.B. Gaherty (2016), A joint inversion for shear velocity and anisotropy: the Woodlark Rift, Papua New Guinea, *Geophys. J. Int.*, 206, 807-824.
22. Abers, G. A., and B. R. Hacker (2016), A MATLAB toolbox and Excel workbook for calculating the densities, seismic wave speeds, and major element composition of minerals and rocks at pressure and temperature, *Geochem. Geophys. Geosys.* (G3), 17, 616-624, doi:10.1002/2015GC006171.
23. Abers, G. A., Z. Eilon, J. B. Gaherty, G. Jin, Y. H. Kim, M. Obrebski, and C. Dieck (2016), Southeast Papuan crustal tectonics: Imaging extension and buoyancy of an active rift, *J. Geophys. Res.*, 121, 951-971, doi:10.1002/2015JB012621.
24. Jin, G., J.B. Gaherty, G.A. Abers, YH. Kim, Z. Eilon, and W.R. Buck (2015). Crust and upper mantle structure associated with extension in the Woodlark Rift, Papua New Guinea from Rayleigh-wave tomography, *Geochem. Geophys. Geosys.*, 16, 3808-3824, doi:10.1002/2015GC005840.
25. Shillington, D.J., A. Becel, M.R. Nedimovic, H. Kuehn, S.C. Webb, G.A. Abers, K.A. Keranen, J. Li, M. Delescluse & G.A. Mattei-Salicrup (2015), Link between plate fabric, hydration and subduction zone seismicity in Alaska, *Nat. Geosci.*, 8, 961-964, doi:10.1038/NGEO2586.
26. Janiszewski, H.A., and G.A. Abers (2015). Imaging the plate interface in the Cascadia seismogenic zone: new constraints from offshore receiver functions, *Seismol. Res. Lett.*, 86, 1261-1269.
27. Eilon, Z., G.A. Abers, J.B. Gaherty, and G. Jin (2015). Imaging Continental Breakup using Teleseismic Body Waves: The Woodlark Rift, Papua New Guinea, *Geochem. Geophys. Geosys.* 16, 2529-2548, doi: 10.1002/2015GC005835.
28. Obrebski, M., G.A. Abers and A. Foster (2015). Magmatic arc structure around Mt Rainier, WA, from the joint inversion of receiver functions and surface wave dispersion, *Geochem. Geophys. Geosys.*, 16, 178-194, doi: 10.1002/2014GC005581.
29. Perttu, A., D. Christensen, G. A. Abers and X. Song (2014), Insights into mantle structure and flow beneath Alaska based on a decade of observations of shear wave splitting, *J. Geophys. Res.*, 119, 8366-8377, doi:10.1002/2014JB011359.
30. Abers, GA, KM Fischer, G Hirth, DA Wiens, TA Plank, BK Holtzman, C McCarthy, and E. Gazel (2014). Reconciling mantle attenuation-temperature relationships from seismology, petrology and laboratory measurements, *Geochem. Geophys. Geosyst.*, 15, 3521-3542, doi:10.1002/2014GC005444.
31. Keranen, K.M., M. Weingarten, G.A. Abers, B. Bekins and S. Ge (2014). Sharp increase in central Oklahoma seismicity 2009-2014 induced by massive wastewater injection, *Science*, 345, 448-451, doi:10.1126/science.1255802.
32. Kim, YH., G.A. Abers, J. Li, D. Christensen J. Calkins, and S. Rondenay (2014). Alaska Megathrust 2: Imaging the megathrust zone and Yakutat/Pacific plate interface in the Alaska subduction zone, *J. Geophys. Res.*, 119, 1924-1941, doi:10.1002/2013JB010581.
33. Sumy, D.F., E.S. Cochran, K.M. Keranen, M. Wei and G.A. Abers (2014), The mechanisms and stress triggering of earthquakes during the November 2011 M5.7 Oklahoma earthquake sequence, *J. Geophys. Res.*, 119, 1904-1923, doi:10.1002/2013JB010612.
34. Eilon, Z., G.A. Abers, G. Jin and J. Gaherty (2014). Anisotropy beneath a highly extended continental rift, *Geochem. Geophys. Geosyst.*, 15, 545-564, doi:10.1002/2013GC005092.
35. Sheehan, A.F., T.L. de la Torre, G. Monsalve, G.A. Abers, and B.R. Hacker (2014), Physical state of Himalayan crust and upper mantle: Constraints from seismic attenuation and velocity tomography, *J. Geophys. Res.*, 119, 567-580, doi:10.1002/2013JB010601.
36. Li, J., G.A. Abers, YH Kim, and D. Christensen (2013), Alaska Megathrust 1: Seismicity 43 years after the great 1964 Alaska earthquake, *J. Geophys. Res.*, 118, 4861-4871, doi: 10.1002/jgrb.50358.

37. Janiszewski, H., G.A. Abers, D. Shillington and J. Calkins (2013), Variations in crustal thickness and structure along the Aleutian volcanic arc from receiver functions, *Geochem. Geophys. Geosyst.*, *14*, 2977-2992, doi:10.1002/ggge20211.
38. Harmon, N., M. Salas de la Cruz, C.A. Rychert, G.A. Abers and K.M. Fischer (2013). Crustal and mantle shear velocity structure of Costa Rica and Nicaragua from ambient noise and teleseismic Rayleigh wave tomography, *Geophys. J. Int.*, *195*, 1300-1313.
39. van der Elst, N.J., H.M. Savage, K.M. Keranen and G.A. Abers (2013), Enhanced remote triggering at fluid-injection sites in the Midwestern U.S., *Science*, *341*, 164-167.
40. Keranen, K.M., H.M. Savage, G.A. Abers and E.S. Cochran (2013), Initiation of triggered earthquakes after 20 years of fluid injection: The November 2011 sequence in Oklahoma, *Geology*, *41*, 699-702, doi:10.1130/G34045.1.
41. Abers G.A., J. Nakajima, P.E. van Keken, S. Kita and B.R. Hacker (2013), Thermal-petrological controls on the location of earthquakes within subducting plates, *Earth Planet. Sci. Lett.*, *369-370*, 178-187.
42. Hacker, B.R. and G.A. Abers (2012), Subduction Factory 5: Unusually low Poisson's ratios in subduction zones from elastic anisotropy of peridotite, *J. Geophys. Res.*, *117*, art. no. B06308.
43. Brownlee, S.J., B.R. Hacker, M. Salisbury, G. Seward, T.A. Little, S.L. Baldwin, and G.A. Abers, (2011). Predicted velocity and density structure of the exhuming Papua New Guinea ultrahigh-pressure terrane. *J. Geophys. Res.* *116*, art. no. B08206.
44. Calkins, J., G.A. Abers, G. Ekström, K. C. Creager, and S. Rondenay (2011), Shallow structure of the Cascadia subduction zone beneath western Washington from spectral ambient noise correlation, *J. Geophys. Res.*, *116*, B07302, doi:10.1029/2010JB007657.
45. van Keken, P.E., B.R. Hacker, E.M. Syracuse and G.A. Abers (2011). Subduction factory 4: Depth-dependent flux of H<sub>2</sub>O from subducting slabs worldwide, *J. Geophys. Res.*, *116*, B01401, doi:10.1029/2010JB007922.
46. Abers, G.A. (2011), Subduction Zones, in H. Gupta (ed.), *Encyclopedia of Solid Earth Geophysics*, Springer, p. 1395-1405.
47. Rondenay, S., L. Montesi and G.A. Abers, New geophysical insight into the origin of the Denali volcanic gap, *Geophys. J. Int.*, *182*, 613-630, 2010.
48. MacKenzie, L.M., G.A. Abers, S. Rondenay and K.M. Fischer, Imaging a steeply dipping subducting slab in southern Central America, *Earth Planet. Sci. Lett.*, *296*, 459-468, 2010.
49. Syracuse, E.M., P. E. van Keken and G.A. Abers, The global range of subduction zone thermal models, *Phys. Earth Planet. Int.*, *183*, 73-90, doi:10.1016/j.pepi.2010.02.004, 2010.
50. Christensen, D. and G.A. Abers, Seismic anisotropy under central Alaska from SKS splitting observations, *J. Geophys. Res.*, *115*, B04315, doi:10.1029/2009JB006712, 2010.
51. Abt, D.L., K.M. Fischer, G.A. Abers, J.M. Protti, V. González and W. Strauch, Constraints on upper mantle anisotropy surrounding the Cocos slab from SK(K)S splitting, *J. Geophys. Res.*, *115*, art. no. B06316, doi:10.1029/2009JB006710, 2010.
52. French, S.W., L.M. Warren, K.M. Fischer, G.A. Abers, W. Strauch, J. M. Protti, and V. Gonzalez. Constraints on upper-plate deformation in the Nicaragua subduction zone from earthquake relocation and directivity analysis, *Geochem. Geophys. Geosyst.*, *11*, art. no. Q03S20, doi:10.1029/2009GC002841, 2010.

53. Ekström, G., G.A. Abers, and S.C. Webb, Determination of surface-wave phase velocities across USArray from noise and Aki's spectral formulation, *Geophys. Res. Lett.*, *36*, L18301, doi:10.1029/2009GL039131, 2009.
54. Abers, G.A., L.S. MacKenzie, S.Rondenay, Z. Zhang, A.G. Wech, and K.C. Creager, Imaging the source region of Cascadia tremor and intermediate-depth earthquakes, *Geology*, *37*, 1119-1122, 2009.
55. Abers, G.A., Slip on shallow-dipping normal faults (Research Focus), *Geology*, *37*, 767-768, 2009.
56. Abt, D.L., K.M. Fischer, G.A. Abers, W. Strauch, J.M. Protti and V. Gonzalez, Shear-wave anisotropy beneath Nicaragua and Costa Rica: Implications for flow in the mantle wedge, *Geochem. Geophys. Geosyst.*, *10*, Q05S15, doi:10.1029/2009GC002375, 2009.
57. Rychert, C.A., K.M. Fischer, G.A. Abers, T. Plank, E.M. Syracuse, J.M. Protti, V. Gonzalez, and W. Strauch, Strong along-arc variations in attenuation in the mantle wedge beneath Costa Rica and Nicaragua, *Geochem. Geophys. Geosyst.*, *9*, Q10S10, <http://dx.doi.org/10.1029/2008GC002040>, 2008.
58. Harmon, N., P. Gertsoft, C.A. Rychert, G.A. Abers, M. Salas de la Cruz, and K.M. Fischer, Phase velocities from seismic noise using beamforming and cross correlation in Costa Rica and Nicaragua, *Geophys. Res. Lett.*, *35*, L19303, doi:10.1029/2008GL035387, 2008.
59. MacKenzie, L.S., G.A. Abers, K.M. Fischer, E.M. Syracuse, J.M. Protti, V. Gonzalez, and W. Strauch, Crustal structure along the southern Central American volcanic front, *Geochem. Geophys. Geosyst.*, *9*, Q08S09, doi:10.1029/2008GC001991, 2008.
60. Syracuse, E.M., G.A. Abers, K.M. Fischer, McKenzie, L., C. Rychert, J. M. Protti, V. Gonzalez, and W. Strauch, Seismic tomography and earthquake locations in the Nicaraguan and Costa Rican upper mantle, *Geochem. Geophys. Geosyst.*, *9*, Q07S08, doi:10.1029/2008GC001963, 2008.
61. Abers, G.A., Orogenesis from subducting thick crust and evidence from Alaska, *AGU Monogr. 179, Active Tectonics and Seismic Potential of Alaska*, P. Haeussler, J. Freymueller, R. Wesson and G. Ekström (eds.), 337-349, 2008.
62. Rondenay, S., G.A. Abers, and P.E. van Keken, Seismic imaging of subduction zone metamorphism, *Geology*, *36*, 275-278, 2008.
63. Hoernle, K., D. Abt, K. Fischer, H. Nichols, F. Hauff, G. Abers, P. van den Bogaard, G. Alvarado, M. Protti and W. Strauch, Geochemical and geophysical evidence for arc-parallel flow in the mantle wedge beneath Costa Rica and Nicaragua, *Nature*, *451*, 1094-1097, 2008.
64. Eberhart-Phillips, D., D.H. Christensen, T.M. Brocher, R. Hansen, N.A. Ruppert, P. J. Haeussler, and G.A. Abers, Imaging the transition from Aleutian subduction to Yakutat collision in central Alaska, with local earthquakes and active source data, *J. Geophys. Res.*, *111*, B11303, doi:10.1029/2005JB004240, 2006.
65. Rossi, G., G.A. Abers, S. Rondenay and D.H. Christensen, Unusual mantle Poisson's ratio, subduction and crustal structure in Central Alaska, *J. Geophys. Res.*, *111*, B09311, doi:10.1029/2005JB003956, 2006.
66. Syracuse, E. and G.A. Abers, Global compilation of variations in slab depth beneath arc volcanoes and implications, *Geochem. Geophys. Geosyst.*, *7*, Q05017, doi:10.1029/2005GC001045, 2006.
67. Veenstra, E., D. Christensen, G. A. Abers and A. Ferris, Crustal thickness variation in south central Alaska: Results from the Broadband Experiment Across the Alaska Range, *Geology*, *34*, 781-784, 2006.
68. Ferris, A.F., G.A. Abers, B. Zelt, B. Taylor, S. Roecker, Crustal structure across the transition from rifting to spreading: the Woodlark rift system of Papua New Guinea, *Geophys. J. Int.*, *166*, 622-634, 2006.

69. Abers, G.A., P.E. van Keken, E.A. Kneller, A. Ferris, and J.C. Stachnik, The thermal structure of subduction zones constrained by seismic imaging: implications for slab dehydration and wedge flow, *Earth Planet. Sci. Lett.*, *241*, 387-397, 2006.
70. Hacker, B.R., G. Abers, S. Peacock and S. Johnston, Reply to Comment by Romain Bousquet et al. on "Subduction factory 1. Theoretical mineralogy, densities, seismic wave speeds and H<sub>2</sub>O contents", *J. Geophys. Res.*, doi:10.1029/2004JB003490, 2005.
71. Peacock, S.M., van Keken, P.E., Holloway, S.D., Hacker, B.R., Abers, G.A., and Fergason, R.L., Thermal structure of the Costa Rica – Nicaragua subduction zone, *Phys. Earth Planet. Int.*, *149*, 187-200, 2005.
72. Abers, G.A., Seismic low-velocity layer at the top of subducting slabs beneath volcanic arcs: observations, predictions, and systematics, *Phys. Earth Planet. Int.*, *149*, 7-29, 2005.
73. Niemi, T.M., A.N. Ferris and G.A. Abers, Investigation of microearthquakes, macroseismic data, and liquefaction associated with the 1867 Wamego earthquake in eastern Kansas, *Bull. Seismol. Soc. Amer.*, *94*, 2317-2329, 2004.
74. Stachnik, J.C., Abers, G.A., and D.Christensen, Seismic attenuation and mantle wedge temperatures in the Alaska subduction zone, *J. Geophys. Res.*, *109*, B10304, doi:10.1029/2004JB003018, 2004.
75. Hacker, B.R. and G.A. Abers, Subduction Factory 3. An Excel worksheet and macro for calculating the densities, seismic wave speeds, and H<sub>2</sub>O contents of minerals and rocks at pressure and temperature, *Geochem. Geophys. Geodyn. (G3)*, *5*, Q01005, doi:10.1029/2003GC000614, 2004.
76. Ekström, G., M. Nettles and G.A. Abers, Glacial Earthquakes, *Science*, *302*, 622-624, 2003.
77. Ferris, A., G.A. Abers, D.H. Christensen and E. Veenstra, High resolution image of the subducted Pacific (?) plate beneath central Alaska, 50-150 km depth, *Earth Planet. Sci. Lett.*, *214*, 575-588, 2003.
78. Abers, G.A., T. Plank and B.R. Hacker, The wet Nicaragua slab, *Geophys. Res. Lett.*, *30*(2), 1098, doi: 10.1029/2002GL015649, 2003.
79. Hacker, B.R., G. A. Abers, and S.M. Peacock, Subduction Factory 1. Theoretical mineralogy, density, seismic wave speeds, and H<sub>2</sub>O content, *J. Geophys. Res.*, *108*(B1), 2029, doi:10.1029/2001JB001127, 2003.
80. Hacker, B.R., S.M. Peacock, G. A. Abers, and S.D. Holloway, Subduction Factory 2. Intermediate-depth earthquakes in subducting slabs are linked to metamorphic dehydration reactions, *J. Geophys. Res.*, *108*(B1), 2030, doi:10.1029/2001JB001129, 2003.
81. Abers, G.A., A. Ferris, M. Craig, H. Davies, A.L. Lerner-Lam, J.C. Mutter and B. Taylor, Mantle compensation of a region of active metamorphic core complexes, Woodlark Rift, Papua New Guinea, *Nature*, *418*, 862-865, 2002.
82. Schlotterbeck, B.A. and G.A. Abers, Three dimensional attenuation variations in southern California, *J. Geophys. Res.*, *30*, 719-30,735, 2001.
83. Abers, G.A. and J.W. Gephart, Direct inversion of earthquake first motions for both the stress tensor and focal mechanisms, and application to Southern California, *J. Geophys. Res.*, *106*, 26,523-26,540, 2001.
84. Abers, G.A., Evidence for seismogenic normal faults at shallow depths in continental rifts, in R.C.L. Wilson, R.B. Whitmarsh, B. Taylor, and N. Froitzheim (eds.), *Non-Volcanic Rifting of Continental Margins: a comparison of evidence from land and sea*, *Geol. Soc. Lond. Spec. Pub.*, *187*, 305-318, 2001.
85. Abers, G.A., Hydrated subducted crust at 100-250 km depth, *Earth and Planet. Sci. Lett.*, *176*, 323-330, 2000.

86. Sarker, G. and G.A. Abers, Lithosphere temperature estimates from seismic attenuation across range fronts in southern and central Eurasia, *Geology*, 27, 427-430, 1999.
87. Sarker, G., and G.A. Abers, Comparison of seismic body wave and coda wave measures of  $Q$ , *Pure and App. Geophys. special issue on attenuation* (B.J. Mitchell and B. Romanowicz, eds.), 153, 665 - 683, 1998.
88. Sarker, G., and G.A. Abers, Deep structure along the boundary of a collisional belt: attenuation tomography of  $P$  and  $S$  waves in the Greater Caucasus, *Geophys. J. Int.*, 133, 326-340, 1998.
89. Abers, G.A., Array measurements of phases used in receiver function calculations: importance of scattering, *Bull. Seism. Soc. Amer.*, 88, 313-318, 1998.
90. Helffrich, G., and G. A. Abers, Slab low-velocity layer in the eastern Aleutian subduction zone, *Geophys. J. Int.*, 130, 640-648, 1997.
91. Abers, G.A., C.Z. Mutter and J. Fang, Shallow dips of normal faults during rapid extension: Earthquakes in the Woodlark-D'Entrecasteaux rift system, Papua New Guinea, *J. Geophys. Res.*, 102, 15,301-15,317, 1997.
92. Mellors, R.J., F.L. Vernon, G.L. Pavlis, G.A. Abers, M.W. Hamburger, S. Ghose, and B. Iliasov, The  $M_s=7.3$  1992 Suusamy, Kyrgyzstan, earthquake: 1: Constraints on fault geometry and source parameters based on aftershocks and body-wave modeling, *Bull. Seismol. Soc. Am.*, 87, 11-22, 1997.
93. Abers, G.A., and G. Sarker, Dispersion of regional body waves at 100-150 km depth beneath Alaska: In situ constraints on metamorphism of subducted crust, *Geophys. Res. Lett.*, 23, 1171-1174, 1996.
94. Abers, G.A., Plate structure and the origin of double seismic zones, in *Subduction Top to Bottom, Geophysical Monograph 96*, edited by G.E. Bebout, D. Scholl, and S. Kirby, AGU, Washington, D.C., p. 223-228, 1996.
95. Abers, G.A., J. Beavan, S. Horton, S. Jaumé, and E. Triep, Large accelerations and tectonic setting of the May, 1993 Shumagin Islands earthquake sequence, *Bull. Seismol. Soc. Am.*, 85, 1730-1738, 1995.
96. Yang, X., K.M. Fischer, and G.A. Abers, Seismic anisotropy beneath the Shumagin Islands segment of the Aleutian-Alaska subduction zone, *J. Geophys. Res.*, 100, 18,165-18,177, 1995.
97. Sheehan, A.F., G.A. Abers, C.H. Jones, and A.L. Lerner-Lam, Crustal thickness variations across the Rocky Mountain front from teleseismic receiver functions, *J. Geophys. Res.*, 100, 20,391-20,404, 1995.
98. Abers, G.A., Hu, X., and L.R. Sykes, Source scaling of earthquakes in the Shumagin region, Alaska: time-domain deconvolution of regional waveforms, *Geophys. J. Int.*, 123, 41-58, 1995.
99. Triep, E., G.A. Abers, A. Lerner-Lam, V. Mishatkin, N. Zhacherenko, and O. Staravoit, Active thrust front at the south slope of the greater Caucasus: The 29 April, 1991 earthquake and its aftershock sequence, *J. Geophys. Res.*, 100, 4011-4034, 1995.
100. Abers, G.A., and R. McCaffrey, Active arc-continent collision: Earthquakes, gravity anomalies, and fault kinematics in the Huon-Finisterre collision zone, Papua New Guinea, *Tectonics*, 13, 227-245, 1994.
101. Abers, G.A., Three-dimensional inversion of regional  $P$  and  $S$  arrival times in the East Aleutians and sources of subduction zone gravity highs, *J. Geophys. Res.*, 99, 4395-4412, 1994.
102. Kulig, C., R. McCaffrey, G.A. Abers, and H. Letz, Shallow seismicity of arc-continent collision near Lae, Papua New Guinea, *Tectonophysics*, 227, 81-94, 1993.
103. Abers, G.A., G.A. Ekström, M.S. Marlow, and E.L. Geist, Bering Sea earthquake of February 21, 1991: Active faulting along the Bering shelf edge, *J. Geophys. Res.*, 98, 2155-2165, 1993.
104. Abers, G.A., Relationship between shallow- and intermediate-depth seismicity in the eastern Aleutian subduction zone, *Geophys. Res. Lett.*, 19, 2019-2022, 1992.

105. Abers, G.A., Possible seismogenic shallow-dipping normal faults in the Woodlark-D'Entrecasteaux extensional province, Papua New Guinea, *Geology*, *19*, 1205-1208, 1991.
106. McCaffrey, R., and G.A. Abers, Orogeny in arc-continent collision: The Banda Arc and Western New Guinea, *Geology*, *19*, 563-566, 1991.
107. Abers, G.A., and S. Roecker, Deep structure of an arc-continent collision: Earthquake relocation and inversion for upper mantle P and S wave velocities beneath Papua New Guinea, *J. Geophys. Res.*, *96*, 6379-6401, 1991.
108. Abers, G. A., and H. Lyon-Caen, Regional gravity anomalies, depth of the foreland basin, and isostatic compensation of the New Guinea Highlands, *Tectonics*, *9*, 1479-1493, 1990.
109. Abers, G., and R. McCaffrey, Active deformation in the New Guinea Fold-and-Thrust Belt: Seismological evidence for strike-slip faulting and basement-involved thrusting, *J. Geophys. Res.*, *93*, 13,332-13,354, 1988.
110. Abers, G.A., B. Parsons, and J.K. Weissel, Seamount abundances and distributions in the southeast Pacific, *Earth and Planet. Sci. Lett.*, *87*, 137-151, 1988.
111. Abers, G.A., C. Bryan, S.W. Roecker, and R. McCaffrey, Thrusting of the Hindu Kush over the Tadjik Basin, Afghanistan: Evidence from two large earthquakes, *Tectonics*, *7*, 41-56, 1988.
112. MIT Field Geophysics Camp (Jones, C. H., M. R. Nelson, G. Abers, C. Decker, J. Hegley, R. Herrmann, M. Kohn, T. Madden, R. Manikkalingam, J. Matarese, D. Meinholz, P. Molnar, C. Ruppel), and S. Biehler, A geophysical investigation of the northern Panamint Valley, Inyo County, California: Evidence for possible low-angle normal faulting at shallow depth in the crust, *J. Geophys. Res.*, *92*, 10,427-10,441, 1987.
113. Bowin, C., G. Abers, and L. Shure, Gravity field of Venus at constant altitude and comparison with Earth, Proc. Lunar Planet. Sci. Conf. 15th, in *J. Geophys. Res.*, *90*, C757-C770, 1985.
114. Abers, G., The subsurface structure of Long Valley Caldera, Mono County, California: A preliminary synthesis of gravity, seismic, and drilling information, *J. Geophys. Res.*, *90*, 3627-3636, 1985.

### ***Other Reports and Unrefereed Publications***

- Abers, G.A. and M.E. Mann (2019). Earth structure effects on wave propagation of the damaging 2016 M7.1 Iniskin Alaska earthquake and other in-slab earthquakes, *U.S. Geol. Surv., Final Technical Reports*, NEHRP Award G17AP00065, Reston VA, 11 pp.
- Worthington, L., and the AACSE Team (G. Abers, A. Adams, P. Haeussler, E. Roland, S. Schwartz, A. Sheehan, D. Shillington, S. Webb, D. Wiens and L. Worthington), Putting the "Community" in the Alaska Amphibious Community Seismic Experiment (AACSE): Alaska Peninsula and Western Gulf of Alaska, Summer 2018 (2018), *GeoPRISMS Newslett.*, *41*, p. 16-23.
- Abers, GA, A Adams, E Roland, S Schwartz, S Webb, L Worthington (2018), Amphibious Community Experiments in Alaska and Related Opportunities, *GeoPRISMS Newslett.*, *40*, p. 43.
- Ulberg, C.W. and the iMUSH team (G.A. Abers, O. Bachmann, P. Bedrosian, D.L. Blatter, E. Bowles-Martinez, M.A. Clynne, K.C. Creager, K. Crosbie, R.P. Denlinger, M.E. Glasgow, J. Han, S.M. Hansen, G.J. Hill, E. Kiser, A. Levander, M. Mann, X. Meng, S.C. Moran, J. Peacock, B. Schmandt, A. Schultz, T.W. Sisson, R.A. Soto Castaneda, W.A. Thelen, J.E. Vidale, M. Wanke) (2017). Imaging magma under Mount St. Helens with geophysical and petrologic methods, *GeoPRISMS Newslett.* *39*, Fall 2017, p. 6-11.

- Abers, G., S. Schwartz, R. Arrowsmith, R. Evans, J. Freymueller, J. Gaherty, H. Gao, D. Lizarralde, E. Roland, D. Toomey, P. van Keken, D. Wiens and R. Woodward (2015), *Amphibious Array Facilities Workshop Report*, submitted to NSF Feb. 2015, <http://geoprisms.org/wpdemo/wp-content/uploads/2014/06/AAFW-Report-2015.pdf>, 41 pp.
- Abers, G., Fracking shakes up the Earth, Commentary in *Albany Times-Union*, Jan. 16, 2013.
- Abers, G.A., From the MARGINS Chair, *MARGINS Newslett.* 25, Fall 2010, p. 8-9.
- Abers, G.A. and J. Morgan, NSF MARGINS Program: The MARGINS decade, and its successor, *Struct. Geol. & Tecton. Newslett., Geol. Soc. Amer.*, 30(1), p. 8, Feb. 2010.
- Abers, G.A., From the MARGINS Chair, *MARGINS Newslett.* 23, Fall 2009, p. 8-9.
- Abers, G.A., From the MARGINS Chair; Response to Decadal Review Report, *MARGINS Newslett.* 22, Spring 2009, p. 1-3.
- Abers, G.A., From the MARGINS Chair, *MARGINS Newslett.* 21, Fall 2008, p. 8-9.
- Abers, G.A., From the MARGINS Chair, *MARGINS Newslett.* 20, Spring 2008, p. 7-8.
- Abers, G.A., From the MARGINS Chair, *MARGINS Newslett.* 19, Fall 2007, p. 5-6.
- Abers, G.A., K.M. Fischer, E. Syracuse, C. A. Rychert, L. S. Auger, D. L. Abt, M. Salas-de la Cruz, J. M. Protti, W. Strauch, and Victor Gonzalez, Probing mantle melting processes in the Nicaragua-Costa Rica subduction zone with the TUCAN broadband seismometer experiment, *IRIS Newslett.*, 1, p. 10-12, Spring 2007.
- Abers, G.A., From the MARGINS Chair, *MARGINS Newslett.* 18, Spring 2007, p. 6-7.
- Gaherty, J.B., G. Hirth and G.A. Abers, Report on MARGINS Workshop: Interpreting Upper-Mantle Images, *MARGINS Newsletter* 17, Fall 2006, p. 1-5.
- Bilek, S., G. Abers, G. Reyes, K. Fischer, W. Strauch and V. Gonzalez Salas, The October 2004 M=7.1 Nicaragua earthquake: Rupture process, aftershock locations, and the confluence of SEIZE and SubFAC goals, *MARGINS Newsletter* 15, Fall 2005, p. 1-2.
- Reagan, M., G.A. Abers, and P. van Keken, The Subduction Factory Initiative: Status and Future Directions - October 2005, *MARGINS Newsletter* 15, Fall 2005, p. 3-7.
- Hacker, B.R., G.A. Abers and S.M. Peacock, Theoretical mineralogy, density, seismic wave speeds, and H<sub>2</sub>O content of the Cascadia subduction zone, with implications for intermediate-depth seismicity and earthquake hazard, in Kirby, S., Wang, K., and Dunlop, S., eds., *The Cascadia Subduction Zone and Related Subduction Systems-Seismic Structure, Intraslab Earthquakes and Processes, and Earthquake Hazards: U.S. Geol. Surv. Open-File Rep. 02-328*, and *Geol. Surv. Canada Open File 4350*, 133-137, 2002.
- Anton, L., McKee, C.O., and Abers, G.A., 2001. The Gobe Earthquake of 4 March 2000: evidence of thrust faulting in basement beneath the Papuan Fold Belt. Papua New Guinea Geological Survey Report 2001/6.
- Abers, G.A., and B. Schlotterbeck, Three-Dimensional Attenuation Variations in Southern California, *U.S. Geol. Surv., Final Technical Reports*, Reston VA, 29 pp., 2000.
- Niemi, T. G.A. Abers, and A. Ferris, Paleoseismic Investigation of the Nemaha Ridge and the Humboldt Fault, Eastern Kansas, *U.S. Geol. Surv., Final Technical Reports*, Reston VA, 24 pp., 1999.

- Abers, G.A., and B. Schlotterbeck, Three-Dimensional Attenuation Variations in Southern California, NEHRP Summaries of Technical Reports XXXXI, US Geol. Surv. Open-File Rep., [http://erp-web.er.usgs.gov/reports/annsum/vol41/sc/sc\\_vol41.htm](http://erp-web.er.usgs.gov/reports/annsum/vol41/sc/sc_vol41.htm), 1998.
- Abers, G.A., Three-Dimensional Attenuation Variations in Southern California, NEHRP Summaries of Technical Reports XXXX, US Geol. Surv. Open-File Rep., [http://erp-web.er.usgs.gov/reports/annsum/vol40/sc/sc\\_vol40.htm](http://erp-web.er.usgs.gov/reports/annsum/vol40/sc/sc_vol40.htm), 1998.
- Abers, G.A. and J.W. Gephart, Constraints on regional stress tensors from direct inversion of earthquake first motions, *U.S. Geol. Surv., Final Technical Reports*, Reston VA, 42 pp., 1998.
- Niemi, T. and G.A. Abers, Paleoseismic Investigation of the Nemaha Ridge and the Humboldt Fault, Eastern Kansas, NEHRP Summaries of Technical Reports XXXIX, US Geol. Surv. Open-File Rep., [http://erp-web.er.usgs.gov/reports/annsum/vol39/ni/ni\\_vol39.htm](http://erp-web.er.usgs.gov/reports/annsum/vol39/ni/ni_vol39.htm), 1997.
- Abers, G.A. and J.W. Gephart, Constraining the regional stress tensor directly from seismic first-motion observations, NEHRP Summaries of Technical Reports XXXVIII, US Geol. Surv. Open-File Rep., 1997.
- Abers, G.A. and G. Sarker, Seismic sources and structure in Iran and the Caucasus from Joint Seismic Program array data: Attenuation variations at the northern margins of Eurasian mountains, in *Proceedings of the 18th Annual Seismic Research Symposium* 4-6 September 1996, Annapolis, Maryland, PL-TR-96-2153, pp. 1-9, 1996.
- Abers, G.A., Book Reviews, The Dynamic Earth, Third Edition, by B.J. Skinner and S.C. Porter, *Pure and Applied Geophysics (PAGEOPH)*, 147, 585-587, 1996.
- Gephart, J.W. and G.A. Abers, G.A., Collaborative research (Cornell and Kansas); constraining the regional stress tensor directly from seismic first-motion observations, *Final Report, U.S. Geol. Surv.*, Reston, VA, 18 pp., 1996.
- Abers, G.A., W.-Y. Kim, and A. Lerner-Lam, Seismic sources and structure in Iran and the Caucasus from Joint Seismic Program array data, in *Proceedings of the 17th Annual Seismic Research Symposium* 12-15 September 1995, Scottsdale, Arizona, PL-TR-95-2108, p. 602-608, 1995.
- W.-Y. Kim, V. Aharonian, G. Abers, A. Lerner-Lam, and P. Richards, Discrimination of earthquakes and explosions in southern Russia using regional high-frequency data from IRIS/JSP Caucasus Network, in *Proceedings of the 17th Annual Seismic Research Symposium* 12-15 September 1995, Scottsdale, Arizona, PL-TR-95-2108, 68-77, 1995.
- J.W. Gephart and Abers, G.A., Constraining the regional stress tensor directly from seismic first-motion observations, NEHRP Summaries of Technical Reports XXXVI, US Geol. Surv. Open-File Rep. 95-0210, 360-363, 1995.
- Abers, G.A., Buy one and get one free: plate structure and the origin of double seismic zones, SUBCON extended abstracts, US Geol. Surv. Open-File Rep., in press, 1994.
- Abers, G.A., The Caucasus Seismic Network, *IRIS Newsletter*, 13(2), 16-17, 1994.
- Zwicky, P., R. McCaffrey and G. Abers, Earthquake moment tensor analysis from inversion of body waves, IASPEI Software Lib., vol. 4, 1994.
- Abers, G.A., and W.-Y. Kim, Determination of earthquake source parameters from regional waveforms: Analysis of sparse network data in the Aleutians, in *NEHRP Summaries of Technical Reports vol. XXXIV, U.S. Geol. Surv. Open-file Rep. 93-195*, 165-170, 1993.



- Abers, G.A., Seismic monitoring of the Shumagin seismic gap, Alaska, Final Report, U.S. Geol. Surv., Reston, VA, 1992.
- Abers, G.A., Analysis of seismic data from the Shumagin seismic gap, Alaska, in *NEHRP Summaries of Technical Reports vol. XXXIII, U.S. Geol. Surv. Open-file Rep. 92-258*, 1-5, 1992.
- Abers, G.A., Seismic monitoring of the Shumagin seismic gap, Alaska, in *NEHRP Summaries of Technical Reports vol. XXXIII, U.S. Geol. Surv. Open-file Rep. 92-258*, 121-125, 1992.
- Abers, G.A., Analysis of seismic data from the Shumagin seismic gap, Alaska, Final Report, U.S. Geol. Surv., Reston, VA, 9 pp., 1991.
- Abers, G.A., Analysis of seismic data from the Shumagin seismic gap, Alaska, in *NEHRP Summaries of Technical Reports vol. XXXII, U.S. Geol. Surv. Open-file Rep. 91-352*, 170-73, 1991.
- Abers, G.A., Seismic monitoring of the Shumagin seismic gap, Alaska, in *NEHRP Summaries of Technical Reports vol. XXXII, U.S. Geol. Surv. Open-file Rep. 91-352*, 1-4, 1991.
- Lerner-Lam, A., G. Abers, D. Lentricchia, N. Zakharchenko, and V. Mishatkin, Joint US/USSR survey of Georgian/Ossetian earthquake aftershock sequence, *IRIS Newsletter*, 10(2), 10-11, 1991.
- McCaffrey, R., G. Abers, and P. Zwick, Inversion of Teleseismic Body Waves, in *Digital Seismogram Analysis and Waveform Inversion, IASPEI Software Library, 3*, edited by W.H.K. Lee, IASPEI/SSA, El Cerrito, Calif., pp. 81-166, 1991.
- McCaffrey, R., and G. Abers, SYN3: A program for inversion of teleseismic body waveforms on microcomputers, *AFGL Tech. Rep., TR-88-0099*, Air Force Geophys. Lab., Bedford, Mass, 1988.