

volume 118
number 8
August 2013

Articles published online
1 August – 31 August 2013

Journal of
Geophysical
Research
Solid Earth

Journal of Geophysical Research Solid Earth

Volume 118 Number 8 August 2013
JGREA2(8) 3871–4668 (2013)
ISSN 2169–9313 (print); ISSN 2169–9356 (online)

The online article is the official version and may contain additional content not available in this print issue. To access the full article, including multimedia, enhanced figures, supporting information, and other nonprinted content, go to <http://wileyonlinelibrary.com/journal/jgrb>.

Geomagnetism and Paleomagnetism/Marine Geology and Geophysics

- 3871** *U. Kirscher, A. Zwing, D. V. Alexeiev, H. P. Echtler, and V. Bachtaidze*
Paleomagnetism of Paleozoic sedimentary rocks from the Karatau Range, Southern Kazakhstan: Multiple remagnetization events correlate with phases of deformation (doi 10.1002/jgrb.50253)
- 3886** *Tom Haerinck, Timothy N. Debacker, and Manuel Sintubin*
Magnetic anisotropy of chloritoid (doi 10.1002/jgrb.50276)
- 3899** *A. Leprêtre, F. Klingelhofer, D. Grindorge, P. Schmurl, M. O. Beslier, K. Yelles, J. Déverchère, and R. Bracene*
Multiphased tectonic evolution of the Central Algerian margin from combined wide-angle and reflection seismic data off Tipaza, Algeria (doi 10.1002/jgrb.50318)
- 3917** *B. W. Anderson, K. M. Gillis, and L. A. Coogan*
A hydrologic model for the uppermost oceanic crust constrained by temperature estimates from carbonate minerals (doi 10.1002/jgrb.50325)

Chemistry and Physics of Minerals and Rocks/Volcanology

- 3931** *Roman N. Vasin, Hans-Rudolf Wenk, Waruntorn Kanitpanyacharoen, Siegfried Matthes, and Richard Wirth*
Elastic anisotropy modeling of Kimmeridge shale (doi 10.1002/jgrb.50259)
- 3957** *E. Chaussard, F. Amelung, and Y. Aoki*
Characterization of open and closed volcanic systems in Indonesia and Mexico using InSAR time series (doi 10.1002/jgrb.50288)
- 3970** *Miki Tasaka and Takehiko Hiraga*
Influence of mineral fraction on the rheological properties of forsterite + enstatite during grain-size-sensitive creep:
1. Grain size and grain growth laws (doi 10.1002/jgrb.50285)
- 3991** *Miki Tasaka, Takehiko Hiraga, and Mark E. Zimmerman*
Influence of mineral fraction on the rheological properties of forsterite + enstatite during grain-size-sensitive creep:
2. Deformation experiments (doi 10.1002/jgrb.50284)
- 4013** *George R. Priest, Frank R. Hladky, Stanley A. Mertzman, Robert B. Murray, and Thomas J. Wiley*
Volcanic signature of Basin and Range extension on the shrinking Cascade arc, Klamath Falls-Keno area, Oregon (doi 10.1002/jgrb.50290)
- 4039** *Ludmila Adam, Kasper van Wijk, Thomas Otheim, and Michael Batzle*
Changes in elastic wave velocity and rock microstructure due to basalt-CO₂-water reactions (doi 10.1002/jgrb.50302)
- 4048** *Leif Karlstrom, Shaul Hurwitz, Robert Sohn, Jean Vandemeulebrouck, Fred Murphy, Maxwell L. Rudolph, Malcolm J. S. Johnston, Michael Manga, and R. Blaine McCleskey*
Eruptions at Lone Star Geyser, Yellowstone National Park, USA: 1. Energetics and eruption dynamics (doi 10.1002/jgrb.50251)
- 4063** *Yan Zhang, Zhong-Yuan Ren, and Yi-Gang Xu*
Sulfur in olivine-hosted melt inclusions from the Emeishan picrites: Implications for S degassing and its impact on environment (doi 10.1002/jgrb.50324)
- 4071** *Dongzhou Zhang, Jennifer M. Jackson, Bin Chen, Wolfgang Sturhahn, Jiyoung Zhao, Jimyuan Yan, and Razvan Caracas*
Elasticity and lattice dynamics of enstatite at high pressure (doi 10.1002/jgrb.50303)



- 4083** *Elin Skurtveit, Anita Torabi, Roy H. Gabrielsen, and Mark D. Zoback*
Experimental investigation of deformation mechanisms during shear-enhanced compaction in poorly lithified sandstone and sand (doi 10.1002/jgrb.50342)
- 4101** *Yasuko Shibano, Ikuro Sumita, and Atsuko Namiki*
A laboratory model for melting erosion of a magma chamber roof and the generation of a rhythmic layering (doi 10.1002/jgrb.50295)
- Seismology**
- 4117** *A.-A. Gabriel, J.-P. Ampuero, L. A. Dalguer, and P. M. Mait*
Source properties of dynamic rupture pulses with off-fault plasticity (doi 10.1002/jgrb.50213)
- 4127** *Fuyuki Hirose and Kenji Maeda*
Simulation of recurring earthquakes along the Nankai trough and their relationship to the Tokai long-term slow slip events taking into account the effect of locally elevated pore pressure and subducting ridges (doi 10.1002/jgrb.50287)
- 4145** *Jianye Chen, Xiaosong Yang, Qingbao Duan, Toshi Shimamoto, and Christopher J. Spiers*
Importance of thermochemical pressurization in the dynamic weakening of the Longmenshan Fault during the 2008 Wenchuan earthquake: Inferences from experiments and modeling (doi 10.1002/jgrb.50260)
- 4170** *Lun Li, Aibing Li, Yang Shen, Eric A Sandvol, Danian Shi, Hongyi Li, and Xinfu Li*
Shear wave structure in the northeastern Tibetan Plateau from Rayleigh wave tomography (doi 10.1002/jgrb.50292)
- 4184** *E. M. Syracuse, C. H. Thurber, C. J. Rawles, M. K. Savage, and S. Bannister*
High-resolution relocation of aftershocks of the M_w 7.1 Darfield, New Zealand, earthquake and implications for fault activity (doi 10.1002/jgrb.50301)
- 4196** *Thomas H. Jordan and Elizabeth M. Paulson*
Convergence depths of tectonic regions from an ensemble of global tomographic models (doi 10.1002/jgrb.50263)
- 4226** *Jiayi Xie, Michael H. Ritzwoller, Weisen Shen, Yingjie Yang, Yong Zheng, and Longquan Zhou*
Crustal radial anisotropy across Eastern Tibet and the Western Yangtze Craton (doi 10.1002/jgrb.50296)
- 4253** *Tadashi Terada, Yoshihiro Hiramatsu, and Tomoyuki Mizukami*
Shear wave anisotropy beneath the volcanic front in South Kyushu area, Japan: Development of C-type olivine CPO under H_2O -rich conditions (doi 10.1002/jgrb.50300)
- 4265** *Lisa A. Alpert, Meghan S. Miller, Thorsten W. Becker, and Amir A. Allam*
Structure beneath the Alboran from geodynamic flow models and seismic anisotropy (doi 10.1002/jgrb.50309)
- 4278** *Chad Gu, Aicko Y. Schumann, Marco Baiesi, and Jörn Davidsen*
Triggering cascades and statistical properties of aftershocks (doi 10.1002/jgrb.50306)
- 4296** *Xinglin Lei, Shengli Ma, Wenkang Chen, Chunmei Pang, Jie Zeng, and Bing Jiang*
A detailed view of the injection-induced seismicity in a natural gas reservoir in Zigong, southwestern Sichuan Basin, China (doi 10.1002/jgrb.50310)
- 4312** *Mathias Obrebski, Fabrice Arduin, Eleonore Stutzmann, and Martin Schimmel*
Detection of microseismic compressional (P) body waves aided by numerical modeling of oceanic noise sources (doi 10.1002/jgrb.50233)
- 4325** *Weisen Shen, Michael H. Ritzwoller, and Vera Schulte-Pelkum*
Crustal and uppermost mantle structure in the central U.S. encompassing the Midcontinent Rift (doi 10.1002/jgrb.50321)
- 4345** *Deyan Draganov, Xander Campman, Jan Thorbecke, Arie Verdel, and Kees Wapenaar*
Seismic exploration-scale velocities and structure from ambient seismic noise (> 1 Hz) (doi 10.1002/jgrb.50339)

Geodesy and Gravity/Tectonophysics

- 4361** *Pablo J. González, Sergey V. Samsonov, Susi Pepe, Kristy F. Tiampo, Pietro Tizzani, Francesco Casu, José Fernández, Antonio G. Camacho, and Eugenio Sansosti*
Magma storage and migration associated with the 2011–2012 El Hierro eruption: Implications for crustal magmatic systems at oceanic island volcanoes (doi 10.1002/jgrb.50289)

- 4378** *T. D. Khoza, A. G. Jones, M. R. Muller, R. L. Evans, M. P. Miensopust, and S. J. Webb*
Lithospheric structure of an Archean craton and adjacent mobile belt revealed from 2-D and 3-D inversion of magnetotelluric data: Example from southern Congo craton in northern Namibia (doi 10.1002/jgrb.50258)
- 4398** *J. Ruch, S. Pepe, F. Casu, G. Solaro, A. Pepe, V. Acocella, M. Neri, and E. Sansosti*
Seismo-tectonic behavior of the Pernicana Fault System (Mt Etna): A gauge for volcano flank instability? (doi 10.1002/jgrb.50281)
- 4410** *Yonggang Liu and W. Richard Peltier*
Sea level variations during snowball Earth formation: 1. A preliminary analysis (doi 10.1002/jgrb.50293)
- 4425** *Yonggang Liu and W. Richard Peltier*
Sea level variations during snowball Earth formation and evolution: 2. The influence of Earth's rotation (doi 10.1002/jgrb.50294)
- 4446** *V. Roche, C. Homburg, and M. Rocher*
Fault nucleation, restriction, and aspect ratio in layered sections: Quantification of the strength and stiffness roles using numerical modeling (doi 10.1002/jgrb.50279)
- 4461** *Henri Leclère, Guillaume Daniel, Olivier Fabbri, Frédéric Cappa, and François Thouvenot*
Tracking fluid pressure buildup from focal mechanisms during the 2003–2004 Ubaye seismic swarm, France (doi 10.1002/jgrb.50297)
- 4477** *Max Rohrman*
Intrusive large igneous provinces below sedimentary basins: An example from the Exmouth Plateau (NW Australia) (doi 10.1002/jgrb.50298)
- 4488** *H. Bathke, H. Sudhaus, E. P. Holohan, T. R. Walter, and M. Shirzaei*
An active ring fault detected at Tendürek volcano by using InSAR (doi 10.1002/jgrb.50305)
- 4503** *Kristine M. Larson*
A methodology to eliminate snow- and ice-contaminated solutions from GPS coordinate time series (doi 10.1002/jgrb.50307)
- 4511** *Scott T. Marshall, Gareth J. Funning, and Susan E. Owen*
Fault slip rates and interseismic deformation in the western Transverse Ranges, California (doi 10.1002/jgrb.50312)
- 4535** *Atsuhiro Muto, Knut Christianson, Huw J. Horgan, Sridhar Anandakrishnan, and Richard B. Alley*
Bathymetry and geological structures beneath the Ross Ice Shelf at the mouth of Whillans Ice Stream, West Antarctica, modeled from ground-based gravity measurements (doi 10.1002/jgrb.50315)
- 4547** *Lu Yao, Toshihiko Shimamoto, Shengli Ma, Raehee Han, and Kazuo Mizoguchi*
Rapid postseismic strength recovery of Pingxi fault gouge from the Longmenshan fault system: Experiments and implications for the mechanisms of high-velocity weakening of faults (doi 10.1002/jgrb.50308)
- 4564** *S. Beauprétre, I. Manighetti, S. Garambois, J. Malavieille, and S. Dominguez*
Stratigraphic architecture and fault offsets of alluvial terraces at Te Marua, Wellington fault, New Zealand, revealed by pseudo-3D GPR investigation (doi 10.1002/jgrb.50317)
- 4586** *M. Schindelegger, D. Salstein, and J. Böhm*
Recent estimates of Earth-atmosphere interaction torques and their use in studying polar motion variability (doi 10.1002/jgrb.50322)
- 4599** *Jianbao Sun, Zheng-Kang Shen, Roland Bürgmann, Min Wang, Lichun Chen, and Xiwei Xu*
A three-step maximum a posteriori probability method for InSAR data inversion of coseismic rupture with application to the 14 April 2010 M_w 6.9 Yushu, China, earthquake (doi 10.1002/jgrb.50244)
- 4628** *Tao Li, Jie Chen, Jessica A. Thompson, Douglas W. Burbank, and Xiaodong Yang*
Quantification of three-dimensional folding using fluvial terraces: A case study from the Mushi anticline, northern margin of the Chinese Pamir (doi 10.1002/jgrb.50316)
- 4648** *W. W. Sager, J. M. Bull, and K. S. Krishna*
Active faulting on the Ninetyeast Ridge and its relation to deformation of the Indo-Australian plate (doi 10.1002/jgrb.50319)