**MICHAEL MANGA**

**EDUCATION**

B.Sc. (Geophysics) McGill University, June 1990

S.M. (Engineering Sciences) Harvard University, June 1992

Ph.D. (Earth and Planetary Sciences) Harvard University, May 1994

**PROFESSIONAL EXPERIENCE:**

**Positions Held**

Miller Fellow, Miller Institute for Basic Research in the Sciences,

University of California, Berkeley, August 1994 – August 1996

Assistant professor, Department of Geological Sciences,

University of Oregon, September 1996 – June 2001

Associate professor, Department of Earth and Planetary Science,

University of California, Berkeley, July 2001 – July 2006

Professor, Department of Earth and Planetary Science,

University of California, Berkeley, July 2006 – present

Miller Professor, September 2008 – June 2009

Judy Webb chair of physical sciences, 2013-2018

Freedman chair in Education and the Berkeley Collegium, 2019-2024

Distinguished Professor, July 2019 - present

Department chair, July 2018-2021, 2022-present

**HONORS AND AWARDS**

CIFAR fellow, 2022

Carl Friedrich von Siemens Research Award of the Alexander von Humboldt Foundation, 2021

American Association for the Advancement of Science, fellow 2019

National Academy of Sciences, 2018

UC BerkeleyDistinguished Teaching Award, 2017

Noyce Prize for Excellence in Undergraduate Teaching, 2017

Bunsen Medal, European Geoscience Union, 2011

MacArthur Fellow, 2005

Geological Society of America, fellow 2004

Donath Medal, Geological Society of America, 2003

Macelwane Medal, American Geophysical Union, 2002

American Geophysical Union, fellow 2002

Sloan Fellowship, 2001

Ersted Award for Distinguished Teaching, University of Oregon, 1999

Richard A. Bray Faculty Fellow, University of Oregon, 1999

National Science Foundation, CAREER award, 1997

**Professional Service**

*Editorial responsibilities*:

Editorial Committee, *Annual Reviews of Earth and Planetary Sciences*, 2012-present

Editorial Board, *Proceedings of the National Academy of Sciences*, 2020-present

Editor, *Reviews of Geophysics*, 2005- 2009

Advisory board, *Physics Today*, 2007-2013

Associate editor, *Bulletin of Volcanology*, 2011- 2015

Associate editor, *Journal of Geophysical Research*, 2001- 2005

Guest editor, special issue of *Journal of Volcanology and Geothermal Research* on “Experimental volcanology”, 2004

Guest editor, special issue of *Pure and Applied Geophysics* on “Hydrological, geochemical, and geophysical changes related to earthquakes and slow slip events”

coeditor, *GSA special volume* “The kinematics and dynamics of lava flows “

Editorial board guest, *Annual Reviews of Earth and Planetary Science*, 2003

Editorial Board, *Geology*, 2004 – 2006

exceptional reviewer award, *Geology*, 2007

reviewer for Nature, Science, Geology, Journal of Geophysical Research, Icarus, Journal of Volcanology and Geothermal Research, Bulletin of Volcanology, Applied Volcanology, Geothermics, Journal of Petrology, Journal of Fluid Mechanics, Physics of Fluids, International Journal of Multiphase Flow, Experiments in Fluids, Fluid Dynamics Research, AIChE Journal, Shock Waves, Industrial and Engineering Chemistry Research, Geophysical Research Letters, Water Resources Research, Sustainable Water Resource Management, Groundwater, G-cubed, Geophysical Journal International, Earth and Planetary Science Letters, Physics of the Earth and Planetary Interiors, EOS, Journal of Intermontaine Science, Contes Rendues Geoscience, European Journal of Fluid Mechanics, AGU monographs, Limnology and Oceanography, Geomorphology, Earth Surface Processes and Landforms, Remote Sensing of the Environment, Proceedings of the Royal Society, Journal of Engineering Mathematics, Journal of nonNewtonian Fluid Mechanics, Ground Water, Hydrogeology Journal, Hydrological Processes, Journal of Hydrology, Hydrology and Earth System Science, Geofluids, Transport in Porous Media, Physics Today, Annual Reviews of Earth and Planetary Sciences, Astrobiology, Environmental Science and Technology, Chemical Geology, Geological Society of America Bulletin, Bulletin of the Seismological Society of America, Siesmological Research Letters, American Journal of Science, Journal of Seismology, Mineralogical Magazine, International Journal of Earth Sciences, Tectonophysics, Contributions in Mineralogy and Petrology, Marine Geology, Astrophysical Journal, Challenges, Geological Magazine, Oceanologia, Solid Earth, Natural Hazards, Scientific Reports, Nature Communications, Nature Geoscience, Proceedings of the National Academy of Sciences

*National Science Foundation*:

Hydrological Sciences review panel, 2011

CMG review panel, 2009

CAREER committee of visitors, 2006

Geophysics review panel, 2002-2005

Earth Science postdoc panel, 1996-1998

*Department of Energy*

Committee member Council for the Geosciences Program of the Office of Science, 2008 - 2015

*NASA*:

Outer Planets Research panel, 2004

Mars Data Analysis panel, 2007

*American Geophysical Union*:

Macelwane medal committee, 2005-2007

Chair, Macelwane medal committee, 2008-2011

Excellence in Geophysical Education Award Committee, 1998-2002

Secretary SEDI focus group, 2003-2004

Kuno award committee, 2011-2014

President-elect then president, VGP section, 2017-2020

Council Leadership Team, 2017-2021

Leadership development and governance committee, 2021-present

*Geological Society of America*

Publications committee, 2010-2014

Donath medal committee, 2017-2020

*European Geoscience Union*

Bunsen medal committee, 2011-2014

*European Research Council*

Review panels, 2014, 2015, 2016, 2017, 2018, 2019 (best reviewer award), 2021, 2022

*National Research Council and National Academies*

Committee, New Research Opportunities in the Earth Sciences at the NSF (NROES), 2010-2011

Committee Chair, Improving Understanding of Volcanic Eruptions, ERUPT report, 2016-2017

Committee, Planetary Science Decadal Survey, 2020-2021

Member of the Board on Earth Sciences and Resources, 2019-present

Member, Lunar-Orbital Platform-Gateway committee, 2019

Temporary nominating group committee, 2019, 2020, 2021

Arthur Day prize committee, 2019

Cozzarelli Prize committee, 2019, 2020

*US Geological Survey*

Kilauea Science Advisory Committee (K-SAC), 2020-2021

*University and department*:

Graduate advisor, 2003-2008, 2009-2014

Equity advisor, 2009-2015

Faculty advisor, Designated emphasis in Computational Science and Engineering, 2009-2013

NRC review committee representative, 2006-2007

L&S committee on committees, 2004-2005

Berkeley Seismological Lab advisory committee, 2006, 2013

Center for Integrative Planetary Science review committee 2006

Astronomy department review, Senate liaison, 2008

Integrative Biology department review, Senate liaison, 2014

Noyce Prize committee, 2011-2015

Library Committee, Academic Senate, 2014-2015

Library Prize committee, 2017

Committee on Memorial Resolutions, 2015-present

Search committees (CIPS, Seismology, Geochemistry, SSL director, CEE hydrology, Climate Science)

Miller Institute for Basic Research in Science, Executive Committee, 2009-2012, 2013-present, Executive

Director 2010-2012, 2013-2016, Symposium chair 2016-present

Center for Integrative Planetary Science (CIPS), interim director, 2018

Chair, 2018-2021

*Others*

Advisor, Seeds of Science/Roots of Reading program, Lawrence Hall of Science 2006-present

External Review Panel, IFREE 2006

Advisory board, Kavli Institute for Theoretical Physics (KITP), UC Santa Barbara, 2012-2015

Schmidt Science Fellows, review committee, 2018, 2019

**PUBLICATIONS IN PRINT in refereed journals, ORCID 0000-0003-3286-4682**

**students indicated in bold, undergraduates with a \***

#1 Manga, M.\*, and J. Arkani-Hamed (1991) [Remelting mechanisms for shallow source regions of mare basalts](http://seismo.berkeley.edu/~manga/paper19.html), *Physics of the Earth and Planetary Interiors*, vol. 68, 9-31.

#2 Manga, M., H.A. Stone and R.J. O'Connell (1993) [The interaction of plume heads with compositional discontinuities in the Earth's mantle](http://seismo.berkeley.edu/~manga/paper18.html), *Journal of Geophysical Research*, vol. 98, 19,979-19,990.

#3 Manga, M. and H.A. Stone (1993) Interactions between bubbles at low Reynolds numbers, *Physics of Fluids A*, vol. 5, Gallery of Fluid Motions, S3.

#4 Manga, M. and H.A. Stone (1993) [Buoyancy-driven interactions between deformable drops at low Reynolds numbers](http://seismo.berkeley.edu/~manga/paper13.html), *Journal Fluid Mechanics*, vol. 256, 647-683.

#5 Manga, M. and H.A. Stone (1994) [Interactions between bubbles in magmas and lavas: Effects of deformation](http://seismo.berkeley.edu/~manga/paper12.html), *Journal of Volcanology and Geothermal Research*, vol. 63, 269-281.

#6 Manga, M. and H.A. Stone (1995) [Low Reynolds number motion of bubbles, drops and rigid spheres through fluid-fluid interfaces](http://seismo.berkeley.edu/~manga/paper11.html), *Journal Fluid Mechanics*, vol. 287, 279-298.

#7 Manga, M. and R.J. O'Connell (1995) [The tectosphere and postglacial rebound](http://seismo.berkeley.edu/~manga/paper10.html), *Geophysical Research Letters*, vol. 22, 1949-1952.

#8 Manga, M. and H.A. Stone (1995) [Collective hydrodynamics of deformable drops and bubbles in dilute suspensions at low Reynolds numbers](http://seismo.berkeley.edu/~manga/paper9.html), *Journal of Fluid Mechanics*, vol. 300, 231-263.

#9 Li, X., M. Manga, J.N. Nguyen and R. Jeanloz (1996) [Temperature profile in a laser-heated diamond cell with external heating, and implications for the thermal conductivity of (Mg,Fe)SiO3 perovskite](http://seismo.berkeley.edu/~manga/paper16.html), *Geophysical Research Letters*, vol. 23, 3775-3778.

#10 Koch, D.M. and M. Manga (1996) [Neutrally buoyant diapirs: A model for Venus coronae](http://seismo.berkeley.edu/~manga/paper8.html), *Geophysical Research Letters*, vol. 23, 225-228.

#11 Manga, M. and R. Jeanloz (1996) [Vertical Temperature gradients in the laser-heated diamond cell](http://seismo.berkeley.edu/~manga/paper7.html), *Geophysical Research Letters*, vol. 23, 1845-1848.

#12 Manga, M. and R. Jeanloz (1996) [Implications of a metal-bearing chemical boundary layer in D" for mantle dynamics](http://seismo.berkeley.edu/~manga/paper6.html), *Geophysical Research Letters*, vol. 23, 3091-3094.

#13 Manga, M. (1996) [Dynamics of drops in branched tubes](http://seismo.berkeley.edu/~manga/paper5.html), *Journal of Fluid Mechanics*, vol. 315, 105-117.

#14 Manga, M. (1996) [Mixing of heterogeneities in the mantle: Effect of viscosity differences](http://seismo.berkeley.edu/~manga/paper4.html), *Geophysical Research Letters*, vol. 23, 403-406.

#!5 Manga, M. (1996) [Waves of bubbles in magmatic systems](http://seismo.berkeley.edu/~manga/paper3.html), *Journal of Geophysical Research*, vol. 101, 17,457-17,466.

#16 Manga, M. (1996) [Dynamics of drops in cavity flows: Aggregation of high viscosity ratio drops](http://seismo.berkeley.edu/~manga/paper2.html), *Physics of Fluids*, vol. 8, 1732-1737.

#17 Manga, M. (1996) [Hydrology of spring-dominated streams in the Oregon Cascades](http://seismo.berkeley.edu/~manga/paper1.html), *Water Resources Research*, vol. 32, 2435-2439.

#18 Manga, M. and R. Jeanloz (1997) [Thermal conductivity of corundum and periclase, implications for the lower mantle](http://seismo.berkeley.edu/~manga/paper14.html), *Journal of Geophysical Research*, vol. 102, 2999-3008.

#19 Manga, M. (1997) [Interactions between mantle diapirs](http://seismo.berkeley.edu/~manga/paper20.html), *Geophysical Research Letters*, vol. 24, 1871-1974.

#20 Manga, M. (1997) [A model for discharge in spring-dominated streams, and implications for the transmissivity and recharge of Quaternary volcanics in the Oregon Cascades](http://seismo.berkeley.edu/~manga/paper17.html), *Water Resources Research*, vol. 32, 2435-2439.

#21 Manga, M. and R. Jeanloz (1998) [Temperature Distribution in the Laser-Heated Diamond Cell](http://seismo.berkeley.edu/~manga/paper15.html), in *Properties of Earth and Planetary Materials*, edited by Manghnani and Yagi, Geophysical Monograph 101, American Geophysical Union, pp. 17-25.

#22 **Montague, N.L.**, L.H. Kellogg and M. Manga (1998) [High Rayleigh number thermo-chemical models of a dense boundary layer in D''](http://seismo.berkeley.edu/~manga/paper25.html), *Geophysical Research Letters*, vol. 25, 2345-2348.

#23 **Weeraratne, D.\***, and M. Manga (1998) [Transitions in the style of mantle convection at high Rayleigh numbers](http://seismo.berkeley.edu/~manga/paper26.html) , *Earth and Planetary Science Letters*, vol. 160, 563-568.

#24 **Dorsey, C.** and M. Manga (1998) [Spreading rate of low Reynolds number gravity currents on a free-surface](http://seismo.berkeley.edu/~manga/paper23.html), *Physics of Fluids*, vol. 10, 3011-3013.

#25 **Hammer, J.E.**, M. Manga and K.V. Cashman (1998) [Non-equilibrium and unsteady fluid degassing during slow decompression](http://seismo.berkeley.edu/~manga/paper30.html), *Geophysical Research Letters*, vol. 25, 4565-4568.

#26 Manga, M., **J. Castro**, K.V. Cashman, and M. Loewenberg (1998) [Rheology of bubble-bearing magmas: Theoretical results](http://seismo.berkeley.edu/~manga/paper28.html), *Journal of Volcanology and Geothermal Research*, vol. 87, 15-28.

#27 Manga, M. (1998) [Orientation distribution of microlites in obsidian](http://seismo.berkeley.edu/~manga/paper24.html), *Journal of Volcanology and Geothermal Research*, vol. 86, 107-115.

#28 Manga, M. (1998) [Advective heat transport by low temperature discharge in the Oregon Cascades](http://seismo.berkeley.edu/~manga/paper27.html), *Geology*, vol. 26, 799-802.

#29 **Saar, M.O.** and M. Manga (1999) [Permeability of vesicular basalts](http://seismo.berkeley.edu/~manga/paper31.html), *Geophysical Research Letters*, vol. 26, 111-114.

#30 Manga, M. and **D. Weeraratne\*** (1999) [Experimental study of non-Boussinesq Rayleigh-Benard convection at high Rayleigh and Prandtl numbers](http://seismo.berkeley.edu/~manga/paper34.html), *Physics of Fluids*, vol. 11, 2969-2976.

#31 **James, E.R**., M. Manga and T.P. Rose (1999) [CO2 degassing in the Oregon Cascades](http://seismo.berkeley.edu/~manga/paper33.html), *Geology*, vol. 27, 823-826.

#32 Manga, M. (1999) [On the timescales characterizing groundwater discharge at springs](http://seismo.berkeley.edu/~manga/paper32.html), *Journal of Hydrology*, vol. 219, 56-69.

#33 **Stark, J.\*** and M.Manga (2000) [The motion of long bubbles in a network of tubes](http://seismo.berkeley.edu/~manga/paper35.html), *Transport in Porous Media*, vol. 40, 201-218.

#34 Manga, M. and J.W. Kirchner (2000) [Stress partitioning in streams by large woody debris](http://seismo.berkeley.edu/~manga/paper38.html), *Water Resources Research*, vol. 36, 2373-2379.

#35 **James, E.R.**, M. Manga, T.P. Rose and B. Hudson (2000) [The use of temperature and the isotopes of O, H, C, and noble gases to determine the pattern and spatial extent of groundwater flow](http://seismo.berkeley.edu/~manga/paper37.html), *Journal of Hydrology*, vol. 237, 100-112.

#36 Manga, M. (2001) Shaken, not stirred, *Nature*, vol. 410, 1041-1042.

#37 Manga, M. (2001) [Using springs to understand groundwater flow and active geologic processes](http://seismo.berkeley.edu/~manga/paper41.html), *Annual Reviews of Earth and Planetary Sciences*, vol. 29, 203-230.

#38 Manga, M. and M. Loewenberg (2001) [Viscosity of magmas containing highly deformable bubbles](http://seismo.berkeley.edu/~manga/paper36.html), *Journal of Volcanology and Geothermal Research*, vol. 105, 19-24.

#39 **Schaeffer, N.\*** and M. Manga (2001) [Interactions between rising and sinking mantle plumes](http://seismo.berkeley.edu/~manga/paper42.html), *Geophysical Research Letters*, vol. 28, 455-458.

#40 Manga, M., **D. Weeraratne** and S.J.S. Morris (2001) [Boundary-layer thickness in Benard convection of a liquid with a temperature-dependent viscosity](http://seismo.berkeley.edu/~manga/paper39.html), *Physics of Fluids*, vol. 13, 802-805.

#41 Manga, M. (2001) [Constraints on the origin of coseismic and postseismic streamflow changes inferred from recession-flow analysis](http://seismo.berkeley.edu/~manga/paper44.html), *Geophysical Research Letters*, vol. 28, 2133-2136.

#42 **Saar, M.O.**, M. Manga, K.V. Cashman and **S. Fremouw**\* (2001) [Numerical simulations of the onset of yield strength in crystal-melt suspensions](http://seismo.berkeley.edu/~manga/paper45.html), *Earth and Planetary Science Letters*, vol. 187, 367-379.

#43 **Hoover, S.R**., K.V. Cashman and M. Manga (2001) [The yield strength of subliquidus basalts -- Experimental results](http://seismo.berkeley.edu/~manga/paper46.html), *Journal of Volcanology and Geothermal Research*, vol. 107, 1-18.

#44 **Rust, A.C.**, and M. Manga (2002) [The effects of bubble deformation on the viscosity of suspensions](http://seismo.berkeley.edu/~manga/paper50.html), *Journal of nonNewtonian Fluid Mechanics*, vol. 104, 53-63.

#45 Nimmo, F. and M. Manga (2002) Causes, characteristics and consequences of convective diapirism on Europa, *Geophysical Research Letters*, vol. 29, paper number 10.1029/2002GL015754

#46 Jellinek, A.M., and M. Manga (2002) The influence of a chemical boundary layer on the fixity and lifetime of mantle plumes, *Nature*, vol. 418, 760-763.

#47 **Gonnermann, H.M.**, M. Manga and A.M. Jellinek (2002) [Dynamics and longevity of an initially stratified mantle,](http://seismo.berkeley.edu/~manga/paper53.html) *Geophysical Research Letters*, vol. 29, paper number 10.1029/2002GL01485.

#48 **Castro, J.M.**, M. Manga and K.V. Cashman (2002) The emplacement of Obsidian Dome, California: Insights from measurements of crystal orientation, *Earth and Planetary Science Letters*, vol. 199, 211-226.

#49 **Rust, A.C.** & M. Manga (2002) [Orientation and deformation of bubbles in shear flows](http://seismo.berkeley.edu/~manga/paper52.html), *Journal of Colloid and Interface Science*, vol. 249, 476-480.

#50 **Saar, M.O.** and M. Manga (2002) [Continuum percolation for randomly oriented soft-core prisms,](http://seismo.berkeley.edu/~manga/paper51.html) *Physical Review E*, vol. 65, paper number 056131.

#51 Jellinek, A.M., A. Lenardic and M. Manga (2002) [The influence of interior mantle temperature on the structure of plumes: Heads for Venus, Tails for the Earth,](http://seismo.berkeley.edu/~manga/paper56.html) *Geophysical Research Letters*, vol. 29, paper number 10.1029/2001GL014624.

#52 **Saar, M.O.**, and M. Manga (2003) Seismicity induced by seasonal groundwater recharge at Mt. Hood, Oregon, *Earth and Planetary Science Letters*, vol. 214, 605-618.

#53 Brodsky, E.E., E. Roeloffs, D. Woodcock, I. Gall, M. Manga (2003) A mechanism for sustained ground water pressure changes induced by distant earthquakes, *Journal of Geophysical Research*, vol. 108, doi:10.1029/2002JB002321.

#54 Gannett, M., M. Manga, & K.E. Lite (2003) [Groundwater hydrology of the upper Deschutes Basin and its influence on streamflow,](http://seismo.berkeley.edu/~manga/paper55.html) in *A peculiar river: Geology, geomorphology, and hydrology of the Deschutes River, Oregon*, J.E. O'Conner and G.E. Grant editors, Water Science and Application Series, volume 7, American Geophysical Union, pp. 31-50.

#55 **Castro, J.M.**, K.V. Cashman, and M. Manga (2003) A technique for measuring 3-D crystal-size distributions of prismatic microlites in obsidian, *American Mineralogist*, vol. 88, 1230-1240.

#56 Cagnoli, B. and M. Manga (2003) Pumice-pumice collisions and the effect of impact angle, *Geophysical Research Letters*, vol. 30, paper number 10.1029/2003GL017421

#57 Montgomery, D.R., and M. Manga (2003) Streamflow and water well responses to earthquakes, *Science*, vol. 300, 2047-2049.

#58 Manga, M., E.E. Brodsky, and **M. Boone**\* (2003) Response of streamflow to multiple earthquakes and implications for the origin of postseismic discharge changes, *Geophysical Research Letters*, vol. 30, doi:10.1029/2002GL016618.

#59 Hunt, A.G., and M. Manga (2003) Effects of bubbles on the hydraulic conductivity of porous materials -- Theoretical results*, Transport in Porous Media,* vol. 52, 51-65.

#60 **Gonnermann, H.**, and M. Manga (2003) Explosive volcanism may not be an inevitable consequence of magma fragmentation, *Nature*, vol. 426, 432-435.

#61 Mader, H.M., M. Manga, and T. Koyaguchi (2004) The role of laboratory experiments in volcanology, *Journal of Volcanology and Geothermal Research,* vol. 129, 1-5.

#62 **Rust, A.C.**, M. Manga, and K.V. Cashman (2003) [Determining flow type, shear rate and shear stress in magmas from bubbles shapes and orientations](http://seismo.berkeley.edu/~manga/paper57.html), *Journal of Volcanology and Geothermal Research*, vol. 122, 111-132.

#63 **Hygelund\*, B.**, and M. Manga (2003) Field measurements of drag coefficients for large woody debris, *Geomorphology*, vol. 51, 175-185.

#64 Manga, M. (2004) Martian floods at Cerberus Fossae can be produced by groundwater discharge, *Geophysical Research Letters*, vol. 31, L02702, doi:10.1029/2003GL018958.

#65 **Wenzel, M.J.**, M. Manga, and A.M. Jellinek (2004) Tharsis: A consequence of Mars' dichotomy and layered mantle, *Geophysical Research Letters* vol. 31, L04702, doi:10.1029/2003GL019306.

#66 **Saar, M.O.** and M. Manga (2004) Depth dependence of permeability in the Oregon Cascades inferred from hydrogeologic, thermal, seismic, and magmatic modeling constraints, *Journal of Geophysical Research,* vol. 109, B4, B04204, 10.1029/2003JB002855.

#67 Manga, M. and J.W. Kirchner (2004) Interpreting the temperature of water at cold springs and the importance of gravitational potential energy, submitted to *Water Resources Research*, vol. 40, W05110 10.1029/2003WR002905.

#68 Wang, C.-Y., M. Manga, D. Dreger, and **A. Wong\*** (2004) Streamflow increases due to the rupturing of hydrothermal reservoir -- evidence from the 2003 San Simeon, California, Earthquake, *Geophysical Research Letters*, vol. 31, L10502, doi:10.1029/2004GL020124.

#69 **Beebee, R.**, and M. Manga (2004) Variation in the relationship between snowmelt runoff in Oregon and ENSO and PDO, *Journal of the American Water Resources Association*, vol. 40, 1011-1024.

#70 Wang, C.-Y., C.-H. Wang, and M. Manga (2004) Coseismic release of water from mountains - evidence from the 1999 (Mw = 7.5) Chi-Chi, Taiwan earthquake, *Geology*, vol. 32, 769-772.

#71 **Gonnermann, H.M.**, A.M. Jellinek, M.A. Richards, and M. Manga (2004) Modulation of mantle plumes and heat flow at the core mantle boundary by plate-scale flow: results from laboratory experiments, *Earth and Planetary Science Letters*, vol. 226, 53-67.

#72 Cagnoli, B. and M. Manga (2004) Granular mass flows and Coulomb's friction in shear cell experiments: Implications for geophysical flows, *Journal of Geophysical Research*, vol. 109, F04005, 10.1029/2004JF000177

#73 Jellinek, A.M. and M. Manga (2004) Links between long-lived hotspots, mantle plumes, D", and plate tectonics, *Reviews of Geophysics*, vol. 42, RG3002 10.1029/2003RG000144.

#74 Jellinek, A.M., M. Manga, and **M.O. Saar** (2004) Did melting glaciers cause volcanic eruptions in eastern California? Probing the mechanics of dike formation, *Journal of Geophysical Research*, vol. 109, B09206, 10.1029/2004JB002978.

#75 Manga, M. and **A. Sinton\*** (2004) Formation of bands, ridges and grooves on Europa by cyclic deformation: Insights from analogue wax experiments, *Journal of Geophysical Research*, vol. 109, E09001, 10.1029/2004JE002249.

#76 **Saar, M.O.**, M.C. Castro, C.M. Hall, M. Manga, and T.P. Rose (2005) Quantifying magmatic, crustal, and atmospheric helium contributions to volcanic aquifers using all stable noble gases: Implications for magmatism and groundwater flow, *G-cubed*, vol. 6, Q03008 DOI 10.1029/2004GC000828

#77 Wang, C.-Y., M. Manga, and **A. Wong** (2005) Floods on Mars released from groundwater by impact, *Icarus*, vol. 175, 551-555.

#78 Cagnoli, B. and M. Manga (2005) Vertical segregation in granular mass flows: A shear cell study *Geophysical Research Letters*, vol. 32, L10402 10.1029/2005GL023165.

#79 Llewellin, E. and M. Manga (2005) Bubble suspension rheology and implications for conduit flow, *Journal of Volcanology and Geothermal Research*, vol. 143, 205-217.

#80 Lenardic, A, L.-N. Moresi, A.M. Jellinek, and M. Manga (2005) Continental insulation, mantle cooling and the surface area of oceans and continents, *Earth and Planetary Science Letters*, vol. 234, 317-333.

#81 Rost, S., E.J. Garnero, Q. Williams and M. Manga (2005) Seismological constraints on a possible plume root at the core, *Nature*, vol. 435, 666-669.

#82 **Gonnermann, H.M.**, and M. Manga (2005) Flow banding in obsidian: A record of evolving textural heterogeneity during magma deformation, *Earth and Planetary Science Letters*, vol. 236, 135-147.

#83 Namiki, A., and M. Manga (2005) Response of a bubble bearing viscoelastic fluid to rapid decompression: Implications for explosive volcanic eruptions, *Earth and Planetary Science Letters*, vol. 236, 269-284.

#84 **Gonnermann, H.M.**, and M. Manga (2005) Nonequilibrium magma degassing: Results from modeling of the ca. 1340 A.D. eruption of Mono Craters, California, *Earth and Planetary Science Letters*, vol. 238, 1-16.

#85 Manga, M. (2005) Deformation of flow bands by bubbles and crystals, *Lava flow dynamics and kinematics*, GSA Special Paper 396, 47-54.

#86 Castro, J., M. Manga, and M. Martin (2005) Vesiculation rates of obsidian domes inferred from H2O concentration profiles, *Geophysical Research Letters*, vol. 32, L21307, doi:10.1029/2005GL024029.

#87 Wang, C.-W., **A. Wong**, D.S. Dreger, and M. Manga (2006) Liquefaction limit during earthquakes and undergrround explosions – implication for ground-motion attenuation, *Bulletin of the Seismological Society of America*, vol. 96, 355-363.

#88 **Soukhovitskaya\*, V.** and M. Manga (2006) Martian landslides in Valles Marineris: Wet of dry? *Icarus*, vol. 180, 348-352.

#89 **Lillis, R.J.**, M. Manga, D.L. Mitchell, R.P. Lin, M.H. Acuna (2006) Unusual magnetic signature of Hadriaca Patera volcano: implications for early Mars, *Geophysical Research Letters*, vol. 33, L03202, doi:10.1029/2005GL024905.

#90 **Matsuyama, I.**, J.X. Mitrovica, **J.T. Perron**, M. Manga and M.A. Richards (2006) Rotational stability of dynamic planets with lithospheres, *Journal of Geophysical Research*, vol. 111, E02003, doi:10.1029/2005JE002447.

#91 Manga, M., and E.E. Brodsky (2006) Seismic triggering of eruptions in the far field: volcanoes and geysers, *Annual Reviews of Earth and Planetary Sciences*, vol. 34, 263-291.

#92 **Karlstrom\*, L.**, and M. Manga (2006) Origins of zigzag rift patterns on lava lakes, *Journal of Volcanology and Geothermal Reseach*, vol. 154, 317-324*.*

#93 Wang, C.-Y., M. Manga, and J. Hanna (2006) Can freezing cause floods on Mars? *Geophysical Research Letters*, vol. 33, L20202, doi:10.1029/2006GL027471.

#94 Namiki, A., and M. Manga (2006) Influence of decompression rate on the expansion velocity and expansion style of bubbly fluids, *Journal of Geophysical Research,* vol. 111, B11028, DOI:10.1029/2005JB004132.

#95 Cammarano, F., **V. Lekic**, M. Manga, M. Panning and B. Romanowicz (2006) Long period seismology on Europa: I. Physically consistent interior models, *Journal of Geophysical Research,* vol. 111, E12009, doi:10.1029/2006JE002710.

#96 Panning, M., **V. Lekic**, M. Manga, F. Cammarano, and B. Romanowicz (2006) Long period seismology on Europa: II. Predicted seismic response*, Journal of Geophysical Research,* vol. 111, E12008, doi:10.1029/2006JE002712.

#97 **Gonnermann, H.** and M. Manga (2007) The fluid mechanics inside a volcano, *Annual Reviews of Fluid Mechanics*, vol. 39, 321-356.

#98 Trigila, R., M. Battaglia, and M. Manga (2007) An experimental facility for investigating hydromagmatic eruptions at high-pressure and high-temperature with application to the importance of magma porosity for magma-water interaction, *Bulletin of Volcanology*, vol. 69, 365-372.

#99 Manga, M., and C.-Y. Wang (2007) Pressurized oceans and the eruption of liquid water on Europa and Enceladus, *Geophysical Research Letters,* vol. 34, L07202, doi:10.1029/2007GL029297.

#100 Manga, M. (2007) Did an earthquake trigger the May 2006 eruption of the Lusi mud volcano? *EOS,* vol. 88, 201*.*

#101 **Perron, J.T.,** J.X. Mitrovica, M. Manga, I. Matsuyama and M.A. Richards (2007) Evidence of an ancient martian ocean in the topography of deformed shorelines. *Nature*, vol. 447, 840-843.

#102 Ogawa, Y., and M. Manga (2007) Thermal demagnetization of Martian upper crust by magma intrusion, *Geophysical Research Letters*, vol. 34, L16302, doi:10.1029/2007GL030565.

#103 Manga, M., and C.-Y. Wang (2007) Earthquake hydrology, in *Treatise on Geophysics*, volume 4, 293-320.

#104 Dufek, J., M. Manga, **M. Staedter\*** (2007) Littoral blasts: Pumice-water heat transfer and the conditions for steam explosions when pyroclastic flows enter the ocean, *Journal of Geophysical Research,* vol. 112, V11201, doi:10.1029/2006JB004910.

#105 Namiki, A., and M. Manga (2008) Transitions between fragmentation and permeable outgassing of low viscosity magmas, *Journal of Volcanology and Geothermal Research*, vol. 169, 48-60.

#106 Lillis, R. J., Frey, H. V., Manga, M., Mitchell, D. L., Lin, R. P., Acuña, M. H. and S. W. Bougher (2008) An improved crustal magnetic field map of Mars from electron reflectometry: Highland volcano magmatic history and the end of the Martian dynamo*, Icarus,* vol. 194, 575-596.

#107 **Daradich, A**., J.X. Mitrovica, I. Matsuyama, **J.T. Perron**, M. Manga and M.A. Richards (2008) Rotational stability and figure of Mars, *Icarus*, vol. 194, 463-475.

#108 Sumita, I., and M. Manga (2008) Suspension rheology under oscillatory shear and its geophysical implications, *Earth and Planetary Science Letters,* vol. 269, 467-476.

#109 **Lamb, M.P**., W.E. Dietrich, S.M. Aciego, D.J. DePaolo, and M. Manga (2008) Formation of Box Canyon, Idaho, by megaflood: Implications for seepage erosion on Earth and Mars, *Science*, vol. 320, 1067-1070.

#110 **Rowland, J.C.**, M. Manga, T.P. Rose (2008) The influence of poorly interconnected fault zone flow paths on spring geochemistry, *Geofluids*, vol. 8, 93-101.

#111 Lillis, R.J., H.V. Frey, and M. Manga (2008) Rapid decrease in Martian crustal magnetization in the Noachian era: Implications for the dynamo and climate of early Mars, *Geophysical Research Letters,* vol. 35, L14203, doi:10.1029/2008GL034338.

#112 Davies, R.J., **M. Brumm**, M. Manga, R. Rubiandini, and R. Swarbrick (2008) The East Java mud volcano (2006-present): An earthquake or drilling trigger?  *Earth and Planetary Science Letters*, vol. 272, 627-638.

*A picture containing text, vector graphics

Description automatically generated*

#113 **Huber, C.**, **A. Parmigiani**, B. Chopard, M. Manga and O. Bachmann (2008) Lattice Boltzmann model for melting with natural convection, *International Journal of Heat and Fluid Flow,* vol. 29, 1469-1480*.*

#114 Dufek, J., and M. Manga (2008) The in-situ generation of ash in pyroclastic flows, *Journal of Geophysical Research*, vol. 113, B09207, doi:10.1029/2007JB005555.

#115 **Watkins, J**., M. Manga, **C. Huber**, and M. Martin (2009) Diffusion-controlled spherulite growth in obsidian inferred from H2O concentration profiles, *Contributions in Mineralogy and Petrology*, vol. 157, 163-172.

#116 **Rudolph, M.L**., and M. Manga (2009) Fracture penetration in planetary ice shells, *Icarus,* vol. 199, 536-541.

#117 **Huber, C**., **J. Watkins**, and M. Manga (2009) Steady shape of a miscible bubble rising below an inclined wall at low Reynolds numbers, *European Journal of Mechanics, B Fluids*, vol. 28, 405-410.

#118 Roberts, J.H., R.J. Lillis, and M. Manga (2009) Giant impacts and the cessation of the Martian dynamo, *Journal of Geophysical Research*, vol. 114, E04009, doi:10.1029/2008JE003287.

#119 **Kite, E.S.**, I. Matsuyama, M. Manga, J.T. Perron, and J.X. Mitrovica (2009) True polar wander driven by late-stage volcanism and the distribution of paleopolar deposits on Mars, *Earth and Planetary Science Letters*, vol. 280, 254-267.

#120 **Huber, C**., O. Bachmann and M. Manga (2009) Homogenization processes in silicic magma chambers by stirring and mushification (latent heat buffering), *Earth and Planetary Science Letters,* vol. 283, 38-47*.*

#121**Kite, E.S**., M. Manga and E. Gaidos (2009) Geodynamics and rate of volcanism on massive Earth-like planets, *Astrophysical Journal,* vol. 700, 1732-1749.

#122 Lillis, R.J., J. Dufek, J.E. Bleacher, and M. Manga (2009) Demagnetization of crust by magmatic intrusion near the Arsia Mons volcano: Magnetic and thermal implications for the development of the Tharsis province, Mars, *Journal of Volcanology and Geothermal Research*, vol. 185, 123-138.

#123 Manga, M., and J.C. Rowland (2009) Response of Alum Rock springs to the October 30, 2007 earthquake and implications for the origin of increased discharge after earthquakes, *Geofluids,* vol. 9, 237-250.

#124 **Brumm, M**., C.-Y. Wang, and M. Manga (2009) Spring temperatures in the Sagehen Basin, Sierra Nevada, California: Implications for heat flow and ground water circulation, *Geofluids,* vol. 9, 195-207.

#125 **Karlstrom, L**., J. Dufek and M. Manga (2009) Organization of volcanic plumbing through magmatic lensing by magma chambers and volcanic loads, *Journal of Geophysical Research*, vol. 114, B10204, doi:10.1029/2009JB006339.

#126 Manga, M., **M. Brumm** and **M.L. Rudolph** (2009) Earthquake triggering of mud volcanoes, *Journal of Marine and Petroleum Geology*, vol. 26, 1785-1798*.*

#127 Liu, W. and M. Manga (2009) Changes in permeability caused by dynamic stresses in fractured sandstone, *Geophysical Research Letters*, vol. 36, L20307, doi:10.1029/2009GL039852.

#128 Dufek, J., **J. Wexler\***, and M. Manga (2009) The transport capacity of pyroclastic density currents: experiments and models of substrate-flow interaction, *Journal of Geophysical Research*, vol. 114, B11203, doi:10.1029/2008JB006216.

#129 Nimmo, F.N., and M. Manga (2009) Geodynamics of Europa’s ice shell, in *Europa,* Pappalardo et al., editors,Univ Arizona Press, 382-404.

#130 **Karlstrom, L**., J. Dufek, and M. Manga (2010) Magma chamber stability in arc and continental crust, *Journal of Volcanology and Geothermal Research*,vol. 190, 249-270.

#131 Halekas, J., R.Lillis, R.P. Lin, M. Manga, M.E. Purucker, and R. Carley (2010) How strong are lunar crustal magnetic fields at the surface? Considerations from a reexamination of the electron reflectometry technique, *Journal of Geophysical Research,* vol. 115, E03006, doi:10.1029/2009JE003516*.*

#132 Manga, M. (2010) Low-viscosity mantle blobs are sampled preferentially at regions of surface divergence and stirred rapidly into the mantle, *Physics of the Earth and Planetary Interiors,* vol. 180, 104-107.

#133 **Huber, C**., O. Bachmann, and M. Manga (2010) Two competing effects of volatiles on heat transfer in crystal-rich magmas: thermal insulation versus defrosting, *Journal of Petrology,* vol. 51, 847-867.

#134 Wang, C.-Y., and M. Manga (2010) Hydrologic responses to earthquakes – a general metric, *Geofluids*, vol. 10, 206-216. Also reprinted in *Frontiers in Geofluids*, edited by Yardley, Manning and Garven, pages 330-348.

#135 Gaidos, E., M. Manga, J. Hernlund, and C.P. Conrad (2010) Thermodynamic limits on magnetodynamos in rocky exoplanets, *Astrophysical Journal*, vol. 718, 596-609.

#136 **Stroberg\*, W**., M. Manga, and J. Dufek (2010) Heat transfer coefficients of natural volcanic clasts, *Journal of Volcanology and Geothermal Research*, vol. 94, 214-219.

#137 Lillis, R.J., M. Purucker, J.S. Halekas, **K.L. Louzada**, S.T. Stewart-Mukhopadhyay, M Manga, and H. Frey (2010) Study of impact demagnetization at Mars using Monte Carlo modeling and multiple altitude data, *Journal of Geophysical Research,* vol. 115, E07007, doi:10.1029/2009JE003556.

#138 **Huber, C**., B. Chopard, and M. Manga (2010) A lattice Boltzmann model for coupled diffusion, *Journal of Computational Physics*,vol. 229, 7956-7976.

#139 Davies, R.J., M. Manga, M. Tingay, S. Lusianga, and R. Swarbrick (2010), Discussion: Sawalo et al. (2009) The LUSI mud volcano controversy: Was it caused by drilling, *Marine and Petroleum Geology*, vol. 27, 1651-1657.

#140 **Rhoden, A.R**., B. Militzer, **E.M. Huff**, T.A. Huford, M. Manga and M.A. Richards (2010) Constraints on Europa’s rotational dynamics from modeling of tidally-driven fractures, *Icarus*,vol. 210, 770-784.

#141 Matsuyama, I., and M. Manga (2010) Mars without the equilibrium rotational figure, Tharsis, and the remnant rotational figure, *Journal of Geophysical Research*, vol. 115, E12020, doi:10.1029/2010JE003686.

#142 **Rudolph, M.L**., and M. Manga (2010) Mud volcano response to the April 4, 2010 El Mayor-Cucapah earthquake, *Journal of Geophysical Research*, vol. 115, B12211, doi:10.1029/2010JB007737.

#143 **Rhoden, A.R**., T.A. Hurford, and M. Manga (2011) Strike-slip fault patterns on Europa: Obliquity or polar wander? *Icarus*, vol. 211, 636-647.

#144 Manga, M., **A. Patel**, and J. Dufek (2011) Rounding of pumice clasts during transport: field measurements and laboratory studies, *Bulletin of Volcanology*, vol. 73, 321-333.

#145 Davies, R., M. Manga, M. Tingay, and R. Swarbrick (2011) Fluid transport properties and estimation of overpressure at the Lusi mud volcano, East Java Basin (Tanikawa et al., 2010), *Engineering Geology*, vol. 121, 97-99.

#146 **Kite, E.S**., T.I. Michaels, S. Rakfin, M. Manga, and W.E. Dietrich (2011) Localized precipitation and runoff on Mars, *Journal of Geophysical Research*. vol. 116, E07002, doi:10.1029/2010JE003783.

#147 **Rudolph, M.L**., **L. Karlstrom**, and M. Manga (2011) A prediction of the longevity of the Lusi mud volcano, Indonesia, *Earth and Planetary Science Letters*, vol. 308, 124-130.

#148 **Geballe, Z.M**., C.-Y. Wang, and M. Manga (2011) A permeability-change model for water level changes triggered by teleseismic waves, *Geofluids*, vol. 11, 302-308. (selected by the editors as best paper of 2011)

#149 Degruyter, W., and M. Manga (2011) Cryoclastic origin of particles on the surface of Enceladus, *Geophysical Research Letters*, vol. 38, L16201, doi:10.1029/2011GL048235.

#150 **Kite, E.S**., S. Rafkin, T. Michaels, W.E. Dietrich, and M. Manga (2011) Chaos terrain, storms and past climate on Mars, *Journal of Geophysical Research*, vol. 38, E10002, doi:10.1029/2010JE003792.

#151 Andrews, B.J., and M. Manga (2011) Effects of topography on pyroclastic density current runout and formation of coignimbrites, *Geology*, vol. 39, 1099-1102.

#152 **Kite, E.S**., E. Gaidos, and M. Manga (2011) Climate instability on tidally locked exoplanets, *Astrophysical Journa*l, vol. 743, 41-53.

#153 Manga, M., **A. Patel**, J. Dufek and **E.S. Kite** (2012) Wet surface and dense atmosphere on early Mars suggested by the bomb sag at Home Plate, Mars, *Geophysical Research Letters*, vol. 39, L01202, doi:10.1029/2011GL050192.

#154 **Rhoden, A.R**., **G. Wurman**, **E.M. Huff**, M. Manga and T.A. Hurford (2012) Shell tectonics: A mechanical model for strike-slip displacement on Europa, *Icarus*, vol. 218, 2987-307.

#155 Wang, C.-Y., M. Manga, C.-H. Wang, and C.-Y. Chen (2012) Earthquakes and subsurface temperature changes near an active mountain front, *Geology*, vol. 40, 119-122.

#156 Manga, M., I. Beresnev, E.E. Brodsky, J.E. Elkhoury, D. Elsworth, S. Ingebritsen, D.C. Mays and C.-Y. Wang (2012) Changes in permeability by transient stresses: Field observations, experiments and mechanisms,  *Reviews of Geophysics,* vol. 50, RG2004, doi:10.1029/2011RG000382.

#157 Andrews, B.J., and M. Manga, (2012) Experimental study of turbulence, sedimentation, and coignimbrite mass partitioning in dilute pyroclastic density currents, *Journal of Volcanology and Geothermal Research*, vol. 225-226, 30-44.

#158 **Karlstrom, L**., **M.L. Rudolph**, and M. Manga (2012) Caldera size modulated by the yield stress within a crystal rich magma reservoir, *Nature Geoscience*, vol. 5, 402-405.

#159 Cordonnier, B., L. Caricchi, **M. Pistone**, J. Castro, K.-U. Hess, S. Gottscahaller, M. Manga, D.B. Dingwell (2012) The viscous-brittle transition of crystal-bearing silicic melt: Direct observation of magma rupture and healing, *Geology*, vol. 40, 611-614.

#160 **Watkins, J.M**., M. Manga and D.J. DePaolo (2012) Bubble geobarometry: A record of pressure changes, degassing, and regassing at Mono Craters, California, *Geology*, vol. 40, 699-702.

#161 **Rudolph, M**., and M. Manga (2012) Frequency dependence of mud volcano response to earthquakes, *Geophysical Research Letters*, vol. 39, L14303, doi:10.1029/2012GL052383.

#162 Degruyter, W., O. Bachmann, A. Burgisser, and M. Manga (2012) The effects of outgassing on the transition between effusive and explosive silicic eruptions, *Earth and Planetary Science Letters,* vol. 349-350, 161-170.

#163 Dufek, J., M. Manga and A. Patel (2012) Granular disruption during explosive volcanic eruptions, *Nature Geoscience,* vol. 5, 561-564*.*

#164 Manga, M., M. Hornbach and the rest of the Leg 340 Science Party (2012) Heat flow in the Lesser Antilles island arc and adjacent back arc Grenada basin, *Geochemistry, Geophysics, Geosystems*, vol. 13, B08007, doi:10.1029/2012GC004260.

#165 Cox, S.C., H.J. Rutter, A. Sims, M. Manga, J.J. Weir, T. Ezzy, P.A. White, T.W. Horton and D. Scott (2012) Hydrological effects of the Darfield (Canterbury) Mw 7.1 earthquake, 4 September 2010, New Zealand, *New Zealand Journal of Geology and Geophysics*, vol. 55, 231-247. (New Zealand Geophysics Prize for the “most meritorious contribution to New Zealand geophysics published in 2010-2012”)

#166 **Rudolph, M.L**., and M. Manga (2012) Effects of anisotropic viscosity and texture development of convection in Ice Ih mantles, *Journal of Geophysical Research*, vol. 117, E11003, doi:10.1029/2012JE004166.

#167 Carey, R.J., M. Manga, W. Degruyter, D. Swanson, B. Houghton, T. Orr, and M. Patrick (2012) External triggered renewed bubble nucleation in basaltic magma: The 12 October 2008 eruption at Halema`uma`u Overlook vent, Kilauea, Hawai`i, USA, *Journal of Geophysical Research*, vol. 117, B11202, doi:10.1029/2012JB009496.

#168 Manga, M., and M. Bonini (2012) Large historical eruptions at subaerial mud volcanoes, Italy, *Natural Hazards and Earth System Science*, vol. 12, 3377-3386.

#169 **Rudolph, M.L**., M. Manga, S. Hurwitz, M. Johnston, **L. Karlstrom**, and C.-Y. Wang (2012) Mechanics of Old Faithful Geysers, Calistoga, *Geophysical Research Letters*, vol. 39, L24308, doi:10.1029/2012GL054012.

#170 **Kite, E.S**., I. Halevy, M.A. Kahre, M.J. Wolff, and M. Manga (2013) Seasonal melting and the formation of sedimentary rocks on Mars, with predictions for the Gale Crater mound, *Icarus*, vol. 223, 181-210.

#171 Carey, R.J., M. Manga, W. Degruyter, H. Gonnermann, D. Swanson, B. Houghton, T. Orr, and M. Patrick (2013) Convection in a volcanic conduit recorded by bubbles, *Geology*, vol. 41, 395-398.

#172 Gonnermann, H.M., and M. Manga (2013) Magma ascent in the volcanic conduit, *Modeling volcanic processes: The physics and mathematics of volcanism*, edited by S.A. Fagents, T.K.P. Gregg, and R.C. Lopez, Cambridge University Press, pages 55-84.

#173 **Rudolph, M.L**., M. Shirzaei, M. Manga, and Y. Fukushima (2013) Evolution and future of the Lusi mud eruption inferred from ground deformation, *Geophysical Research Letters*, vol. 40, 1089-1092, doi:10.1002/grl.50189.

#174 Patel, A., M. Manga, R.J. Carey and W. Degruyter (2013) Effects of thermal quenching on mechanical properties of pyroclasts, *Journal of Volcanology and Geothermal Research*, vol. 258, 24-30.

#175 Lillis, R.J., S. Robbins, M. Manga, J.S. Halekas, and H.V. Frey (2013) Time history of the Martian dynamo from crater magnetic field analysis, *Journal of Geophysical Research*, vol. 118, 1488-1511, doi:10.1002/jgre.20105.

#176 Hayes, A.G., R.D. Lorenz, M.A. Donelan, M. Manga, T. Schneider, M.P. Lamb, W.W. Fischer, J.M. Mitchell, J.I. Lunine, S.D. Graves, H.L. Tolman, P. Encrenaz, O. Aharonson and the Cassini RADAR Team (2013) Wind driven capillary waves on Titan’s lakes: Hard to detect or non-existent? *Icarus,* vol. 225, 403-412.

#177 Wang, C.-Y., L.-P. Wang, M. Manga, C.-H. Wang and C.-H. Chen (2013) Basin-scale transport of heat and fluid induced by earthquakes, *Geophysical Research Letters*, vol. 40, 3893-3897, doi:10.1002/grl.50738.

#178 **Karlstrom, L**., S. Hurwitz, R. Sohn, J. Vandemeulebrouck, F. Murphy, **M.L. Rudolph**, M. Johnston, M. Manga, and R.B. McCleskey (2013) Eruptions at Lone Star geyser, Yellowstone National Park, USA, Part 1: Energetics and eruptions dynamics, *Journal of Geophysical Research*, vol. 118, 4048-4062, doi:10.1002/jgrb.50251.

#179 Shteinberg, A.S., M. Manga, and E. Korolev (2013) Measuring pressure in the source region for geysers, Geyser Valley, Kamchatka, *Journal of Volcanology and Geothermal Research*, vol. 264, 12-16.

#180 Lillis, R., S. Stewart and M. Manga (2013) Demagnetization by basin-forming impacts on early Mars: contributions from shock, heat and excavation, *Journal of Geophysical Research*, vol. 118, 1045-1062, doi:10.1002/jgre.20085.

#181 **Karlstrom, L.**, **P. Gajjar\***, and M. Manga (2013) Meander formation in supraglacial streams, *Journal of Geophysical Research*: *Earth Surface*, vol. 118, 1897-1907, doi:10.1002/jgrf.20135.

#182 Andrews, B.J., and M. Manga (2014) Thermal and rheological controls on the formation of mafic enclaves or banded pumice, *Contributions in Mineralogy and Petrology*, vol. 167, doi 10.1007/s00410-013-0961-7.

#183 **Lafuerza, S**., A. Le Friant, M. Manga, G. Boudon, B. Villemant, N. Stroncik, B. Voight, M. Hornbach, O. Ishizuka, and Expedition 340 Science Party (2014) Geomechanical characterization of submarine volcano-flank sediments, Martinique, Lesser Antilles arc, in Krastel et al., editors, Submarine Mass Movements and Their Consequences, *Advances in Natural and Technological Hazards Research*, vol. 37, 73-81, doi 10.1007/978-3-319-00972-8\_7.

#184 **Culha, C**\*., A. Hayes, M. Manga, and **A. Thomas** (2014) Double ridges on Europa accommodate some of the missing surface contraction, *Journal of Geophysical Research*, vol. 119, 395-403, doi: 10.1002/2013JE004526.

#185 Hurwitz, S., R.A. Sohn, K. Lutrell, and M. Manga (2014) Triggering and modulation of geyser eruptions in Yellowstone National Park by earthquakes, Earth tides, and weather, *Journal of Geophysical Research*, vol. 119, 1718-1737, doi: 10.1002/2013JB010803. Highlighted in *EOS*, vol. 95, p. 180.

#186 **Shi, Z**., G. Wang, C.-Y. Wang, M. Manga, and C. Liu (2014) Comparison of hydrological responses to the Wenchuan and Lushan earthquakes, *Earth and Planetary Science Letters*, vol. 391, 193-200.

#187 Carlson, R.W., E. Garnero, T.M. Harrison, J. Li, M. Manga, W.F. McDonough, S. Mukhopadhyay, B. Romanowicz, D. Rubie, Q. Williams, and S. Zhong (2014) How did early Earth become our modern world? *Annual Reviews of Earth and Planetary Science*, vol. 42, 151-178.

#188 Michaut, C., and M. Manga (2014) Domes, pits and small chaos on Europa produced by water sills, *Journal of Geophysical Research*, vol. 119, 550-573, doi: 10.1002/2013JE004558.

#189 **Befus, K.S**., **R.W. Zinke\***, **J.S. Jordan\***, M. Manga, and J.E. Gardner (2014) Pre-eruptive storage conditions and eruption dynamics of a small rhyolite dome: Douglas Knob, Yellowstone volcanic field, USA, *Bulletin of Volcanology*, vol. 76, doi 10.1007/s00445-014-0808-8.

#190 **Karlstrom, L**., A**. Zok**\*, and M. Manga (2014) Near surface permeability in a supraglacial drainage basin on the Llewellyn Glacier, Juneau Icefield, British Columbia, *Cryosphere*, vol. 8, 537-536.

#191 Karlstrom, L., C.-T. A Lee, and M. Manga (2014) The role of magmatically driven lithospheric thickening on arc front migration, *G-cubed*, vol. 15, 2655-2675, doi:10.1002/2014GC005355.

#192 Namiki, A., **C. Munoz-Saez**, and M. Manga (2014) El Cobreloa: A geyser with two distinct eruption styles, *Journal of Geophysical Research*, vol. 119, 6229-6248, doi:10.1002/2014JB011009.

#193 Wall-Palmer, D., and 34 others (2014) Late Pleistocene stratigraphy of IODP Site U1396 and compiled chronology offshore of south and south west Montserrat, Lesser Antilles, *G-cubed*, vol. 15, 3000-3020, doi:10.1002/2014GV005402.

#194 **Adelstein, E**.\*, **A. Tran\***, **C. Munoz-Saez**, A. Shteinberg, and M. Manga (2014) Geyser preplay and eruption in a laboratory model with a bubble trap, *Journal of Volcanology and Geothermal Research*, vol. 285, 129-135.

#195 **Birch, S.P.D**.\*, M. Manga, **B. Delbridge**, and **M. Chamberlain\*** (2014) Penetration of spherical projectiles intro wet granular media, *Physical Review E*, 032208, 1-8.

#196 Wang, C.-Y., and M. Manga (2014) Earthquakes and water, Encyclopedia of Complexity and System Science, Springer, 1-38, 10.1007/978-3-642-27737-5\_606-1.

#197 Vandemeulebrouck, J., R.A. Sohn, **M.L. Rudolph**, S. Hurwitz, M. Manga, M.J.S. Johnston, S.A. Soule, J.M.G. Glen, **L. Karlstrom**, and F. Murphy (2014) Eruptions at Lone Star Geyser, Yellowstone National Park, USA, Part 2: Constraints on subsurface dynamics, *Journal of Geophysical Research*, vol. 119, 8688-8707, doi:10.1002/2014JB011526.

#198 Hornbach, M.J., and M. Manga (2014) The ability of rock physics models to infer marine in situ pore pressure, *G-cubed*, vol. 15, 4769-4780, doi: 10.1002/2014GC005442.

#199 LeFriant, A., and 41 others (2015) Submarine record of volcanic island construction and collapse in the Lesser Antilles arc: First scientific drilling of submarine volcanic island landslides by IODP expedition 340, *G-cubed*, vol. 16, 420-442, doi: 10.1002/2014GC005652.

#200 **Munoz-Saez, C**., M. Manga, S. Hurwitz, M.L. Rudolph, A. Namiki and C.-Y. Wang (2015) Dynamics within geyser conduits, and sensitivity to environmental conditions: Insights from a periodic geyser in the El Tatio Geyser Field, Atacama Desert, Chile, *Journal of Volcanology and Geothermal Research*, vol. 292, 41-55.

A picture containing text, vector graphics

Description automatically generated

#201 **Mohr, C**., M. Manga, C.-Y. Wang, J.W. Kirchner, and A. Bronstert (2015) Shaking water out of soils, *Geology*, vol. 43, 207-210.

#202 **Shi, Z**., G. Wang, M. Manga and C.Y. Wang (2015) Continental-scale water-level response to a large earthquake, *Geofluids*, vol. 15, 310-320.

#203 **Tran, A**.\*, M.L. Rudolph, and M. Manga (2015) Bubble mobility in mud and yield stress fluids, *Journal of Volcanology and Geothermal Research*, vol. 294, 11-24.

#204 Black, B.A., R. R. Neely, and M. Manga (2015) Campanian ignimbrite volcanism, climate, and the final decline of the Neanderthals, *Geology*, vol. 43, 411-414.

A picture containing transport, balloon, vector graphics, aircraft

Description automatically generated

#205 Manga, M. and C.-Y. Wang (2015) Earthquake hydrology, *Treatise of Geophysics*, second edition, vol. 4, 305-328.

#206 Cassidy, M., S. Watt, P. Talling, M. Palmer, M. Edmonds, M. Jutzeler, D. Wall-Palmer, M. Manga et al. (2015) Magmatism following unloading facilitated by volcanic edifice collapse, *Geophysical Research Letters*, vol. 42, 4778-4785, doi: 10.1002/2015GL064519.

#207 Wang, D., and M. Manga (2015) Organic-matter maturation in the contact aureole of an igneous sill as a tracer of hydrothermal convection, *Journal of Geophysical Research*, vol. 120, 4102-4112, doi:10.1002/2015JB011877, 1-11.

#208 Tingay, M., M.L. Rudolph, M. Manga, R. Davies, C.-Y. Wang (2015) Initiation of the Lusi mudflow disaster, *Nature* *Geoscience*, vol. 8, 493-494, doi:10.1038/ngeo2472.

A picture containing text, vector graphics

Description automatically generated

#209 Shirzaei, M., M.L. Rudolph, and M. Manga (2015) Deep and shallow sources for the Lusi mud eruption revealed by surface deformation, *Geophysical Research Letters*, vol. 42, 5274-5281, doi:10.1002/2015GL064576.

#210 Wang, C.-Y., and M. Manga (2015) New streams and springs after the 2014 M6.0 South Napa earthquake, *Nature Communications*, vol. 6, 7597, doi: 10.1038/ncomms8597. (paper states that authors contributed equally)

A picture containing text, vector graphics

Description automatically generated

#211 Vona, A., Giordano, G., De Benedetti, A.A., D’Ambrosio, F., Romano, C., and M. Manga (2015) Ascent velocity and eruption dynamics of the Fiumicino mud eruption, Rome, Italy, *Geophysical Research Letters*, vol. 42, 6244-6252, doi:10.1002/2015GL064571.

#212 **Shi, Z**., G. Wang, M. Manga, and C.-Y. Wang (2015) Mechanism of co-seismic water level change following four great earthquakes – insights from co-seismic responses throughout the Chinese mainland, *Earth and Planetary Science Letters*, vol. 430, 66-74.

#213 Lillis, R.J., J. Dufek, W.S. Kiefer, B. Black, M. Manga, J. Richardson, and J.E. Bleacher (2015) The Syrtis Major volcano, Mars: a multidisciplinary approach to interpreting its magmatic evolution and structural development, *Journal of Geophysical Research*, vol. 120, 1476-1496, doi: 10.1002/2014JE004774.

#214 Befus, K.S., M. Manga, J.E. Gardner, and M. Williams (2015) Ascent and emplacement dynamics of obsidian lavas from microlite textures, *Bulletin of Volcanology*, vol. 77, 88-105, doi 10.1007/s00445-015-0971-6.

#215 Rudolph, M., M. Manga, M. Tingay, and R. Davies (2015) Influence of seismicity on the Lusi mud eruption, *Geophysical Research Letters*, vol. 42,7436-7443, doi: 10.1002/2015GL065310.

#216 **Munoz-Saez, C**., A. Namiki, and M. Manga (2015) Geyser eruption intervals and interactions: examples from El Tatio, Atacama, Chile, *Journal of Geophysical Research*, vol. 120, 7490-7507, doi: 10.1002/2015JB012364.

#217 Richards, M.A., W. Alvarez, S. Self, L. Karlstrom, P.R. Renne, M. Manga, C.J. Sprain, J. Smit, and S.A. Gibson (2015) Triggering of the largest Deccan eruptions by the Chicxulub impact, *Geological Society of America Bulletin*, vol. 127, 1507-1520.

A picture containing text, transport, vector graphics, aircraft

Description automatically generated

#218 Hornbach, M.J., M. Manga, and IODP expedition Leg 340 scientists (2015) Permeability and pressure measurements in Lesser Antilles submarine slides: Evidence for pressure-driven slow-slip failure, *Journal of Geophysical Research*, vol. 120, 7986-8011, doi:10.1002/2015JB012061.

#219 Burns, E.R., S.E. Ingebritsen, M. Manga, and C.F. Williams (2016) Evaluating geothermal and hydrogeologic controls on regional groundwater temperature distribution, *Water Resources Research*, vol. 52, 1328-1344, doi:10.1002/2015WR018204.

#220 **Culha, C**.\*, and M. Manga (2016) Geometry and spatial distribution of lenticulae on Europa, *Icarus*, vol. 271, 49-56.

#221 Bonini, M., M.L. Rudolph, and M. Manga (2016) Long- and short-term triggering and modulation of mud volcano eruptions by earthquakes, *Tectonophysics*, vol. 672, 190-211, doi:10.1016/j.tecto.2016.01.037.

#222 **Zhang, Z**., S.M. Dorfman J. Labidi, **S. Zhang**, M. Li, M. Manga, L. Stixrude, W.F. McDonough and Q. Williams (2016) Primordial metallic melt in the deep mantle, *Geophysical Research Letters*, vol. 43, 3693-3699, doi: 10.1002/2016GL068560.

#223 Black, B.A., and M. Manga (2016) The eruptibility of magmas at Tharsis and Syrtis Major on Mars, *Journal of* *Geophysical Research*, vol. 121, 944-964, doi:10.1002/2016JE004998.

#224 Li, M., B. Black, S. Zhong, M. Manga, M.L. Rudolph, and P. Olson (2016) Quantifying melt production and degassing rate at mid-ocean ridges from global mantle convection models with plate motion history, *G-cubed*, vol. 17, 2884-2904, doi: 10.1002/2016GC006439.

#225 **Munoz-Saez, C**., **S. Saltiel**, M. Manga, **C. Nguyen**, and H. Gonnermann (2016) Hydraulic and physical properties of modern sinter deposits: El Tatio, Atacama, *Journal of Volcanology and Geothermal Research*, vol. 325, 156-168.

#226 Wang, C.-Y., X. Liao, L.-P. Wang, C.-H. Wang, and M. Manga (2016) Large earthquakes create vertical permeability by breaching aquitards, *Water Resources Research*, vol. 52, 5923-5937, doi:10.1002/2016WR018893.

#227 Black, B.A., M. Manga, and B. Andrews (2016) Ash production and dispersal from sustained low-intensity Mono-Inyo eruptions, *Bulletin of Volcanology*, vol. 78, 57-70. doi:10.1007/s00445-016-1053-0.

#228 **Coussens, M**., D. Wall-Palmer, P. Talling, S. Watt, M. Cassidy, M. Jutzeler, M.A. Clare, J.E. Hunt, M. Manga, T.M. Gernon, M. Palmer, S. Hatter, G. Boudon, D. Endo, A. Fujinawa, R. Hatfield, M. Hornbach, O. Ishizuka, K. Kataoka, A. Le Friant, F. Maeno, M. McCanta, A. Sinton (2016) The relationship between eruptive activity, flank collapse and sea-level at volcanic islands: a long-term (>1 Ma) record offshore, Lesser Antilles, *G-cubed*, vol. 17, 2591-2611, doi:10.1002/2015GC006053.

#229 Namiki, A., Y. Ueno, S. Hurwitz, M. Manga, **C. Munoz-Saez**, and F. Murphy (2016) An experimental study of the role of subsurface plumbing on geothermal discharge, *G-cubed*, vol. 17, 3691-3716, doi: 10.1002/2016GC006472.

#230 **Fauria, K.E**., M. Manga and **M. Chamberlain**\* (2016) Effect of particle entrainment on the runout of pyroclastic density currents, *Journal of Geophysical Research,* vol. 121, 6445-6461, doi:10.1002/2016JB013263.

#231 Shirzaei, M., W. Ellsworth, K. Tiampo, P.J. Gonzalez and M. Manga (2016) Surface uplift and time-dependent seismic hazard due to fluid injection in eastern Texas, *Science*, vol. 353, 1416-1419.

A picture containing text, vector graphics

Description automatically generated

#232 Jutzeler, M., M. Manga, J.D.L. White, P.J. Talling, A.A. Proussevitch, S.F.L. Watt, M. Cassidy, R.N. Taylor, A. Le Friant, and O. Ishizuka (2016) Submarine deposits from pumice-rich pyroclastic density currents dispersing over water: an outstanding example from offshore Montserrat (IODP 340), *Bulletin of the Geological Society of America*, doi: dx.doi.org/20.1130/B31448.1

#233 Bonadonna, C., and 41 others (2016) MeMoVolc report on classification and dynamics of volcanic explosive eruptions, *Bulletin of Volcanology*, vol. 78, doi:10.1007/s00445-016-1071-y.

#234 Manga, M., C.-Y. Wang, and M. Shirzaei (2016) Increased stream discharge after the 3 September 2016 Mw 5.8 Pawnee, Oklahoma earthquake, *Geophysical Research Letters,* vol. 43, 11,588-11,594, doi: 10.1002/2016GL071268. Highlighted in *EOS*, *98*, January 13, 2017.

#235 Black, B. and M. Manga (2017) Volatiles and the tempo of flood basalt magmatism, *Earth and Planetary Science Letters*, vol. 458, 130-140,dx.doi.org/20.1016/j.epsl.2016.09.035.

#236 Mohr, C.H., M. Manga, C.-Y. Wang, and O. Korup (2017) Regional changes in streamflow after a megathrust earthquake, *Earth and Planetary Science Letters,* vol. 458, 418-428.dx.doi.org/10.1016/j.epsl.11.013.

#237 **Fauria, K**., M. Manga, and **Z. Wei\*** (2017) Trapped bubbles keep pumice afloat and gas diffusion makes pumice sink, *Earth and Planetary Science Letters*, vol. 460, 50-59.

A picture containing text, vector graphics, aircraft

Description automatically generated

#238 Manga, M., and C. Michaut (2017) Formation of lenticulae on Europa by saucer-shaped sills, *Icarus*, vol. 286, 261-269. dx.doi.org/10.1016/j.icarus.2016.1009.

#239 Hurwitz, S., and M. Manga (2017) The fascinating and complex dynamics of geyser eruptions, *Annual Reviews of Earth and Planetary Science* (paper states that authors contributed equally), vol. 45, 31-59.

A picture containing text, vector graphics

Description automatically generated

#240 Burns, E.R., **Y. Zhu**, H. Zhan, M. Manga, C.F. Williams, S.E. Ingebritsen and J. Durham (2017) Thermal effect of climate change on groundwater-fed ecosystems, *Water Resources Research,* vol. 53, 3341-3351, doi: 10.1002/2016WR020007.

#241 Wang, C.-Y., M. Manga, M. Shirzaei, M. Weingarten, and L.-P. Wang (2017) Induced seismicity in Oklahoma affects shallow groundwater, *Seismological Research Letters,* vol. 88, 956-962.

#242 Romanowicz, B., M. Hirschmann, L. Kellogg, M. Manga, S. Mukhopadhyay, and B. Buffett (2017) Advancing geoscience research through CIDER, *GSA Today*, vol. 27, doi.org/10.1130/GSATG329GQ.1.

#243 **Maestrelli, D**., M. Bonini, D. Delle donne, M. Manga, L. Piccardi, and F. Sani (2017) Dynamic triggering of mud volcano eruptions during the 2016-2017 Central Italy seismic sequence, *Journal of Geophysical Research*, vol. 122, doi.org/10.1002/2017JB014777.

#244 **Randolph-Flagg, N**., **S. Breen**, **A. Hernandez**\*, M. Manga, and S. Self (2017) Evenly-spaced columns in the Bishop Tuff as relicts of hydrothermal cooling, *Geology*, vol. 45, 1015-1018.

#245 Taira, T., **A. Nayak**, F. Brenguier, and M. Manga (2018) Monitoring reservoir response to earthquakes and fluid extraction, Salton Sea Geothermal Field, California, *Science Advances*, vol. 4, e1701536.

#246 Carey, R., S. Soule, M. Manga et al. (2018) The largest and deepest silicic eruption: The 2012 Havre volcanic eruption, Kermadec Arc, New Zealand, *Science Advances***,** vol. 4, e1701121.

A picture containing text, vector graphics

Description automatically generated

#247 Tingay, M., M. Manga, M.L. Rudolph, and R. Davies (2018) An alternative review of facts, coincidences and past and future studies of the Lusi eruption, *Marine and Petroleum Geology*, vol. 95, 345-361, doi.org/20.1016/j.marpetgeo.2017.12.031.

#248 Manga, M., **K.E. Fauria**, **C. Lin**\*, **S.J. Mitchell**, **M. Jones**, C. Conway, W. Degruyter, **B. Hosseini**\*, **R. Cahalan**, B. Houghton, J.D.L. White, M. Jutzeler, A. Soule, and K. Tani (2018) The pumice raft-forming 2012 Havre submarine eruption was effusive, *Earth and Planetary Science Letters*, vol. 489, 49-58.

A picture containing text, vector graphics

Description automatically generated

#249 **Citron, R.I**., M. Manga, D. Hemingway (2018) Timing of oceans on Mars from shoreline deformation, *Nature*, vol. 555, 643-646, doi:10.1038/nature26144.

A picture containing text, vector graphics

Description automatically generated

#250 **Citron, R.I**., M. Manga, and E. Tan (2018) A hybrid origin of the martian crustal dichotomy: Degree-1 convection antipodal to a giant impact, *Earth and Planetary Science Letters*, vol. 491, 58-66.

#251 **Weit, A**., O. Roche, T. Dubois and M. Manga (2018) Experimental measurement of the solid particle concentration in geophysical turbulent gas-particle mixtures, *Journal of Geophysical Research,* vol. 123, 2747-2761, doi:10.1029/2018JB015530.

#252 **Sawi, T.M.**\*, and M. Manga (2018) Revisiting earthquake triggered volcanism, *Bulletin of Volcanology*, vol. 80:57, doi:10.1007/s00445-018-1232-2.

A red circle with a black circle in the middle

Description automatically generated with low confidence

#253 M. Manga, M. Voltolini and H.-R. Wenk (2018) Microlite orientation in obsidian flow measured by synchrotron X-ray diffraction, *Contributions to Mineralogy and Petrology,* doi:10.1007/s00410-018-1479-9.

#254 King, C.-Y., and M. Manga (2018) Hydrological, geochemical and geophysical changes related to earthquakes and slow-slip events, *Pure and Applied Geophysics,* vol. 175, 2407-2410*.* doi:10.1007/s00024-018-1923-9.

#255 Mohr, C.H., M. Manga, and D. Wald (2018) Stronger peak ground motion, beyond the threshold to initiate a response does not lead to larger stream discharge responses to earthquakes, *Geophysical Research Letters*, vol. 45, 6523-6531,doi:10.1029/2018GL078621.

#256 Cassidy, M., M. Manga, K.V. Cashman, and O. Bachmann (2018) Controls on explosive-effusive volcanic eruption styles, *Nature Communications*, vol. 9, 2839, doi:10.1038/s41467-018-05293-3.

#257 Prudencio, J., M. Manga and T. Taira (2018) Subsurface structure of Long Valley caldera imaged with seismic scattering and intrinsic attenuation, *Journal of Geophysical Research*, vol. 123, 5987-5999, doi:10.1029/2017JB014986.

#258 Munoz-Saez, C., M. Manga and S. Hurwitz (2018) Hydrothermal discharge from the El Tatio basin, Atacama, Chile, *Journal of Volcanology and Geothermal Research*, vol. 361, 25-35.

#259 **Fauria, K**., and M. Manga (2018) Pyroclast cooling and saturation in water, *Journal of Volcanology and Geothermal Research*, vol. 362, 17-31.

#260 Goldstein, D.B., M. Hedman, M. Manga, M. Perry, J. Spitale and B. Teolis (2018) Enceladus plume dynamics: From surface to space, in *Enceladus and the Icy Moons of Saturn*, University of Arizona Press, P.M. Schenk et al. editors, 175-194.

#261 Manga, M., S.J. Mitchell, W. Degruyter, and R.J. Carey (2018) Transition of eruptive style: pumice raft to dome-forming eruption at the Havre submarine volcano, southwest Pacific Ocean, *Geology,* vol. 46, 1075-1078.

#262 **Ardid, A**., E. Vera, **C. Kelly**, M. Manga, C. Munoz-Saez, A. Maksymowicz, and F. Ortega-Culaciati (2019) Geometry of geyser plumbing inferred from ground deformation, *Journal of Geophysical Research*, vol. 124, doi.org/10.1029/2018JB016454.

#263 Shirzaei, M., M. Manga and G. Zhai (2019) Hydraulic properties of injection formations constrained by surface deformation, *Earth and Planetary Science Letters,* vol. 515, 125-134.

#264 **Mitchell, S.J.,** B.F. Houghton, R.J. Carey, M. Manga, **K.E. Fauria**, **M.R. Jones**, S.A. Soule, C.E. Conway, **Z. Wei**, and T. Giachetti (2019) Submarine giant pumice: A window into the shallow conduit dynamics of a recent silicic eruption, *Bulletin of Volcanology,*vol. 81, /10.1007/s00445-019-1298-5.

#265 **Weit, A**., O. Roche, T. Dubois, and M. Manga (2019) Maximum solid phase concentration in geophysical turbulent gas-particle flows: Insights from laboratory experiments, *Geophysical Research Letters,* vol. 46,6388-6396,doi.org/10.1029/2019GL082658.

#266 Manga, M., G. Zhai and C.-Y. Wang (2019) Squeezing Marsquakes out of groundwater, *Geophysical Research Letters,* vol. 46, 6333-6340,doi.org/10.1029/2019GL082892.

*A picture containing text, vector graphics

Description automatically generated*

#267 Ingebritsen, S.E., and M. Manga (2019) Earthquake hydrogeology, *Water Resources Research,* vol. 55, doi.org/10.1029/2019WR025341.

#268 Befus, K.S. and M. Manga (2019) Lava Creek Tuff supereruption and the hollow reentrants, *Geology,* vol. 47, 710-714, doi.org/10.1130/G46275.1.

#269 Zhai, G., M. Shirzaei, M. Manga and X. Chen (2019) Pore pressure diffusion, enhanced by poroelastic stresses, controls induced seismicity in Oklahoma, *Proceedings of the National Academy of Sciences,* doi.org/10.1073/pnas.1819225116.

A picture containing text, vector graphics

Description automatically generated

#270 Hosono, T., C. Yamada, T. Shibata, Y. Tawara, C.-Y. Wang, M. Manga, A.T.M.S. Rahman, and J. Shimada (2019) Coseismic groundwater drawdown along crustal ruptures during the 2016 Mw 7.0 Kumamoto earthquake, *Water Resources Research,* vol. 55, 5891-5903.doi.org/10.1029/2019WR024871. Featured in *EOS.*

#271 Wang, C.-Y., A.-Y. Zhu, X. Liao, and M. Manga (2019) Capillary effects on the groundwater response to Earth tides, *Water Resources Research, vol. 55,* 6886-6895,doi.org/10.1029/2019WR025166.

#272 Befus, K.S., M. Manga, C. Stan, and M. Tamura (2019) Volcanoes erupt stressed quartz crystals, *Geophysical Research Letters,* doi/org/10.1029/2019GL083619.

#273 **Lin, W**., X.Li, Z. Yang, M. Manga, X. Fu, S. Xiong, A. Gong, G. Chen, H. Li, L. Pei, S. Li, X. Zhao, and X. Wang (2019) Multiscale digital porous rock reconstruction using template matching, *Water Resources Research*, vol. 55, 6911-6922, doi.org/10.1029/2019WR025219.

#274 Tripoli, B., M. Manga, J. Mayeux and H. Barnard (2019) The effects of deformation on the early crystallization kinetics of basaltic magmas, *Frontiers* *of Earth Sciences*, vol. 7:250, doi:10.3389.feart.2019.00250.

#275 Hurford, T.A., W.G. Henning, R. Maquire, V. Lekic, N. Schmerr, M. Panning, V.J. Bray, M. Manga, S.A. Kattenhorn L.C. Quick, and A.R. Rhoden (2020) Seismicity on tidally active solid-surface worlds, *Icarus*, vol. 338, doi.org/10.1016/j.icarus.2019.113466.

#276 Prudencio, J., and M. Manga (2020) 3D seismic attenuation structure of Long Valley caldera: looking for melt bodies in the shallow crust, *Geophysical Journal International,* vol. 220, 1677-1686.doi.org/10.1093/gji/ggz543.

#277 Hemingway, D.J., M. Rudolph, and M. Manga (2020) Cascading parallel fractures on Enceladus, *Nature Astronomy*, vol. 4, 234-239. doi:10.1038/s41550-019-0958-x.

A picture containing text, vector graphics

Description automatically generated

#278 **Knappe, E**\*., M. Manga and A. Le Friant (2020) Rheology of natural sediments and its influence on the settling of dropstones in hemipelagic marine sediment, *Earth and Space Science*, vol. 7, e2019EA000876, doi:10.1029/2019EA000876.

#279 Jutzeler, M., R. Marsh, E. van Sebille, T. Mittal, R.J. Carey, K.E. Fauria, M. Manga and J. McPhie (2020) Ongoing dispersal of the August 7, 2019 pumice raft form the Tonga arc in the southwestern Pacific Ocean, *Geophysical Research Letters*, vol. 47, e1701121*.* doi:10.1029/2019GL086768*.*

#280 Zhai, G., M. Shirzaei and M. Manga (2020) Elevated seismic hazard in Kansas due to high volume injections in Oklahoma, *Geophysical Research Letters,* vol. 47, e2019GL085705.doi.org/10.1029/2019GL085705.

#281 **Lapides, D**., and M. Manga (2020) Large wood as a confounding factor in interpreting the width in spring-fed streams, *Earth Surface Dynamics,* vol. 8, 195-2010. doi.org/10.5194/esurf-8-195-2020.

#282 Kiraly, A., D.E. Portner, K.L. Haynie, B.H. Chilson-Parks, T. Ghosh, M. Jadamec, A. Makushkina, M. Manga, L. Moresi, and K. O’Farrell (2020) The effect of slab gaps on subduction dynamics and mantle upwelling, *Tectonophysics*, vol. 785, doi.org/10.1016/j.tecto.2020.228458.

#283 Hosono, T., C. Yamada, M. Manga, C.-Y. Wang and M. Tanimizu (2020) Stable isotopes show that earthquakes enhance permeability and release water from mountains, *Nature Communications*, vol. 11, 2776, doi.org/10.1038/s41467-020-16604-y.

#284 Munoz Saez, C., M. Manga, S. Hurwitz, **S. Slagter**, **D. Churchill\***, M. Reich, D. Damby, and D. Morata (2020) Radiocarbon dating of silica sinter and postglacial hydrothermal activity in the El Tatio geyser field, *Geophysical Research Letters,* vol. 47, e2020GL087908*.* 10.1029/2020GL087908.

#285 **Churchill, D.M\***., M. Manga, S. Hurwitz, S. Peek, J.M. Licciardi and J.B. Paces (2020) Dating silica sinter (geyserite): A cautionary tale, *Journal of Volcanology and Geothermal Research,* vol. 402.10.1016/j.jvolgeores.2020.106991.

#286 Munoz-Saez, C., **C. Perez-Nunez**, **S. Martini**, **A. Vargas**, M. Reich, D. Morata, and M. Manga (2020) The Alpehue geyser field, Sollipulli Volcano, Chile, *Journal of Volcanology and Geothermal Research,* vol. 406,107065. [doi.org/10.1016/j.jvolgeores.2020.107065](https://doi.org/10.1016/j.jvolgeores.2020.107065).

#287 Hurwitz, S., J.C. King, G.T. Pederson, J.T. Martin, D.E. Damby, M. Manga, J.D.G. Hungerford and S. Peek (2020) Yellowstone’s Old Faithful Geyser shut down by a severe thirteenth century drought, *Geophysical Research Letters,* vol. 47, e2020GL089871*.* doi:10.1029/2020GL089871.

A picture containing text, vector graphics

Description automatically generated

#288 Nayak, A., M. Manga, S. Hurwitz, A. Namiki and P. Dawson (2020) Origin and properties of hydrothermal tremor at Lone Star Geyser, Yellowstone National Park, USA, *Journal of Geophysical Research,* doi: 10.1029/2020JB019711*.*

#289 Mazzini, A., G. Akhmanov, M. Manga, A. Sciarra, A. Huseynova, A. Huseynow, and I. Guliyev (2021) Explosive mud volcano eruptions and rafting of mud breccia blocks, *Earth and Planetary Science Letters,* vol. 555, doi.org/10.1016/j.epsl.2020.116699.

#290 **Reed, M.H**., C. Munoz-Saez, **S. Hajimirza**, **S.-M. Wu**, **A. Barth**, T. Girona, **M. Rasht-Behesht**, E.B. White, M.S. Karplus, S. Hurwitz and M. Manga (2021) The 2018 reawakening of Steamboat, Yellowstone National Park, the world’s tallest geyser, *Proceedings of the National Academy of Sciences,* vol. 118, e2020943118*.*

*A picture containing text, vector graphics

Description automatically generated*

#291 Cox, S.C., S. van Ballegooy, H.K. Rutter, D.S. Harte, C. Holden, A.K. Gulley, V. Lacrosse, and M. Manga (2021) Can artesian groundwater and earthquake-induced aquifer leakage exacerbate the manifestation of liquefaction? *Engineering Geology,* vol. 281, 105982, doi.org/10.1016/j.enggeo.2020.105982.

#292 Namiki, A., M. Patrick, M. Manga and B. Houghton (2021) Brittle fragmentation by rapid gas separation in a Hawaiian fountain, *Nature Geoscience,* vol. 14, 242-247, [doi.org/10.1038/s41561-021-00709-0](https://doi.org/10.1038/s41561-021-00709-0).

#293 Kedar, S., M.P. Panning, S.E. Smrekar, S. C. Stähler, S.D. King, MP. Golombek, M. Manga, B.R. Julian, B. Shiro, C. Perrin, J.A. Power, C. Michaut, S. Ceylan, D. Giardini, P. Longnonné, and W, B, Banerdt (2021) Analyzing low frequency seismic events at Cerberus Fossae as long period volcanic quakes, *Journal of Geophysical Research*, vol. 126, e2020JE006518, [doi.org/10.1029/2020JE006518](https://doi.org/10.1029/2020JE006518).

#294 Manga, M., and V. Wright (2021) No cryosphere-confined aquifer below InSight on Mars, *Geophysical Research Letters*, vol. 48, e2021GL093127, https://doi.org/10.1029/2021GL093127.

#295 Zhai, G., M. Shirzaei, and M. Manga (2021) Widespread deep seismicity in the Delaware Basin, Texas, is mainly driven by shallow wastewater injection, *PNAS,* vol. 118, e2102338118.

A picture containing vector graphics

Description automatically generated

#296 Wright, V., **A. Ferrick**\*, M. Manga and N. Sitar (2021) Coordination numbers in natural beach sands, *Powders and Grains 2021, EPJ Web of Conferences,* vol. 249, 11008, doi.org/10.1051/epjconf/202124911008.

#297 Korup, O., C. Mohr, M. Manga (2021) Bayesian detection of streamflow response to earthquakes, *Water Resources Research,* vol. 57, e2020WR028864, doi.org/10.1029/2020WR028874.

#298 Hurwitz, S., M. Manga, K.S. Campbell, C. Munoz-Saez and E.P.S. Eibl (2021) Why study geysers? *EOS*, vol. 102,doi.org/10.1029/2021EO161365.

#299 **Churchill, D.M**., M. Manga, S. Hurwitz, S. Peek, D.E. Damby, **B. Hosseini**, J. Hungerford, R. Conrey and J.R. Wood (2021) The structure and volume of large geysers in Yellowstone National Park, USA and the mineralogy and chemistry of their silica sinter deposits, *Journal of Volcanology and Geothermal Research*, doi.org/10.1016/j.jvolgeores.2021.107391.

#300 Mohr, C.H., M. Manga, G. Helle, I. Heinrich, L. Giese and O. Korup (2021) Trees talk tremor – wood anatomy and d13C content reveal contrasting tree-growth responses to earthquakes, *Journal of Geophysical Research*, doi:10.1029/2021JG006385. Featured in *EOS,* *Science*, and May 2022 issue of *National Geographic* magazine.

A red circle with a black circle in the middle

Description automatically generated with low confidence

#301 **Ferrick\*, A**., V. Wright, M. Manga and N. Sitar (2022) Microstructural differences between naturally-deposited and laboratory beach sands, *Granular Matter*, vol. 24, doi.org/10.1007/s10035-021-01169-4.

#302 **Valdivia, P.A**., **A.A. Marshall**, B.D. Brand, M. Manga and C. Huber (2022) Mafic explosive volcanism at Llaima volcano: 3D x-ray microtomography reconstruction of pyroclasts to constrain shallow conduit processes, *Bulletin of Volcanology,* vol. 84, doi:10.1007/s00445-021-01514-8.

#303 **Marshall, A.A**., B.D. Brand, V**. Martinez**, **J.M. Bowers**, **M. Walker**, V.D. Wanless, B.J. Andrews, M. Manga, **P. Valdivia** and G. Giordano (2022) The mafic Curacautín ignimbrite of Llaima volcano, Chile, *Journal of Volcanology and Geothermal Research,* vol. 421, 107418, doi:10.1016/j.jvolgeores.2021.107418.

#304 **Katona\*, J**., X. Fu, T. Mittal, M. Manga and S. Self (2021) Some lava flows may not have been as thick as they appear, *Geophysical Research Letters*, vol. 48, doi.org/10.1029/2021GL095202.

#305 Rudolph, M.L., M. Manga, M. Walker, A.R. Rhoden (2022) Cooling crusts create concomitant cryovolcanic cracks,  *Geophysical Research Letters*, vol. 49, e2021GL094421, doi.org/10.1029/2021GL094421.

A picture containing text, vector graphics

Description automatically generated

#306 **Breen, S.J**., S.R. Pride, Y. Masson and M. Manga (2022) Stable drainage in a gravity field*, Advances in Water Resources,* vol. 162,doi.org/10.1016/j.advwatres.2022.104150.

#307 Self, S., N. Randolph-Flagg, J.E. Bailey, and M. Manga (2022) Exposed columns in the Valles Caldera ignimbrites as records of hydrothermal cooling, Jemez Mountains, New Mexico, USA, *Journal of Volcanology and Geothermal Research,* doi.org/j.jvolgeores.2022.107536.

#308 Black, B.A., M. Manga, L. Ojha, M.-A. Longpré, S. Karunatillake, and L. Hlinka (2022) The history of water in Martian magmas from thorium maps, *Geophysical Research Letters,* vol. 49,doi.org/10.1029/2022GL098061. Featured in *EOS*.

#309 **Crozier, J.**, **S. Tramontano**, **P. Forte**, **S.J.C. Oliva**, H.M. Gonnermann, E. Lev, M. Manga, M. Myers, E. Rader, P. Ruprecht, H. Tuffen, R. Paisley, B.F. Houghton, T. Shea, C.I. Schipper, and J.M. Castro (2022) Outgassing through magmatic fractures enables effusive eruption of silicic magma, *Journal of Volcanology and Geothermal Research,* vol. 430, doi.org/10.1016/j.volgeores.2022.107617.

#310 **Marshall, A.A**., M. Manga, B.D. Brand and B.A. Andrews (2022) Autobrecciation and fusing of mafic magma preceding explosive eruptions, *Geology,* vol. 50, 1177-1181, doi.org/10.1130/G50180.1

#311 Wright, V., **J. Dasent**, **R. Kilburn** and M. Manga (2022) A minimally cemented shallow crust beneath InSight, *Geophysical Research Letters*, vol. 49, e2022GL099250, doi.org/10.1029/2022GL099250.

A picture containing text, vector graphics

Description automatically generated

#312 **Springsklee, C**., B. Scheu, M. Manga, V. Cigala, C. Cimarelli, and D. Dingwell (2022) The influence of grain size distribution on laboratory volcanic lightning, *Journal of Geophysical Research,* vol. 127,e2022JB024390, doi.org/10.1029/2022JB024390.

#313 Zhang, Y., M. Manga, L.-Y. Fu, Q.-Y. Yang, Z.-D. Cui and Y. Huang, Changes of hydraulic transmissivity orientation induced by tele-seismic waves, *Water Resources Research*, vol. 58, e2022WR033272, doi.org/10.1029/2022WR033272.

#314 **Kilburn, R**., **J. Dasent**, V. Wright, and M. Manga (2022) Lithology, pore-filling media, and pore closure depth beneath InSight on Mars inferred from shear wave velocities, *Journal of Geophysical Research,* vol. 127, e2022JE007539, doi.org/10.1029/2022JE007539.

#315 **Springsklee, C**., M. Manga, B. Scheu, C. Cimarelli, and D. Dingwell (2022) Electric discharge in erupting mud,  *Geophysical Research Letters,* vol. 49, e2022GL100852, doi.org/10.1029/2022GL100852.

#316 Manga, M., and M.L. Rudolph (2023) Enceladus erupts, Physics Today, vol. 76, 62-63, doi.org/10.1063/PT.3.5165.

#317 **Yan, X**., Z. Shi, C.-Y. Wang, S. Ingebritsen, and M. Manga (2022) Violent groundwater eruption triggered by distant earthquakes, *Geophysical Research Letters.* vol. 49, e2022GL101239, doi.org/10.1029/2022GL101239.

#318 Rhoden, A.R., M.L. Rudolph, and M. Manga (2023) The challenges of driving Charon’s cryovolcanism from a freezing ocean, *Icarus,* doi.org/10.1016/j.icarus.2022.115391.

#319 **Liu, C.-N**., F.-C. Lin, M. Manga, J. Farrell, S.-M. Wu, **M. Reed**, A. Barth, J. Hungerford, and E. White (2023) Short and long-term thumping cycle variations of Doublet Pool in Yellowstone National Park, *Geophysical Research Letters,* doi.org/10.1029/2022GL101175.

*Papers in review or in press:*

**Randolph-Flagg, N**., **J. Day**, **C.W. Johnson**, R. Burgmann and M. Manga, Hydrologic modulation of seismicity near the Tibetan Plateau from 1991 to 2013, submitted to *Earth and Planetary Science Letters*.

**DeNicola**\*, **S**., R. Mundil, C.-Y. Wang and M. Manga, A U-Pb constraint on the initial contact between the Pacific-Farallon ridge and the Western North American continent, submitted to *Earth and Space Sciences*.

**Reed, M.H**. and M. Manga, Snow systematically suppresses seismic signals from Steamboat Geyser,submitted to *Geophysical Research Letters.*

Cooper, K., K. Anderson, K. Cashman, M. Coombs, H. Dietterich, T. Fischer, B. Houghton, I. Johanson, K.J. Lynn, M. Manga, and C. Wauthier, Coordinating science during an eruption: Lessons from the 2020-2021 Kīlauea volcanic eruption, submitted to *Bulletin of Volcanology.*

Penlou, B., O. Roche, M. Manga, and S. van den Wildenberg, Experimental measurement of enhanced and hindered particle settling in turbulent gas-particle suspensions and geophysical implications, submitted to *Journal of Geophysical Research.*

Valentin Alvarado, L.E., S.C. Fakra, A.J. Probst, J.R. Giska, A.L. Jaffe, L.M. Oltrogge, J. West-Roberts, J. Rowland, M. Manga, D.F. Savage, C. Greening, B.J. Baker, and J.F. Banfield, Autotropic biofilms sustained by deeply-sourced groundwater host diverse CPR bacteria implicated in sulfur and hydrogen metabolism.

Olds, P., M.E. Sanborn, T. Teague, Q.-Z. Yin, and M. Manga, Cr isotopic evidence for excavation and ejection of mafic/ultramafic rocks by the Cretaceous-Paleogene boundary impact, submitted to *Geology*.

*Other publications:*

O27 Hurwitz, S., J.C. King, G.T. Pederson, M.H. Reed, L.N. Harrison, D.C. Hungerford, and M. Manga (2023) Radiocarbon dating of silicified wood from around Steamboat Geyser in Norris Geyser Basin, Yellowstone National Park, 2021-2022, U.S. Geological Survey, <https://doi.org/10.5066/P9NG2TF4>.

O26 Ingebritsen, S.E., and M. Manga (2022) A biographical memoir of Marion King Hubbert, National Academy of Sciences, 35 pages.

O25 Reed, M.H., and M. Manga (2021) A mysterious reawakening of the world’s tallest geyser from decades of sleep, *TheScienceBeaker*, https://doi.org/10.25250/thescbr.brk575.

O24 Hurwitz, S., G. Pederson, D. Damby, S. Peek, J. King, J. Hungerford, and M. Manga (2020) A time when Old Faithful wasn’t so faithful, *Yellowstone Caldera Chronicles*, October 12, 2020.

O23 Churchill, D., M. Manga, S. Hurwitz, J. Licciardi, and J. Paces (2020) How old are Yellowstone’s large geysers? We don’t exactly know! *Yellowstone Caldera Chronicles*, July 20, 2020.

O22 Manga, M. (2020) When it rains, lava pours, *Nature*, vol. 580, 457-458.

A picture containing vector graphics

Description automatically generated

O21 Churchill, D., Peek, S., Hurwitz, S., Manga, M., Damby, D.E., Conrey, R., Paces, J.B., and Licciardi, J. (2020) Mineralogy, chemistry and isotope composition of silica sinter deposits from the Upper Geyser Basin, Yellowstone National Park: U.S. Geological Survey, <https://doi.org/10.5066/P90SU3TV>.

O20 Hurwitz, S. and M. Manga (2019) How do geysers work? Knowledge gained from two centuries of scientific research and observations, *Yellowstone Caldera Chronicles*, June 24, 2019.

O19 Manga, M. (2018) Mysteries from the annals of geology, *Physics Today*, vol. 71, 59.

O18 Manga, M. (2018) Working together toward better volcanic forecasting, *EOS*, vol. 99, doi.org/10.1029/2018EO089541.

O17 Manga, M. and T.W. Becker (2017) Richard J. O’Connell (1941-2015), *EOS*, vol. 98, doi.org/10.1029/2017EO086639.

O16 Davies, R. and M. Manga (2017) A mud volcano has been erupting for ten years – and scientists are still undecided about what caused it, *The Conversation*, July 18, 217.

O15 Coussens, M., and Expedition 340 Scientists (2016) Synthesis: stratigraphy and age control for IODP Sites U1394, U1395, and U1396 offshore Montserrat in the Lesser Antilles, *Proceedings of the Ocean Drilling Program: Scientific Results*, doi:10.2204/iodp.proc.340.204.2016

O14 Ingebritsen, S.E. and M. Manga (2014) Hydrogeochemical precursors to earthquakes, *Nature Geoscience*, vol. 7, 697-698.

O13 Expedition 340 Scientists (2012) Lesser Antilles volcanism and landslides: Implications for hazard assessment and long-term magmatic evolution of the arc, IODP Preliminary Report, 340, doi:10.2204/iodp.pr.340.2012, 103 pages.

O12 Pitman, J., A. Duncan, D. Stubbs, R. Sigler, R. Kendrick, E. Smith, J. Mason, G. Delory, J.H. Lipps, M. Manga, J. Graham, I. de Pater, S. Reiboldt, E. Bierhaus, J.B. Dalton, J. Fienup, and J. Yu (2004) Remote sensing space science enabled by the Multiple Instrument Distributed Aperture Sensor (MIDAS) concept, Instrument, Methods, and Missions for Astrobiology VIII, SPIE, vol. 5555, 301-310.

O11 Pitman, J., A. Duncan, D. Stubbs, R. Sigler, R. Kendrick, E. Smith, J. Mason, G. Delory, J.H. Lipps, M. Manga, J. Graham, I. de Pater, S. Reiboldt, E. Bierhaus, J.B. Dalton, J. Fienup, and J. Yu (2004) Multiple instrument distributed aperture sensor (MIDAS) for planetary remote sensing, Sensors, Systems and Next-Generation Satellites VIII, SPIE, vol. 5570, 168-180.

O10 Pitman, J., A. Duncan, D. Stubbs, R. Sigler, R. Kendrick, E. Smith, J. Mason, G. Delory, J.H. Lipps, M. Manga, J. Graham, I. de Pater, S. Reiboldt, E. Bierhaus, J.B. Dalton, J. Fienup, and J. Yu (2004) Multiple instrument distributed aperture sensor (MIDAS) for remote sensing, Sensors, Systems and Next-Generation Satellites VIII, SPIE, vol. 5570, 218-227.

O9 DePaolo, D., and M. Manga (2003) Deep origin of hotspots -- The mantle plume model, *Science*, vol. 300, 920-921

O8 Manga, M., D.O. Nelson, W.A. Atkins (2003) “Physics and chemistry of fresh water”, Water Sciences, MacMillan Reference USA, pp 100-103.

O7 Manga, M. (2003) “Springs”, Water Sciences, MacMillan Reference USA, pp. 107-111.

O6 Manga, M., and H.A. Stone (2003) Interactions between bubbles at low Reynolds numbers, in A Gallery of Fluid Motions, p 52, Samimy et al., editors, Cambridge University press.

O5 James, E.R., M. Manga and T.P. Rose (2000) [Springs in the Oregon Cascades: Where does the water come from? and how old is it?](http://seismo.berkeley.edu/~manga/paper40.html) *Oregon Geology*, vol. 62, 87-95.

O4 Saar, M.O. and M. Manga (1999) Intrinsic permeability, porosity, and microstructure of Holocene vesicular basaltic andesites in the Oregon Cascades, *Oregon Geology*, vol. 61, 87-88.

O3 Manga, M. (1997) Comment on ``Potential role played by viscous heating in thermal-chemical convection in the outer core'', by U. Hansen and D.A. Yuen, *Geochimica et Cosmochimica Acta*, 665-667.

O2 Stone, H.A. and M. Manga (1995) Integral equation methods for viscous flow free-boundary problems: An overview with applications, in IABEM Symposium on Boundary Integral Methods for Nonlinear Problems, ed. Morino, L. and W.L. Wendland, Kluwer Academic Publishers, pp. 197-203.

O1 Tanzosh, J., M. Manga and H.A. Stone (1992) [Boundary integral methods for viscous free-surface flow problems: Deformation of single and multiple fluid-fluid interfaces](http://seismo.berkeley.edu/~manga/paper21.html), in Boundary Element Technologies, ed. Brebbia, C.A. and M.S. Ingber, Computational Mechanics Publications and Elsevier Applied Science, pp. 19-39.

*Books*:

*Earth Science*, McGraw Hill, 1029 pages, 2008 (one of 9 authors)

Wang, C.-Y., and M. Manga (2010) *Earthquakes and Water*, Springer, Lecture Notes in Earth Sciences, volume 114, 249 pp, ISBN: 978-3-642-00809-2.

Manga, M., and 11 others (2017) *Volcanic eruptions and their Repose, Unrest, Precursors and Timing*, The National Academies Press, Washington DC, doi.org/10.17226/24650.

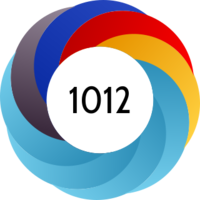
A picture containing vector graphics

Description automatically generated

C.-Y. King and M. Manga, editors (2018) *Hydrological and geophysical changes related to earthquakes and slow-slip events*, Birkhauser, 149 pp, ISBN: 978-3-030-02495-6.

Wang, C.-Y., and M. Manga (2021) *Water and Earthquakes*, Springer, Lecture Notes in Earth System Sciences, 387 pp, ISBN 978-3-030-64307-2. <https://link.springer.com/book/10.1007/978-3-030-64308-9>

National Academies of Sciences, Engineering and Medicine (2022) *Origins, Worlds and Life: A decadal Strategy for Planetary Science and Astrobiology 2023-2032*, The National Academies Press, Washington DC doi.org/10.17226/26522. (Manga was on the Mars Panel)



*PhD students (dissertation chair)*

Zachary Smith (2021-present)

Orlando Romeo (2020-present)

Tyler Cadena (2019-present)

Mara Reed (2018-present)

Steve Breen (2021), with Steve Pride, now postdoc at UC Riverside

Dana Lapides (2020), with Sally Thompson, now postdoc at Simon Fraser University

Nate Lindsey (2020), with Jonathan Ajo-Franklin, lead scientist at FiberSense

Robert Citron (2019), now postdoc at UC Davis

Noah Randolph-Flagg (2019), now postdoc at NASA Ames

Kristen Fauria (2017), now faculty at Vanderbilt

Carolina Munoz-Saez (2016), now faculty at University of Nevada Reno

Max Rudolph (2012), now faculty at UC Davis

Leif Karlstrom (2011), now faculty at University of Oregon

Alyssa Sarid Rhoden (2011), now staff scientist at SWRI

Edwin Kite (2011), now faculty at University of Chicago

Yder Masson (2010), with Steve Pride, now researcher at INRS

Christian Huber (2009), now faculty at Brown University

Mark Wenzel (2006), employed by California Energy Commission

Helge Gonnermann (2004), now faculty at Rice University

Alison Rust (2003), with Kathy Cashman, now faculty at Bristol University

Martin Saar (2003), now faculty at ETH

Jon Castro (1999), with Kathy Cashman, now faculty at Mainz University

*MS students (primary advisor)*

Maria Brumm (2008), now data scientist at Seattle Children’s; Liz James (2000); Dayanthie Weeraratne (1997), now faculty at Cal State University Northridge

*Postdocs (primary advisor)*

Anna Barth (2021-present)

Vashan Wright (2020), now faculty at UC San Diego (Scripps Institute of Oceanography)

Diogo Lourenço (2019-2022)

Guang Zhai (2018-2021), now postdoc at Virginia Tech

Ruby Fu (2018-2020), now faculty at Caltech

Doug Hemingway (2015-2018), now scientist at Maxar Technologies, soon to be faculty at Univ Texas, Austin

Janire Prudencio (2016-2018), now faculty at the University of Grenada

Barbara Tripoli (2015-2018), now scientist Etat du Valais, Switzerland

Ben Black (2014-2016), now faculty at Rutgers

Alex Hayes (2011-2013), now faculty at Cornell University

John Hernlund (2009-2011), now faculty at Tokyo Tech

Wim Degruyter (2010-2013), now faculty at Cardiff University

Benoit Cordonnier (2010-2012), now researcher at University Oslo

Rebecca Carey (2008-2011), now faculty at University of Tasmania

Isamu Matsuyama (2008-2011), now faculty University of Arizona

Ben Andrews (2009-2011), now staff scientist at the Smithsonian

Joe Dufek (2006-2008), now faculty at the University of Oregon

Tim Creyts (2007-2009), now researcher at Columbia University (Lamont Doherty Earth Observatory)

Sarah Zaranek (2005-2007), now at MATLAB

Yoshiko Ogawa (2004-2006), now faculty at University of Aizu

Atsuko Namiki (2003-2006), now faculty at Nagoya University

Emily Brodsky (2000-2002), now faculty at UC Santa Cruz

Mark Jellinek (2000-2002), now faculty at University of British Columbia

Maurizio Battaglia (2001), now faculty Università di Roma, Sapienza

Allen Hunt (2001), now faculty at Wright State University

*Undergraduate coauthors* (\* indicates first author)

Jonas Katona\*, Amy Ferrick\*, Dakota Churchill\*, Behnaz Hosseini, Ellen Knappe\*, Zihan Wei, Theresa Sawi\*, Christina Lin, Andres Hernandez, Michael Chamberlain, Cansu Culha\*, Aaron Tran\*, Sam Birch\*, Esther Adelstein\*, Adam Zok, Robert Zinke, Parmesh Gaijar, Wylie Stroberg\*, Jason Wexler, Marcel Staedter, Leif Karlstrom\*, Veronika Soukhovitskaya\*, Bretagne Hygelund\*, Michael Boone, Jan Stark\*, Nathanael Schaeffer\*, Dayanthie Weeraratne\* (15, 27)

*Cruises*

IODP 340 (2012), 57 days, JOIDES Resolution

MESH (2015), 23 days, Roger Revelle

IODP 398 (2022-2023), 61 days, JOIDES Resolution