

Barbara C Bruno
Publications – updated July 2016

Scientific Research Publications (peer-reviewed journals)

1. Burr, D.M., B.C. Bruno, P.D. Lanagan, L.S. Glaze, W.L. Jaeger, R.J. Soare, J.-M. Wan Bun Tseung, J.A. Skinner, and S.M. Baloga (2009). Mesoscale raised rim depressions (MRRDs) on Earth: A review of the characteristics, processes, and spatial distributions of analogs for Mars. *Planet. and Space Sci.*, 57, 79-596, doi: 10.1016/j.pss.2008.11.011.
2. Baloga, S.M., L.S. Glaze, and B.C. Bruno (2007). Nearest neighbor analysis of small features on Mars: Applications to tumuli and rootless cones. *J. Geophys. Res.*, 112, E03002, doi:10.1029/2005JE002652.
3. Bruno, B.C., S.A. Fagents, C.W. Hamilton, D.M. Burr, and S.M. Baloga (2006). Identification of volcanic rootless cones, ice mounds, and impact craters on Earth and Mars: Using spatial distribution as a remote sensing tool. *J. Geophys. Res.*, 111, E06017, doi:10.1029/2005JE002510.
4. Baloga, S.M and B.C. Bruno (2005), The origin of transverse ridges on the surfaces of catastrophic mass flow deposits on the Earth and Mars. *J. Geophys. Res.*, 110, E05007, doi:10.1029/2004JE002381.
5. Bruno, B.C., S.A. Fagents, T. Thordarson, S.M. Baloga and E. Pilger (2004). Clustering within rootless cone groups on Iceland and Mars: Effect of nonrandom processes. *Geophys. Res. Lett.*, 109, E07009, doi:10.1029/2004JE002273.
6. Blake, S. and B.C. Bruno (2000). Modeling the emplacement of compound lava flows. *Earth and Planet. Sci. Lett.*, 184, 181-197.
7. Symonds, G., R.A. Holman and B.C. Bruno (1997). Rip currents. *Proceedings of Coastal Dynamics '97*. ASCE: Plymouth, UK, 584-593.
8. Bruno, B.C., S.M. Baloga and G.J. Taylor (1996). Modeling gravity-driven flows on an inclined plane. *Journal Geophys. Res.* 101, 11, 565-11, 577.
9. Bruno, B.C. and G.J. Taylor (1995). Morphologic identification of Venusian lavas. *Geophys. Res. Lett.*, 22, 1897-1900.
10. Bruno, B.C., G.J. Taylor, S.K. Rowland and S.M. Baloga (1994). Quantifying the effect of rheology on lava flow margins using fractal geometry. *Bull. Volc.*, 56, 193-206.
11. Bruno, B.C., G.J. Taylor, S.K. Rowland, P.G. Lucey, and S. Self (1992). Lava flows are fractals. *Geophys. Res. Lett.*, 19, 305-308.
12. Bruno, B.C., P.G. Lucey, and B.R. Hawke (1991). High resolution UV-visible spectroscopy of lunar red spots. *Proceedings of Lunar Planet. Sci. XXI*, 405-415.
13. Lucey, P.G., B.C. Bruno and B.R. Hawke (1991). Preliminary results of imaging spectroscopy of the Humorum Basin Region of the Moon. *Proceedings of Lunar Planet. Sci. XXI*, 391-403.

Science Education Publications (peer-reviewed journals)

14. B.C. Bruno J.L.K. Wren, K. Noa, E.M. Wood-Charlson, J. Ayau, S. Leon Soon, H. Needham, and C.A. Choy (2016). Summer Bridge program establishes nascent pipeline to expand and diversify Hawai'i's undergraduate geoscience enrollment. *Oceanography*, 29(2):286–292, <http://dx.doi.org/10.5670/oceanog.2016.33>.
15. Wood-Charlson, E. and B.C. Bruno (2015). Teaching the art and science of getting research funding. *EOS, Earth and Space Science News* 96(22), 10-14.

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16. Wood-Charlson, E., S. Bender, B.C. Bruno, J. Diaz, M. Gradoville, E. Louny and D. Viviani (2015). Translating research abstracts into communication articles. *Limnology and Oceanography Bulletin*, 24(3), 73-76.
17. Bruno, B.C., P. Bligh-Glover, S. Artis, C. Joseph, and A. Tabor (2014). Recommended practices for integrating education, diversity and research: Five lessons learned from NSF Science and Technology Centers. *Oceanography*, 27(4), 9-12, <http://dx.doi.org/10.5670/oceanog.2014.98>.
18. Guannel, M.L., B.C. Bruno, M.M. Grand, N. Lee, and E.A. Day-Miller (2014). In Hawaii, a pilot course in professional development fulfills an unmet need in graduate education. *Limnology and Oceanography Bulletin*, 23(3), 56-59.
19. Böttjer, D., S.P. Jungbluth, R. Boiteau, B. Burkhardt, F. de Leo, and B.C. Bruno (2014). Career choices in marine and environmental sciences: Navigating a sea of options. *Oceanography*, 27(2), 201-207. <http://dx.doi.org/10.5670/oceanog.2014.35>.
20. Bruno, B.C. and J.L.K. Wren (2014). Climate change, sea level rise, and ocean acidification. *The Earth Scientist*, XXX (1), 9-11.
21. Bruno, B.C., Y.M. Rii, J.C. Robidart, and D.A. Viviani (2013). The young scientist and the sea (of microbes). *Current: The Journal of Marine Education*, 28(3), 5-8.
22. Foley, J.M.S., and Bruno, B.C. (2013). Plankton on the stage: Microscopes in middle schools. *Current: The Journal of Marine Education*, 28(3), 16-19.
23. Bruno, B.C., J. Padilla-Gamiño, and F. De Leo (2013). C-MORE professional development training program for graduate students and post-doctoral researchers. *The Earth Scientist*, 29(3), 11-15.
24. Foley, J.M., B.C. Bruno, R.T. Tolman, R.S. Kagami, M.H. Hsia, B. Mayer, and J.K. Inazu (2013). C-MORE Science Kits as a classroom learning tool. *Journal of Geoscience Education*, 61(3), 256-267.
25. Gibson, B.A. and B.C. Bruno (2012). The C-MORE Scholars Program: Motivations for an academic-year Research Experiences for Undergraduates program. *Journal of College Science Teaching*, 41(5), 12-18.
26. Hsia, M.H. and B.C. Bruno (2012). Hands-on family science program stimulates interest in ocean science careers. *Current: The Journal of Marine Education*, 28(2), 16-25.
27. Bruno, B.C., S.E. Thomas, M.M. Frazier & L. James (2011). Student perspectives on facilitating positive undergraduate research experiences. *Council of Undergraduate Research Quarterly*, 32(2), 37-40.
28. Bruno, B.C., K.A. Tice, N. Puniwai and K. Achilles (2011). Ocean acidification: Hands-on experiments to explore the causes and consequences. *Science Scope*, 34, 23-30.
29. Bruno, B.C., C. Wiener, A. Kimura, and R. Kimura (2011). Ocean FEST: Families Exploring Science Together. *J. Geoscience Education*, 59, 13-21; doi:10.5408/1.3543933.
30. Hsia, M.H., K.A. Thomas and B.C. Bruno (2011). What microbe are you? An activity designed for our youngest scientists. *American Society for Microbiology Classroom and Outreach Activities (online)*, July 2011; <http://www.asm.org/index.php/education/classroom-activities.html>.
31. Mayer, B. and B.C. Bruno (2011). C-MORE and Science Buzz: Where students and scientists meet. *The Earth Scientist*, 27(4), 27-30.
32. Thomas, K.A., B.C. Bruno, K. Achilles and S.B. Sherman (2011). A watery whodunit: The case of the missing zooxanthellae. *Science Scope*, 34(7): 44-54.

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33. Wiener, C.S., B.C. Bruno, and J. Foley (2011). Monitoring coral reefs using quadrats. *The Green Teacher*, 92, 31-34.
34. Bruno, B.C., K. Tice, K.M. Achilles, and J. Matsuzaki (2010). Quantifying marine microbes: A simulation to introduce random sampling. *American Society for Microbiology Classroom and Outreach Activities (online)*, April 2010; <http://www.asm.org/asm/images/MDA-PDF/2010%20marine%20microbes.pdf>.
35. Weersing, K., J. Padilla-Gamiño, and B.C. Bruno (2010). What microbe Are you? *The Science Teacher*, 77(6):40-44.
36. Bruno, B.C., K.M. Achilles, K.A. Weersing, G. Walker, and P.F. Kemp (2008). Professional development at the Center for Microbial Oceanography: Research and Education (C-MORE). *The Earth Scientist*, 27(2): 7-10.

Other Publications (not peer-reviewed)

37. Bruno, B.C., C. Wiener, M.H. Hsia (2016). How well do you know your ocean? *Child Art Magazine* (April-June issue), 6-7.
38. Schroeder, S. and B.C. Bruno (2014). Professional development for students and post-docs at National Science Foundation Science and Technology Centers. NSF White Paper.
39. Bruno, B.C., S. Artis, P. Bligh-Glover, C. Joseph and A. Tabor (2014). Best practices in education and diversity at NSF Science and Technology Centers. NSF White Paper.
40. Padilla-Gamiño, J and B.C. Bruno (2010). El mar y sus microbios. *Hélix, Ciencia y Desarrollo* (monthly Spanish-language children's magazine), Mexico City.
41. Achilles, K., B.C. Bruno, G. Walker, K. Weersing and the C-MORE Team (2008). *Key concepts in microbial oceanography* (http://cmore.soest.hawaii.edu/downloads/MO_key_concepts_hires.pdf).
42. Bruno, B.C. and J.Q. Zhang, eds. (2005). *Pīkoi Ke Kaula Kualena: Standards-based, culturally relevant science curricula for Hawai`i's students*, published by the Pīkoi Ke Kaula Kualena project, College of Education, University of Hawai`i at Mānoa, Honolulu.
43. Bruno, B.C. and J.Q. Zhang, eds. (2004). *Mālama I Ka `Aina: Standards-based, culturally relevant science curricula for Hawai`i's students*, published by the Mālama I Ka `Aina project, College of Education, University of Hawai`i at Mānoa, Honolulu.
44. Bruno, B.C. (1999). Earth and physical science laboratory manual. Three Bees Press, Fort Lauderdale. (Used as course text for laboratory class at Broward College, Florida).