

Andrea Gabrieli – Publications

Scientific Papers

- Gabrieli, A.**, J.N. Porter, R. Wright, P.G. Lucey (2017). *Validation Studies of the Accuracy of Various SO₂ Gas Retrievals in the Thermal InfraRed (8-14 μm)*. (IN PRESS in Bulletin of Volcanology).
- Gabrieli, A.**, R. Wright, J.N. Porter, P.G. Lucey (2017). *Applications of quantitative thermal InfraRed hyperspectral imaging (8-14 μm): investigating volcanic plume characteristics and SO₂ fluxes*. (IN PREPARATION)
- Gabrieli, A.**, R. Wright, P.G. Lucey, H. Garbeil, E. Pilger, J.N. Porter, M. Wood. (2016). *Characterization and initial field test of a long wave thermal infrared hyperspectral imager for measuring SO₂ in volcanic plumes*. Bulletin of Volcanology, DOI: 10.1007/s00445-016-1068-6.
- Wright, R., P.G. Lucey, S. Crites, H. Garbeil, M. Wood, E. Pilger, **A. Gabrieli**, and C. Honnibal. (2016) *TIRCIS: thermal infrared compact imaging spectrometer for small satellite applications*. Proc. SPIE 9880, Multispectral, Hyperspectral, and Ultraspectral Remote Sensing Technology, Techniques and Applications VI, 98801K (August 19, 2016); doi:10.1117/12.2224311
- Gabrieli, A.**, L. Wilson, S. Lane. (2015). *Volcano-Tectonic Interactions as Triggers of Volcanic Eruptions*. Journal of the Geologists' Association, UK. DOI: 10.1016/j.pgeola.2015.10.002
- Crites, S.T., R. Wright, P.G. Lucey, J. Chan, **A. Gabrieli**, H. Garbeil, K.A. Horton, A.K.R. Imai-Hong, E.J. Pilger, M. Wood, L. Yoneshige. (2015) *The Thermal Infrared Compact Imaging Spectrometer (TIRCIS): A follow-on to the Space Ultra Compact Hyperspectral Imager (SUCHI)*. Sensors and Systems for Space Application IX – SPIE [9469-26]. DOI:10.1117/12.2185649
- Wright, R., P. Lucey, S.T., Crites, **A. Gabrieli**, H. Garbeil, M. Wood. (2015). *Thermal InfraRed Compact Imaging Spectrometer (TIRCIS): Instrument Update and Preliminary Volcanic Gas Composition Measurements*. [Online]. Available at: <https://esto.nasa.gov/forum/estf2015/presentations/Wright_S4P6_ESTF2015.pdf>.

Abstracts and Posters:

- Gabrieli, A.**, R. Wright, J.N. Porter, P.G. Lucey (2017). *Imaging volcanic SO₂ and CO₂*. (Abstract and Poster for AGU Session: xxxx Volcanology, Geochemistry, and Petrology General Contributions).
- Gabrieli, A.**, R. Wright, J.N. Porter, P.G. Lucey (2017). *Validation Studies of the Accuracy of Various SO₂ Gas Retrievals in the Thermal InfraRed (8-14 μm)*. (Abstract and Poster for IAVCEI2017-Portland Conference).
- Gabrieli, A.**, R. Wright, P.G. Lucey, J.N. Porter, C. Honnibal, H. Garbeil, M. Wood. *Validation Studies of the Accuracy of Various SO₂ Gas Retrievals in the Thermal InfraRed (8-14 μm)* (Abstract and Poster for AGU Session: V11C Volcanology, Geochemistry, and Petrology General Contributions: Monitoring and Volcanic Processes)
- Wright, R., P.G. Lucey, S.T. Crites, H. Garbeil, M. Wood, E. Pilger, C. Honnibal, **A. Gabrieli**. (2016) *Enabling High Spectral Resolution Thermal Imaging from CubeSat and MicroSatellite Platforms Using Uncooled Microbolometers and a Fabry-Perot interferometer*. (Abstract and Poster for AGU Session: A41H The Rise of Small Satellite Constellations for Earth Observation)
- Gabrieli, A.**, R. Wright, P.G. Lucey, H. Garbeil, E. Pilger, J.N. Porter, M. Wood. (2015) *Characterization and initial field test of a long wave thermal infrared hyperspectral imager for measuring SO₂ in*

volcanic plumes (Abstract and Poster for AGU Session: V043 Volcanology, Geochemistry and Petrology General Contributions, Dec. 2015).

Porter, J.N., **A. Gabrieli**, R. Wright. (2015). *Trace Gas Inversion For InfraRed Spectra (TGIF-IRS)*. (Abstract and Poster for AGU Session: V043 Volcanology, Geochemistry and Petrology General Contributions, Dec. 2015)

Tento, A., **A. Gabrieli**, A. Marcellini. (2013) Seasonal variation of the measure of soil fundamental resonant frequency. (Abstract for EGU General Assembly 2013, held 7-12 April, 2013 in Vienna, Austria, id. EGU2013-10005)