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**Research interest** : crustal deformation, seismology,  
natural hazards, hydrology

**[Education]**

2011 PhD in Geophysics, Institut de Physique du Globe de Paris, France

2007 M.S in Geophysics, Institut de Physique du Globe de Paris, France

**[Employment]**

**2018/08 – present:** Assistant Research Fellow, Institute of Earth Sciences,  
Academia Sinica, Taiwan

**2016/01 – 2018/07:** Postdoctoral Research Fellow, Institute of Earth Sciences,  
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**2014/01 – 2015/12:** Distinguished Postdoctoral Fellow, Institute of Earth Sciences,  
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**[Publications]** (\*corresponding author, ^postdoc/student advised)

- Mandler<sup>^</sup>, E., **A. Canitano**, M.E. Belardinelli, M. Nespoli, E. Serpelloni and A. Linde, Tidal calibration of the Gladwin Tensor Strain Monitor (GTSM) array in Taiwan, *Pure Appl. Geophys.*, 181, doi :10.1007/s00024-024-03453-9, 2024.
- **Canitano\***, **A.**, Constraints on the calibration of borehole volumetric strainmeters using Rayleigh-wave vertical seismic acceleration, *Bull. Seismol. Soc. Am.*, 114, doi :10.1785/0120230260, 2024.
- Lin<sup>^</sup>, H.-F., A. Gualandi, Y.-F. Hsu, Y.-J. Hsu, H.-H. Huang, H.-M. Lee and **A. Canitano\***, Interplay between seismic and aseismic deformation on the Central Range fault during the 2013 Mw 6.3 Ruisui earthquake (Taiwan), *J. Geophys. Res. Solid Earth*, 128(9), doi:10.1029/2023JB026861, 2023.
- **Canitano\***, **A.**, Sensitivity limits for strain detection of hypothetical remote fluid-induced earthquakes ( $M_w \geq 4$ ) : a case study in Taiwan, *Front. Earth Sci.*, 11, doi:10.3389/feart.2023.1213577, 2023.
- Lin<sup>^</sup>, H.-F., Y.-F. Hsu<sup>^</sup> and **A. Canitano\***, Source modeling of the 2009 Fengpin-Hualien earthquake sequence, Taiwan, inferred from static strain measurements, *Pure Appl. Geophys.*, 180(2), 715-733, 2023.
- **Canitano\***, **A.**, M. Mouyen, Y.-J. Hsu, A.T. Linde, S. Sacks and H.-M. Lee, Fifteen years of continuous high-resolution borehole strainmeter measurements in eastern

- Taiwan : an overview and perspectives (invited), *GeoHazards*, 2(3), 172-195, 2021.
- **Canitano\***, A., M. Godano and M. Y. Thomas, Inherited state of stress as a key factor controlling slip and slip mode : inference from the study of a slow slip event in the Longitudinal Valley, Taiwan, *Geophys. Res. Lett.*, doi:10.1029/2020GL090278, 2021.
  - **Canitano\***, A., Observation and theory of strain-infrasound coupling during ground-coupled infrasound generated by Rayleigh waves in the Longitudinal Valley (Taiwan), *Bull. Seismol. Soc. Am.*, 110(6), 2991-3003, 2020.
  - **Canitano\***, A., H. Gonzalez-Huizar, Y. J. Hsu, H. M. Lee, A. T. Linde and S. Sacks, Testing the influence of static and dynamic stress perturbations on the occurrence of a shallow, slow slip event in eastern Taiwan, *J. Geophys. Res. Solid Earth*, 124, doi:10.1029/2018JB016742, 2019.
  - **Canitano\***, A., Y. J. Hsu, H. M. Lee, A. T. Linde and S. Sacks, Calibration for the shear strain of 3-component borehole strainmeters in eastern Taiwan through Earth and ocean tidal waveform modeling, *J. Geodesy*, 92(3), 223-240, 2018.
  - **Canitano\***, A., M. Godano, Y. J. Hsu, H. M. Lee, A. T. Linde and S. Sacks, Seismicity controlled by a frictional afterslip during a small magnitude seismic sequence (ML < 5) on the Chihshang Fault, Taiwan, *J. Geophys. Res. Solid Earth*, 123(2), 2003-2018, 2018.
  - Mouyen, M., **A. Canitano**, B. F. Chao, Y. J. Hsu, P. Steer, L. Longuevergne and J. P. Boy, Typhoon-induced ground deformation, *Geophys. Res. Lett.*, 44(21), 11,004-11,011, 2017.
  - **Canitano\***, A., P. Bernard and S. Allgeyer, Observation and modeling of the seismic seiches triggered in the Gulf of Corinth (Greece) by the 2011 Mw 9.0 Tohoku earthquake, *J. Geodyn.*, 109, 24-31, 2017.
  - **Canitano\***, A., Y. J. Hsu, H. M. Lee, A. T. Linde and S. Sacks, A first modeling of dynamic and static crustal strain field from near-field dilatation measurements : example of the 2013 Mw 6.2 Ruisui earthquake, Taiwan, *J. Geodesy*, 91(1), 1-8, 2017.
  - **Canitano\***, A., Y. J. Hsu, H. M. Lee, A. T. Linde and S. Sacks, Near-field strain observations of the October 2013 Ruisui, Taiwan, earthquake : source parameters and limits of very-short term strain detection, *Earth Planets Space*, 67 :125, doi :10.1186/s40623-015-0284-1, 2015.
  - **Canitano\***, A., P. Bernard, A. T. Linde, S. Sacks and F. Boudin, Correcting high-resolution borehole strainmeter data from complex external influences and partial-solid coupling : the case of Trizonia, rift of Corinth (Greece), *Pure Appl. Geophys.*, 171(8), 1759-1790, 2014.
  - **Canitano\***, A., P. Bernard, A. T. Linde and S. Sacks, Analysis of signals of a borehole strainmeter in the western rift of Corinth, Greece, *J. Geod. Sci.*, 3(1), 63-76, 2013.