



## Anthony Clark

Lab Manager, SRPL, Department of Geophysics - Geophysics

### Bio

---

#### BIO

Current research interests include how thermal and/or fluid-mediated processes alter the microstructure and physical properties of rocks and (other) ancient materials.

### Publications

---

#### PUBLICATIONS

- **Monitoring The Changes In The Microstructure, Elastic And Transport Properties of Eagle Ford Marl Caused By Ex-Situ Maturation** *GEOPHYSICS*  
Suwannasri , K., Vanorio , T., Clark , A.  
2018; 83 (5): MR263-MR281
- **Permeability of volcanic ash-lime mixtures during CO<sub>2</sub>-mediated Carbonation and Decompression** *JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH*  
Clark, A., MacFarlane, J., Vanorio, T.  
2018; 123
- **Elastic Softening of Limestone upon Decarbonation with Episodic CO<sub>2</sub> Release** *JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH*  
Head, D., Vanorio, T., Clark, A.  
2018; 123: 7404–7420
- **KG<sup>2</sup>B, a collaborative benchmarking exercise for estimating the permeability of the Grimsel granodiorite – Part 2: modeling, microstructures and complementary data** *GEOPHYS. J. IINT.*  
David, C., Wasserman, J., Amann, F., Klaver, J., Davy, C., Sarout, J., Esteban, L., Rutter, E., Hu, Q., Louis, L., Delage, P., Lockner, D., Selvadurai, et al  
2018; 214 (1)
- **KG<sup>2</sup>B, a collaborative benchmarking exercise for estimating the permeability of the Grimsel granodiorite – Part 1: measurements, pressure dependence and pore-fluid effects** *GEOPHYS. J. IINT.*  
David, C., Wassermann, J., Amman, F., Lockner, D., Rutter, E., Vanorio, T., Amann Hildenbrand , A., Billiotte , J., Reuschlé , T., Lasseux , D., Fortin, J., Lenormand, R., et al  
2018; 214 (1)
- **On the evolution of the elastic properties of organic-rich shale upon pyrolysis-induced thermal maturation** *GEOPHYSICS*  
Allan, A. M., Clark, A. C., Vanorio, T., Kanitpanyacharoen, W., Wenk, H.  
2016; 81 (3): D263-D281
- **The rock physics and geochemistry of carbonates exposed to reactive brines** *JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH*  
Clark, A. C., Vanorio, T.  
2016; 121 (3): 1497-1513
- **Pressure effects caused by CO<sub>2</sub> injection in the Snøhvit Field**  
Grude, S., Dvorkin, J., Clark, A., Vanorio, T., Landrø, M.  
2013

- **Metallic Coulomb blockade thermometry down to 10 mK and below** *REVIEW OF SCIENTIFIC INSTRUMENTS*  
CASPARIS, L., Meschke, M., Maradan, D., Clark, A. C., Scheller, C. P., Schwarzwaelder, K. K., Pekola, J. P., Zumbuehl, D. M.  
2012; 83 (8)
- **Method for cooling nanostructures to microkelvin temperatures** *REVIEW OF SCIENTIFIC INSTRUMENTS*  
Clark, A. C., Schwarzwaelder, K. K., BANDI, T., Maradan, D., Zumbuehl, D. M.  
2010; 81 (10)
- **Influence of Ortho-H-2 Clusters on the Mechanical Properties of Solid Para-H-2** *JOURNAL OF LOW TEMPERATURE PHYSICS*  
Clark, A. C., Cheng, Z. G., Bowne, M., Lin, X., Chan, M. H.  
2010; 158 (5-6): 867-881
- **Heat Capacity Peak in Solid He-4: Effects of Disorder and He-3 Impurities (vol 102, 125302, 2009)** *PHYSICAL REVIEW LETTERS*  
Lin, X., Clark, A. C., Cheng, Z. G., Chan, M. H.  
2009; 103 (25)
- **Heat Capacity Peak in Solid He-4: Effects of Disorder and He-3 Impurities** *PHYSICAL REVIEW LETTERS*  
Lin, X., Clark, A. C., Cheng, Z. G., Chan, M. H.  
2009; 102 (12)
- **Thermal history of solid He-4 under oscillation** *PHYSICAL REVIEW B*  
Clark, A. C., Maynard, J. D., Chan, M. H.  
2008; 77 (18)
- **Effect of He-3 impurities on the nonclassical response to oscillation of solid He-4** *PHYSICAL REVIEW LETTERS*  
Kim, E., Xia, J. S., West, J. T., Lin, X., Clark, A. C., Chan, M. H.  
2008; 100 (6)
- **Probable heat capacity signature of the supersolid transition** *NATURE*  
Lin, X., Clark, A. C., Chan, M. H.  
2007; 449 (7165): 1025-1028
- **Nonclassical rotational inertia in helium crystals** *PHYSICAL REVIEW LETTERS*  
Clark, A. C., West, J. T., Chan, M. H.  
2007; 99 (13)
- **Search for superfluidity in solid hydrogen** *PHYSICAL REVIEW LETTERS*  
Clark, A. C., Lin, X., Chan, M. H.  
2006; 97 (24)
- **Specific heat of solid helium** *International Symposium on Quantum Fluids and Solids (QFS 2004)*  
Clark, A. C., Chan, M. H.  
SPRINGER/PLENUM PUBLISHERS.2005: 853-58
- **Quartz crystal microbalance study of superfluid He-4 films on gold and porous gold surfaces** *13th International Symposium on Quantum Fluids and Solids*  
Hieda, M., Clark, A. C., Chan, M. H.  
SPRINGER/PLENUM PUBLISHERS.2004: 91-96
- **The growth of intermetallic compounds at Sn-Ag-Cu solder/Cu and Sn-Ag-Cu solder/Ni interfaces and the associated evolution of the solder microstructure** *Annual Meeting of the TMS*  
Zribi, A., Clark, A., Zavaliij, L., Borgesen, P., Cotts, E. J.  
SPRINGER.2001: 1157-64