

Peer review publications:

Accepted:

Commer, M., Alumbaugh, D. L., Hoversten, G. M., Um, E. S., Vasco, D. W., Wilt, M., Nichols E., Marchesini P., & Macquet, M. (2022). [Enhanced Multi-Dimensional Inversion Through Target-Specific Inversion Parameter Bounds With an Application to Crosswell Electromagnetic for Sequestration Monitoring](#).

Isaac, J. H., & Lawton, D. C. (2016). [A case study showing the value of multioffset synthetic seismograms in seismic data interpretation](#). *Interpretation*, 4(4), T455-T459.

Kolkman-Quinn, B., Lawton, D. C., & Macquet, M. (2023). [CO2 leak detection threshold using vertical seismic profiles](#). *International Journal of Greenhouse Gas Control*, 123, 103839.

Lawton, D. C., Dongas, J., Osadetz, K., Saeedfar, A., & Macquet, M. (2019). [Development and analysis of a geostatic model for shallow CO2 injection at the Field Research Station, Southern Alberta, Canada](#). *Geophysics and Geosequestration*. Cambridge University Press, Cambridge, 280, 296.

Li, T., Gu, Y. J., Lawton, D. C., Gilbert, H., Macquet, M., Savard, G., Wang, J., Innanen, K. A. & Yu, N. (2022). [Monitoring CO2 Injection at the CaMI Field Research Station Using Microseismic Noise Sources](#). *Journal of Geophysical Research: Solid Earth*, 127(12), e2022JB024719.

Macquet, M., Lawton, D. C., Saeedfar, A., & Osadetz, K. G. (2019). [A feasibility study for detection thresholds of CO2 at shallow depths at the CaMI Field Research Station, Newell County, Alberta, Canada](#). *Petroleum Geoscience*, 25(4), 509-518.

Macquet, M., Lawton, D. C., Osadetz, K. G., Maidment, G., Bertram, M. B., Hall, K. W., Kolkman-Quinn, B., Monsegny Parra, J., Race F., Savard, G., & Wang, Y. (2022). [Overview of Carbon Management Canada's pilot-scale CO2 injection site for developing and testing monitoring technologies for carbon capture and storage, and methane detection](#). *CSEG Recorder*, 47, 1-27.

Mayer B., Humez P., Becker V., Nightingale M., Ing J., Kingston A., Clarckson C., Cahill A., Parker E., Cherry J., Millot R., Kloppmann W., Osadetz K., and Lawton D., (2015). [Prospects and limitations of chemical and isotopic groundwater monitoring to assess the potential environmental impacts of unconventional oil and gas development](#). *Procedia Earth and Planetary Science*, 13, 320-323.

Nyffenegger, P. A., Tinker, M. A., Zhang, J., Grant, E. B., Hutchenson, K. D., & Lawton, D. C. (2022). [Compact phased arrays for microseismic monitoring](#). *First Break*, 40(4), 69-74.

Ourabah, A., & Chatenay, A. (2022). [Unlocking ultra-high-density seismic for CCUS applications by combining nimble nodes and agile source technologies](#). *The Leading Edge*, 41(1), 27-33.

Pan, W., Qu, L., Innanen, K. A., Dettmer, J., Macquet, M., Lawton, D., & Wang, Y. (2023). [Imaging near-surface S-wave velocity and attenuation models by full-waveform inversion with distributed acoustic sensing-recorded surface waves](#). *Geophysics*, 88(1), R65-R78.

Raad, S. M. J., Lawton, D., Maidment, G., & Hassanzadeh, H. (2021). [Transient non-isothermal coupled wellbore-reservoir modeling of CO₂ injection—Application to CO₂ injection tests at the CaMI FRS site, Alberta, Canada](#). *International Journal of Greenhouse Gas Control*, 111, 103462.

Raad, S. M. J., Lawton, D., Maidment, G., & Hassanzadeh, H. (2022). [Sensitivity analysis of operating parameters affecting CO₂ wellbore transient flow at the CaMI Field Research Station, Alberta, Canada](#). *International Journal of Greenhouse Gas Control*, 114, 103594.

Utting, N., Osadetz, K., Darrah, T. H., Brennwald, M. S., Mayer, B., & Lawton, D. (2022). [Methods and benefits of measuring non-hydrocarbon gases from surface casing vents](#). *International Journal of Environmental Science and Technology*, 1-18.

Yu, X., Ahmadinia, M., Shariatipour, S. M., Lawton, D., Osadetz, K., & Saeedfar, A. (2020). [Impact of Reservoir Permeability, Permeability Anisotropy and Designed Injection Rate on CO₂ Gas Behavior in the Shallow Saline Aquifer at the CaMI Field Research Station, Brooks, Alberta](#). *Natural Resources Research*, 29, 2735-2752.

Submitted:

Trans-dimensional inversion of multimode seismic surface wave data from a trenched distributed acoustic sensing survey, Qu L., Dettmer J., Hall K., Innanen K., Macquet M., and Lawton D., submitted to Geophysical Journal International

Performance comparison of compact phased arrays and traditional seismic networks for microseismic monitoring at a CO₂ sequestration test site, Zhang J., Hutchenson K.D., Nyffengger P.A., Grant E.B., Jennings J., Tinker M.A., Macquet M., and Lawton D, submitted to First Break

Time-lapse attenuation variations using distributed acoustic sensing vertical seismic profile data during CO₂ injection at CaMI Field Research Station, Alberta, Canada, Yichuan Wand and Don Lawton, submitted to Geophysics

