

Qian Yang

Professional Summary

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Business address: The University of Texas at Austin
Bureau of Economic Geology
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Areas of Expertise

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Satellite Geodesy (GPS/InSAR)

Professional Preparation

Academic Background

Ph.D. Geology, School of Geosciences, University of South Florida, August 2016

BE, Geodesy and Geomatics, Wuhan University, China, June 2010

Professional Appointments

Research Associate, Bureau of Economic Geology, The University of Texas at Austin (February 2018-Present)

Data Scientist Intern, Bitmotive LLC (November 2016-October 2017)

Research Assistant, University of South Florida (January 2012-August 2016)

Research Assistant, University of Miami (August 2010-December 2011)

Dissertations

Applications of satellite geodesy in environmental and climate change, University of South Florida, 2016.

Presentations

Presentations

Insights from Midland Basin High-Performing Wells: presented at Tight Oil Resource Assessment Industrial Associates, Fall 2020 Annual Meeting, Virtually through the Bureau of Economic Geology, November 18, 2020.

Geologic Variability and Well Productivity in U.S. Oil Plays: The Efficiency of Completion Intensity and New Designs in Various Geologic Contexts: presented at Society of Petroleum Engineers/American Association of Petroleum Geologists/Society of Exploration of Geophysicists Unconventional Resources Technology Conference, virtual, July 2020.

Publications

Peer Reviewed Journal Articles

Scanlon, B. R., Reedy, R. C., Fakhreddine, S., Yang, Q., and Pierce, G., 2023, Drinking water quality and social vulnerability linkages at the system level in the United States: Environmental Research Letters, v. 18, no. 094039, 12 p., <http://doi.org/10.1088/1748-9326/ace2d9>.

Scanlon, B. R., Fakhreddine, S., Reedy, R. C., Yang, Q., and Malito, J. G., 2022, Drivers of

spatiotemporal variability in drinking water quality in the United States: *Environmental Science & Technology*, v. 56, no. 18, p. 12965-12974, <http://doi.org/10.1021/acs.est.1c08697>.

Scanlon, B. R., Ikonnikova, S., Yang, Q., and Reedy, R. C., 2020, Will water issues constrain oil and gas production in the United States?: *Environmental Science and Technology*, v. 54, no. 6, p. 3510-3519, <http://doi.org/10.1021/acs.est.9b06390>.

Scanlon, B. R., Reedy, R. C., Xu, P., Engle, M., Nicot, J. P., Yoxtheimer, D., Yang, Q., and Ikonnikova, S., 2020, Can we beneficially reuse produced water from oil and gas extraction in the U.S.?: *Science of the Total Environment*, v. 717, no. 137085, 12 p., <http://doi.org/10.1016/j.scitotenv.2020.137085>.

Sun, A. Y., Zhong, Z., Jeong, H., and Yang, Q., 2019, Building complex event processing capability for intelligent environmental monitoring: *Environmental Modelling & Software*, v. 116, p. 1-6, <http://doi.org/10.1016/j.envsoft.2019.02.015>.

Yang, Q., and Scanlon, B. R., 2019, How much water can be captured from flood flows to store in depleted aquifers for mitigating floods and droughts? A case study from Texas, US: *Environmental Research Letters*, v. 14, no. 054011, <http://doi.org/10.1088/1748-9326/ab148e>.

Zhong, Z., Sun, A. Y., Yang, Q., and Ouyang, Q., 2019, A deep learning approach to anomaly detection in geological carbon sequestration sites using pressure measurements: *Journal of Hydrology*, v. 573, p. 885-894, <http://doi.org/10.1016/j.jhydrol.2019.04.015>.

Yang, Q., Dixon, T. H., Myers, P. G., Bonin, J., Chambers, D., van den Broeke, M. R., Ribergaard, M. H., and Mortensen, J., 2016, Recent increases in Arctic freshwater flux affects Labrador Sea convection and Atlantic overturning circulation: *Nature Communications*, 7 p., <http://doi.org/10.1038/ncomms10525>.

Karegar, M. A., Dixon, T. H., Malservisi, R., Yang, Q., Hosseini, S. A., and Hovorka, S. D., 2015, GPS-based monitoring of surface deformation associated with CO₂ injection at an enhanced oil recovery site: *International Journal of Greenhouse Gas Control*, v. 41, p. 116-126, <http://doi.org/10.1016/j.ijggc.2015.07.006>.

Yang, Q., Zhao, W., Dixon, T. H., Amelung, F., Han, W. S., and Li, P., 2015, InSAR monitoring of ground deformation due to CO₂ injection at an enhanced oil recovery site, West Texas: *International Journal of Greenhouse Gas Control*, v. 41, p. 20-28, <http://doi.org/10.1016/j.ijggc.2015.06.016>.

Yang, Q., Wdowinski, S., and Dixon, T. H., 2013, Annual variation of coastal uplift in Greenland as an indicator of variable and accelerating ice mass loss: *Geochemistry, Geophysics, Geosystems*, v. 14, no. 5, p. 1569-1589, <http://doi.org/10.1002/ggge.20089>.

Patents

Wan, J., Kai, H., Chen, F., Yang, Q., Wei, T., Sheng, W., and Qin, X., Method and device for determining seal level elevation by extracting GPS (Global Position System) signal gravity frequency shift: Patent Number CN 201010112146, received May 14, 2014.

Non Peer Reviewed Journal Articles

Ikonnikova, S., Yang, Q., Smye, K., and McDaid, G., 2020, Revisiting production outlooks of the Eagle Ford and Bakken plays: analysis of the well productivity and play economics changes over the last 5 years: *Society of Petroleum Engineers/American Association of Petroleum Geologists/Society of Exploration Geophysicists, Proceedings, Unconventional Resources Technology Conference*, Austin, Tex., July 20-22, no. 3029, 9 p., <http://doi.org/10.15530/urtec-2020-3029>.

Smye, K. M., Ikonnikova, S., Yang, Q., McDaid, G., and Goodman, E., 2020, Geologic variability and well productivity in U.S. oil plays: the efficiency of completion intensity and new designs in various geologic contexts: *Society of Petroleum Engineers/American Association of Petroleum Geologists/Society of Exploration Geophysicists, Proceedings, Unconventional Resources*

Technology Conference, Austin, Tex., July 20-22, no. 3317, 10 p., <http://doi.org/10.15530/urtec-2020-3317>.

Published Abstracts

Scanlon, B. R., Reedy, R. C., Yang, Q., and Fakhreddine, S., 2020, How safe are United States public water supply systems? (abs.): AGU Fall Meeting 2017, no. H105-01.

Ikonnikova, S., del Carpio Neyra, V., Gherabati, A., Yang, Q., and Goodman, E., 2019, Analysis of individual-well performance, economics and projected drilling, Wolfcamp A and B, Delaware Basin (ext. abs.): Tight Oil Resource Assessment (TORA) Research Consortium Annual Meeting, The University of Texas at Austin, Bureau of Economic Geology, p. 74-83.

Scanlon, B. R., Yang, Q., Ikonnikova, S., and Reedy, R., 2019, Managing water issues related to unconventional oil and gas production in the U.S. (abs.): Geological Society of America Abstracts with Programs, v. 51, no. 5, abs. no. 175-7, 1 p., <http://doi.org/10.1130/abs/2019AM-334113>.

Yang, Q., and Scanlon, B. R., 2019, Challenges with using flood water for managed aquifer recharge for sustainable water resources management in Texas (abs.): American Geophysical Union Fall Meeting 2019, abs. no. H11L-1660, 1 p.

Ikonnikova, S., Hamlin, H. S., Yang, Q., del Carpio Neyra, V., Gulen, G., and Fairhurst, B., 2018, Individual well productivity and profitability of Midland Wolfcamp A and B wells (ext. abs.): Tight Oil Resource Assessment (TORA) Research Consortium Annual Meeting, p. 89-95.

Ikonnikova, S., Yang, Q., del Carpio Neyra, V., and Gulen, G., 2018, Update on the Bakken and Three Forks production outlook (ext. abs.): Tight Oil Resource Assessment (TORA) Research Consortium Annual Meeting, p. 47-51.

Published Datasets

Scanlon, B. R., Reedy, R. C., Xu, P., Engle, M., Nicot, J.-P., Yoxtheimer, D., Yang, Q., and Ikonnikova, S., 2020, Datasets associated with investigating the potential for beneficial reuse of produced water from oil and gas extraction outside of the energy sector: Data in Brief, v. 30, no. 105406, 4 p., <http://doi.org/10.1016/j.dib.2020.105406>.