



Nanzhe Wang

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Bio

STANFORD ADVISORS

- Louis Durlofsky, Postdoctoral Faculty Sponsor

LINKS

- Stanford Center for Carbon Storage: <https://sccs.stanford.edu/>

Research & Scholarship

LAB AFFILIATIONS

- Louis Durlofsky, Stanford Center for Carbon Storage (9/11/2023)

Publications

PUBLICATIONS

- **GANSim-surrogate: An integrated framework for stochastic conditional geomodelling** *JOURNAL OF HYDROLOGY*
Song, S., Zhang, D., Mukerji, T., Wang, N.
2023; 620
- **Surrogate and inverse modeling for two-phase flow in porous media via theory-guided convolutional neural network** *JOURNAL OF COMPUTATIONAL PHYSICS*
Wang, N., Chang, H., Zhang, D.
2022; 466
- **Efficient well placement optimization based on theory-guided convolutional neural network** *JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING*
Wang, N., Chang, H., Zhang, D., Xue, L., Chen, Y.
2022; 208
- **Theory-guided Auto-Encoder for surrogate construction and inverse modeling** *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING*
Wang, N., Chang, H., Zhang, D.
2021; 385
- **Deep-Learning-Based Inverse Modeling Approaches: A Subsurface Flow Example** *JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH*
Wang, N., Chang, H., Zhang, D.
2021; 126 (2)
- **Efficient uncertainty quantification for dynamic subsurface flow with surrogate by Theory-guided Neural Network** *COMPUTER METHODS IN APPLIED MECHANICS AND ENGINEERING*
Wang, N., Chang, H., Zhang, D.
2021; 373

- **Deep learning of subsurface flow via theory-guided neural network** *JOURNAL OF HYDROLOGY*

Wang, N., Zhang, D., Chang, H., Li, H.

2020; 584