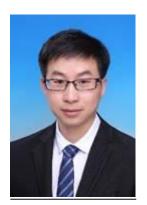
# Resume of Xiang DING

## **Basic Information**



School: School of Civil, Architecture, and

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Gender: Male
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Interest of Rock Mechanics

research:

### Academic Background

From September 2003 to July 2007, China University of Petroleum-Beijing, Bachelor's degree in Civil Engineering;

From September 2007 to July 2010, China University of Petroleum-Beijing, Master's degree of Geotechnical Engineering;

From September 2013 to November 2017, China University of Petroleum-Beijing, Ph.D of Mechanics.

# **Representative Projects**

- 1. Hydraulic fracturing mechanism in viscoelastic HDR formation
- 2. Testing of Micro Mechanical Properties of Granite
- 3. Numerical simulation of crack initiation and propagation and influencing factors in highly deviated clastic rock wells

# Representative Articles

- 1. Ding X, Zhang G, Zhao B, et al. Unexpected viscoelastic deformation of tight sandstone: Insights and predictions from the fractional Maxwell model[J]. Scientific Reports, 2017, 7(1).
- 2 Ding X, Zhang G. Coefficient of equivalent plastic strain based on the associated flow of the Drucker-Prager criterion[J]. International Journal of Non-Linear Mechanics, 2017, 93:15-20.
- 3. Ding X, Zhang F, Zhang G. Modelling of time-dependent proppant embedment and its influence on tight gas production[J]. Journal of Natural Gas science and Engineering, 2020:103519.
- 4. Ding X, Zhang F, Zhang G, et al.Modeling of hydraulic fracturing in viscoelastic formations with the fractional Maxwell model[J]. Computers and Geotechnics, 2020, 126:103723.
- 5. Ding X, Chen N, Zhang F, et al. Evolution of Strength Parameters for Sandstone

- Specimens during Triaxial Compression Tests[J]. Advances in Civil Engineering, 2021, 2021:1-11.
- 6. Ding, Xiang; Zhang, Fan; Chen, Na; Zhang, Yan. Numerical Modeling of Proppant Embedment in Viscoelastic Formations with the Fractional Maxwell Model[J]. ACS omega, 2021, 6, 20398–20407
- 7. Ding, Xiang; Chen, Na; Zhang, Yan; Zhang, Fan. Analytical and Numerical Modelling of Creep Deformation of Viscoelastic Thick-Walled Cylinder with Fractional Maxwell Model[J]. Materials, 2021, 14(17), 4849
- 8. Chen, Na; Du, Chang-jie; Ding, Xiang. Intelligent Interpretation of the Geometric Properties of Rock Mass Discontinuities Based on an Unmanned Aerial Vehicle[J]. Frontiers in Earth Science, 2021, 665.
- Ding X, Zhang G, Li C, et al. A Fractional Calculus Model for Viscoelasticity of Tight Sandstone[C]//51st US Rock Mechanics / Geomechanics Symposium. American Rock Mechanics Association, 2017.
- 10. Ding X, Wang Z, Zhang G, et al. Dilation of Shales under Triaxial Compression [C]//50th US Rock Mechanics/Geomechanics Symposium. American Rock Mechanics Association, 2016.
- 11. Ding, X.; Wang, Z.Y.; Zhang, G.Q. Method of Poisson's ratio determination based on plastic volumetric strain in triaxial experiment of rock[C]//Rock Mechanics and Rock Engineering: From the Past to the Future, v1, p 277-282, 2016.
- 12. X Ding, F Zhang, L Yang, GQ Zhang. Modelling Proppant Embedment in Viscoelastic Formations with the Fractional Maxwell Model. [C]//ISRM International Symposium-10th Asian Rock Mechanics Symposium. International Society for Rock Mechanics, Singapore, 2018.
- 13. Ye Z, Chen D, Pan Z, et al. An improved Langmuir model for evaluating methane adsorption capacity in shale under various pressures and temperatures [J]. Journal of Natural Gas Science and Engineering, 2016, 31: 658-680.