

Resume of Xiang DING

Basic Information



School :	School of Civil, Architecture, and Environment
Gender:	Male
Date of Birth:	1986-06
Title:	Lecturer
Education:	Ph.D of Mechanics
Tutor:	Master degree
Email:	dingxiang@hbut.edu.cn
Interest of research:	Rock Mechanics

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.
9. 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.