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| **工作经历** |
| 2020.03-至今 | 青岛理工大学 副教授 |
| **研究方向** |
| （1）多孔介质多物理场耦合数值模拟及应用（2）基于机器学习的地层渗流模型反演预测（3）油气藏试井解释及相关软件开发（4）基于机器学习的油气藏自动历史拟合 |
| **纵向课题** |
| 国家自然科学基金青年基金（51804325） | 国家基金委 | 2019.01-2021.12 |
| 中国博士后科学基金面上项目 | 中国博士后科学基金会 | 2018.01-2019.12 |
| 山东省博士后创新项目 | 山东省人社厅 | 2019.01-2019.12 |
| **横向课题** |
| **XX井组干扰试井，参与** |
| **基于模型驱动的油藏拟合与优化软件开发，参与** |
| **基于流场调控机器学习模型的方案优化方法研究及软件编制，技术负责人** |
| **所获奖励** |
| 科技进步二等奖 | 教育部 | 2015 |
|  |
| **代表性科研成果** |
| [1] **Piyang Liu**, Jingfa Li, Shuyu Sun, et al. Numerical investigation of carbonate acidizing with gelled acid using a coupled thermal-hydrologic-chemical model[J]. International Journal of Thermal Sciences, 2021. [2] **Piyang Liu**, Xiaoxia Ren, Liang Kong, et al. Three-dimensional simulation of acidizing process in carbonate rocks using the Darcy–Forchheimer framework[J]. Oil & Gas Science and Technology, 2020.[3] **Piyang Liu**, Xia Yan, Jun Yao, et al. Modeling and analysis of the acidizing process in carbonate rocks using a two-phase thermal-hydrologic-chemical coupled model[J]. Chemical Engineering Science, 2019. (IF: 3.372)[4] **Piyang Liu**, Tao Zhang, Shuyu Sun, et al. A tutorial review of reactive transport modeling and risk assessment for geologic CO2 sequestration. Computers and Geoscience,2019. (IF: 2.721)[5] **Piyang Liu**, Jun Yao, Gary Couples, et al. A general method for simulating reactive dissolution in carbonate rocks with arbitrary geometry[J], Computational Geosciences, 2018. (IF: 2.108)[6] **Piyang Liu**, Jun Yao, Gary Douglas Couples, et al. 3-D Modelling and Experimental Comparison of Reactive Flow in Carbonates under Radial Flow Conditions, Scientific Reports, 2017. (IF: 4.36)[7]**Piyang Liu**, Jun Yao, Gary Douglas Couples, et al. Numerical modelling and analysis of reactive flow and wormhole formation in fractured carbonate rocks, Chemical Engineering Science, 2017. (IF: 3.372)[8] **Piyang Liu**, Jun Yao, Gary Douglas Couples, et al.  Modeling and simulation of wormhole formation during acidization of fractured carbonate rocks, Journal of Petroleum Science and Engineering, 2017. (IF: 2.886)[9] Jingzhe Li, **Piyang Liu**, Shuyu Sun, et al. Sedapp v2021: a nonlinear diffusion-based forward stratigraphic model for shallow marine environments[J]. Geoscientific Model Development, 2021.[10] Jingzhe Li, **Piyang Liu**, Jinliang Zhang, et al. Base Level Changes based on Basin Filling Modelling: a Case Study from the Paleocene Lishui Sag, East China Sea Basin[J]. Petroleum Science, 2020.[11] Xiaoxia Ren, Aifen Li, **Piyang Liu**, et al. Experiments and Modeling on the Influence of Interfacial Tension on Imbibition Height of Low-Permeability Reservoir[J]. Geofluids, 2020. [12] Xia Yan, Zhaoqin Huang, Jun Yao, Zhao Zhang, **Piyang Liu**. Numerical Simulation of Hydro-mechanical Coupling in Fractured Vuggy Porous Media Using the Equivalent Continuum Model and Embedded Discrete Fracture Model[J].Advances in Water Resources. [13] Wang, Dongying, Jun Yao, Mingyu Cai and **Piyang Liu**. Transient pressure and productivity analysis in carbonate geothermal reservoirs with changing external boundary flux[J]. Thermal Science 21 (2017): 177-184.[14] 姚军, **刘丕养**, 黄朝琴, 等. 碳酸盐岩油藏酸化施工最优注入条件影响因素分析[J]. 中国科学：技术科学, 2017, 47(7): 692-707.8. (EI)[15] 姚军, **刘丕养**, 黄朝琴等. 碳酸盐岩油藏酸岩反应流动模拟研究进展[J]. 地球科学, 2017,42(8): 1263-1272. (EI)[16] 姚军, **刘丕养**, 吴明录等. 裂缝性油气藏压裂水平井试井分析[J].中国石油大学学报（自然科学版）,2013, 37(5): 107-113. (EI) |