

Publications

Patent

- Adidharma, H., Tan, S. P., **Dejam, M.** and Qiu, X.: Methods and Systems for Isochoric Measurements Using Differential Scanning Calorimetry, **United States Patent US2023/0085535A1 (Application Number: 17/987,406)**, 2023. URL: <https://patentcenter.uspto.gov/applications/17987406>

Book

- **Dejam, M.**: Well Logging: Petrophysical Evaluation of Hydrocarbon Reservoirs Using Well Logging Data and Tools Operation, Tehran: **Iranian Offshore Oil Company**, 2008. ISBN: [978-964-04-2264-9](#)

Journal Articles

- **Dejam, M.** and Hassanzadeh, H. (2026), Reduced-order model for solute transport in mixed electro-osmotic and pressure-driven flows of viscoelastic fluids in microchannels. **Physical Review E**, 114(1): 015105. DOI: [10.1103/82vs-4hyj](#)
- **Dejam, M.** and Hassanzadeh, H. (2026), Solute dispersion due to a velocity field in a channel with leaky walls. **International Journal of Heat and Mass Transfer**, 270: 129241. DOI: [10.1016/j.ijheatmasstransfer.2026.129241](#)
- Nwankwo, I. V. and **Dejam, M.** (2026), Insight into Mowry Shale of Rocky Mountain Basins, USA. **Marine Geoscience and Energy Resources**, 193: 207849. DOI: [10.1016/j.marger.2026.207849](#)
- Owusu-Banahene, E. K., Tan, S. P., **Dejam, M.** and Adidharma, H. (2026), Disclosing the true critical point of fluids confined in nanopores. **Langmuir**, 42(8): 6191-6200. DOI: [10.1021/acs.langmuir.5c05643](#)
- **Dejam, M.** (2025), Modeling tracer dispersion in a coupled system composed of a proppant-packed hydraulic fracture and a tight porous medium. **Advances in Water Resources**, 206: 105122. DOI: [10.1016/j.advwatres.2025.105122](#)
- Nwankwo, I. V., **Dejam, M.** and Quillinan, S. A. (2025), A critical review of experimental and theoretical studies on shale geomechanical and deformation properties, fluid flow behavior, and coupled flow and geomechanics effects during production. **International Journal of Coal Geology**, 306: 104777. DOI: [10.1016/j.coal.2025.104777](#)
- Nwankwo, I. V., **Dejam, M.**, Fischer, T. B. and Quillinan, S. A. (2025), A comprehensive review on analysis of permeability measurements and surfactant enhanced oil recovery in shale. **Physics of Fluids**, 37(7): 071305. DOI: [10.1063/5.0272106](#)
- Owusu-Banahene, E. K., Yang, H., **Dejam, M.** and Adidharma, H. (2025), Capillary condensation measurements in multimodal nanoporous media and pore critical point determination: Methane/propane mixture. **Langmuir**, 41(16): 10152-10160. DOI: [10.1021/acs.langmuir.4c05014](#)
- **Dejam, M.** and Hassanzadeh, H. (2024), Dispersion in a slit with crossflow filtration through a porous wall. **Physics of Fluids**, 36(9): 092001. DOI: [10.1063/5.0226175](#)
- **Dejam, M.** and Hassanzadeh, H. (2024), Two-dimensional counter-current capillary imbibition of a wetting phase into a partially submerged porous cylindrical matrix block. **Physics of Fluids**, 36(5): 056614. DOI: [10.1063/5.0212788](#)
- Chen, F., Wang, S., **Dejam, M.** and Nasrabadi, H. (2024), Molecular simulation of competitive adsorption of hydrogen and methane: Analysis of hydrogen storage feasibility in depleted shale

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- **Dejam, M.** and Hassanzadeh, H. (2023), Upscaling of dispersion in gas-liquid absorption on an inclined surface. **Physical Review E**, 108(3): 035104. DOI: [10.1103/PhysRevE.108.035104](https://doi.org/10.1103/PhysRevE.108.035104)
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Presentations

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