

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. (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 gas reservoirs. **Society of Petroleum Engineers Journal**, 29(6): 3412-3422. DOI: [10.2118/212218-PA](#)
- **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](#)
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- Dordzie, G. and **Dejam, M.** (2023), Implementation of surfactant for alternating injection with low salinity water and γ -alumina nanoparticles in fractured carbonate reservoirs: An experimental study. **Energy & Fuels**, 37(17): 12865-12878. DOI: [10.1021/acs.energyfuels.3c02212](#)
- Dordzie, G. and **Dejam, M.** (2023), Viscosity behavior for zirconia and γ -alumina nanoparticles in different electrolytic solutions: An experimental investigation. **Fuel**, 348: 128522. DOI: [10.1016/j.fuel.2023.128522](#)
- Mirchi, V. and **Dejam, M.** (2023), Effect of rock surface wettability on hydrogen-cushion gas adsorption with application to hydrogen storage in depleted oil and gas reservoirs. **Journal of Energy Storage**, 73(C): 109152. DOI: [10.1016/j.est.2023.109152](#)

- Yang, H., **Dejam, M.**, Tan, S. P. and Adidharma, H. (2023), Experimental study on phase transitions of carbon dioxide confined in nanopores: Evaporation, melting, sublimation, and triple point. *Langmuir*, 39(45): 16060-16068. DOI: [10.1021/acs.langmuir.3c02209](https://doi.org/10.1021/acs.langmuir.3c02209)
- Mirchi, V., **Dejam, M.**, Alvarado, V. and Akbarabadi, M. (2023), Effect of cushion gas on hydrogen/brine flow behavior in oil-wet rocks with application to hydrogen storage in depleted oil and gas reservoirs. *Energy & Fuels*, 37(19): 15231-15243. DOI: [10.1021/acs.energyfuels.3c02884](https://doi.org/10.1021/acs.energyfuels.3c02884)
- Yang, H., Jayaatmaja, K., Qiu, X., Fan, M., **Dejam, M.**, Tan, S. P. and Adidharma, H. (2023), Accurate measurement of the isothermal heat of capillary condensation in nanopores using differential scanning calorimetry and adsorption/desorption experiments. *The Journal of Physical Chemistry C*, 127(45): 21980-21988. DOI: [10.1021/acs.jpcc.3c05402](https://doi.org/10.1021/acs.jpcc.3c05402)
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- Owusu-Banahene, E. K., Yang, H., **Dejam, M.** and Adidharma, H.: Capillary Condensation Measurements in Multimodal Nanoporous Media, ***Wyoming's Energy Future Symposium***, Laramie, Wyoming, USA, 12 September 2024.

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