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Publications

Journals

- Daraei, Mehdi and Bayet-Goll, Aram and Isanejad, Meysam and Karimi, Soroush and Esrafil-Dizaji, Behrooz, "Paleoenvironmental evolution and source rock characterization of the Middle Jurassic Sargelu Formation (Dudan and Kezi sections, Zagros, Iran): insights into Tethyan basin dynamics and climate perturbations", International Journal of Earth Sciences, Vol. 115, NO. 1, 2026, doi: [10.1007/s00531-025-02550-x](https://doi.org/10.1007/s00531-025-02550-x)
- Talebi, Elham and Mehrabi, Hamzeh and Daraei, Mehdi and Navidtalab, Amin and Bayet-Goll, Aram, "Palaeoenvironmental interpretation and isotope stratigraphy of the Campanian-Danian successions in the Zagros Foreland Basin (Kabir Kuh, Lurestan, Iran)", Cretaceous Research, Vol. 168, 2025, doi: [10.1016/j.cretres.2024.106058](https://doi.org/10.1016/j.cretres.2024.106058)
- Bayet-Goll, Aram and Sharafi, Mahmoud and Daraei, Mehdi, "Ichnological discrimination of hemipelagic-dominated slope versus basin-floor mudstones: Insights from early Viséan successions of a distally steepened ramp, northern Iran", Depositional Record, Vol. 11, NO. 5, 2025, doi: [10.1002/dep2.70034](https://doi.org/10.1002/dep2.70034)
- Daraei, Mehdi and Afrazi, Saeed and Vasighi, Mahdi and Masoumi, Zohreh, "Comparison between Core- and Well Log-Based Identification of Flow Units in the Mid-Cretaceous



Bangestan Group Reservoir, Mansuri Field, SW Iran: Implications for Regional Characterization", Journal of Petroleum Geology, Vol. 48, NO. 1, pp. 3-28, 2025, doi: [10.1111/jpg.12876](https://doi.org/10.1111/jpg.12876)

- Álvaro, J. Javier and Bayet-Goll, Aram and Daraei, Mehdi and Martínez-Benítez, Blanca, "Cambrian reef complexes and pelmatozoan-rhynchonelliform mean meadows from the Alborz Mountains, northern Iran: A reassessment of the Miaolingian-Furongian paucity of metazoan reefs paradigm", *Sedimentary Geology*, Vol. 489, 2025, doi: [10.1016/j.sedgeo.2025.106959](https://doi.org/10.1016/j.sedgeo.2025.106959)
- Bayet-Goll, Aram and Sharafi, Mahmoud and Hasanlou, Mitra and Daraei, Mehdi, "Reconstruction of Tournaisian-Viséan tectonic and climatically induced event histories of the Mobarak carbonate platform along depositional strike in the northeastern margin of Gondwana: Constraints from high-resolution cycle and sequence stratigraphy", *Marine and Petroleum Geology*, Vol. 155, 2023, doi: [10.1016/j.marpetgeo.2023.106356](https://doi.org/10.1016/j.marpetgeo.2023.106356)
- Daraei, Mehdi and Talebi, Elham and Navidtalab, Amin, "The role of heterogeneity controls in shaping the Asmari Formation reservoirs in the Zagros region, Iran: insights for regional characterization", *Geopersia*, Vol. 13, NO. 2, pp. 385-414, 2023, doi: [10.22059/geope.2023.360119.648714](https://doi.org/10.22059/geope.2023.360119.648714)
- Daraei, Mehdi and Bayet-Goll, Aram and Geyer, Gerd and Bahrami, Nasrin, "Late Cambrian climate change recorded by a shift from an arid carbonate platform to a storm-dominated cool-water platform at the Gondwana margin (Alborz Zone, Iran)", *Geological Journal*, Vol. 58, NO. 2, pp. 795-824, 2023, doi: [10.1002/gj.4624](https://doi.org/10.1002/gj.4624)
- Bayet-Goll, Aram and Daraei, Mehdi and Geyer, Gerd and Neto de Carvalho, Carlos and Bahrami, Nasrin, "Exotic facies episodes of a carbonate platform: implications for middle and late Cambrian ecosystems and impact of bioturbation in the



Alborz Basin, Iran", Geological Society Special Publication, Vol. 522, pp. 141-174, 2023, doi: [10.1144/SP522-2020-269](https://doi.org/10.1144/SP522-2020-269)

- Bayet-Goll, Aram and Sharafi, Mahmoud and Daraei, Mehdi and Nasiri, Yaghoub, "The influence of hybrid sediment gravity flows on distribution and composition of trace-fossil assemblages: Ordovician succession of the north-eastern Alborz Range of Iran", *Sedimentology*, Vol. 70, NO. 3, pp. 783-827, 2023, doi: [10.1111/sed.13058](https://doi.org/10.1111/sed.13058)
- Bayet-Goll, Aram and Buatois, Luis A. and Mángano, María Gabriela and Daraei, Mehdi, "The interplay of environmental constraints and bioturbation on matground development along the marine depositional profile during the Ordovician Radiation", *Geobiology*, Vol. 20, NO. 2, pp. 233-270, 2022, doi: [10.1111/gbi.12473](https://doi.org/10.1111/gbi.12473)
- Bayet-Goll, Aram and Knaust, Dirk and Daraei, Mehdi and Bahrami, Nasrin and Bagheri, Farzaneh, "Rosselia ichnofabrics from the Lower Ordovician of the Alborz Mountains (northern Iran): palaeoecology, palaeobiology and sedimentology", *Palaeobiodiversity and Palaeoenvironments*, Vol. 102, NO. 1, pp. 103-128, 2022, doi: [10.1007/s12549-021-00493-0](https://doi.org/10.1007/s12549-021-00493-0)
- Bayet-Goll, Aram and Daraei, Mehdi and Seginsara, Milad Imani, "Palaeogeographic reconstruction and sequence architecture of the middle-upper Jurassic successions of Hawraman Basin (NW Iran): Implications for tectono-depositional processes of the northeastern passive margin of the Arabian Plate", *Geological Journal*, Vol. 57, NO. 5, pp. 2058-2093, 2022, doi: [10.1002/gj.4407](https://doi.org/10.1002/gj.4407)
- Bayet-Goll, Aram and Uchman, Alfred and Daraei, Mehdi and de Carvalho, Carlos Neto, "Crowded *Trichophycus* ichnofabrics in the early Ordovician successions of central Iran: insight into the Ordovician radiation", *Lethaia*, Vol. 54, NO. 3, pp. 314-329, 2021, doi: [10.1111/let.12404](https://doi.org/10.1111/let.12404)
- Bayet-Goll, Aram and Daraei, Mehdi and Geyer, Gerd and



Bahrami, Nasrin and Bagheri, Farzaneh, "Environmental constraints on the distribution of matground and mixground ecosystems across the Cambrian Series 2-Miaolingian boundary interval in Iran: A case study for the central sector of northern Gondwana", *Journal of African Earth Sciences*, Vol. 176, 2021, doi: [10.1016/j.jafrearsci.2021.104120](https://doi.org/10.1016/j.jafrearsci.2021.104120)

- Bayet-Goll, Aram and Daraei, Mehdi, "Palaeoecological, sedimentological and stratigraphical insights into microbially induced sedimentary structures of the lower Cambrian successions of Iran", *Sedimentology*, Vol. 67, NO. 6, pp. 3199-3235, 2020, doi: [10.1111/sed.12745](https://doi.org/10.1111/sed.12745)
- Bayet-Goll, Aram and Daraei, Mehdi and Taher, Seyedeh Parvin Mousavi and Etemad-Saeed, Najmeh and de Carvalho, Carlos Neto and Zandkarimi, Keyvan and Monaco, Paolo and Zohdi, Afshin and Rabbani, Javad and Nasiri, Yaghoub, "Variations of the trace fossil Zoophycos with respect to paleoenvironment and sequence stratigraphy in the Mississippian Mobarak Formation, northern Iran", *Palaeogeography, Palaeoclimatology, Palaeoecology*, Vol. 551, 2020, doi: [10.1016/j.palaeo.2020.109754](https://doi.org/10.1016/j.palaeo.2020.109754)
- Malekzadeh, Hamed and Daraei, Mehdi and Bayet-Goll, Aram, "Field-scale reservoir zonation of the Albian-Turonian Sarvak Formation within the regional-scale geologic framework: A case from the Dezful Embayment, SW Iran", *Marine and Petroleum Geology*, Vol. 121, 2020, doi: [10.1016/j.marpetgeo.2020.104586](https://doi.org/10.1016/j.marpetgeo.2020.104586)
- Bayet-Goll, Aram and de Carvalho, Carlos Neto and Daraei, Mehdi and Monaco, Paolo and Sharifi, Mahmoud, "Sequence stratigraphic and sedimentologic significance of the trace fossil Rhizocorallium in the Upper Triassic Nayband Formation, Tabas Block, Central Iran", *Palaeogeography, Palaeoclimatology, Palaeoecology*, Vol. 491, pp. 196-217, 2018, doi: [10.1016/j.palaeo.2017.12.013](https://doi.org/10.1016/j.palaeo.2017.12.013)
- Bayet-Goll, Aram and Esfahani, Fariba Shirezadeh and Daraei,



Mehdi and Monaco, Paolo and Sharafi, Mahmoud and Mohammadi, Amir Akbari, "Cyclostratigraphy across a Mississippian carbonate ramp in the Esfahan-Sirjan Basin, Iran: implications for the amplitudes and frequencies of sea-level fluctuations along the southern margin of the Paleotethys", International Journal of Earth Sciences, Vol. 107, NO. 6, pp. 2233-2263, 2018, doi: [10.1007/s00531-018-1597-7](https://doi.org/10.1007/s00531-018-1597-7)

- Bayet-Goll, Aram and Geyer, Gerd and Daraei, Mehdi, "Tectonic and eustatic controls on the spatial distribution and stratigraphic architecture of late early Cambrian successions at the northern Gondwana margin: The siliciclastic-carbonate successions of the Lalun Formation in central Iran", Marine and Petroleum Geology, Vol. 98, pp. 199-228, 2018, doi: [10.1016/j.marpetgeo.2018.08.002](https://doi.org/10.1016/j.marpetgeo.2018.08.002)
- Bayet-Goll, Aram and Daraei, Mehdi, "Ichnotaxonomy of trace fossil of the Upper Triassic Nayband Formation, Tabas Block, Central Iran", Geopersia, Vol. 7, NO. 2, pp. 199-218, 2017, doi: [10.22059/geope.2017.223046.648285](https://doi.org/10.22059/geope.2017.223046.648285)
- Daraei, Mehdi and Bayet-Goll, Aram and Ansari, Morteza, "An integrated reservoir zonation in sequence stratigraphic framework: A case from the Dezful Embayment, Zagros, Iran", Journal of Petroleum Science and Engineering, Vol. 154, pp. 389-404, 2017, doi: [10.1016/j.petrol.2017.04.038](https://doi.org/10.1016/j.petrol.2017.04.038)
- Gharechelou, Sajjad and Daraei, Mehdi and Amini, Abdolhossein, "Pore types distribution and their reservoir properties in the sequence stratigraphic framework: a case study from the Oligo-Miocene Asmari Formation, SW Iran", Arabian Journal of Geosciences, Vol. 9, NO. 3, 2016, doi: [10.1007/s12517-015-2141-8](https://doi.org/10.1007/s12517-015-2141-8)
- Daraei, Mehdi and Amini, Abdolhossein and Ansari, Morteza, "Facies analysis and depositional environment study of the mixed carbonate-evaporite Asmari Formation (Oligo-Miocene) in the sequence stratigraphic framework, NW Zagros, Iran", Carbonates and Evaporites, Vol. 30, NO. 3, pp. 253-272, 2015,



doi: [10.1007/s13146-014-0207-4](https://doi.org/10.1007/s13146-014-0207-4)

- Daraei, Mehdi and Rahimpour-Bonab, Hossain and Fathi, Nooshin, "Factors shaping reservoir architecture in the Jurassic Arab carbonates: A case from the Persian Gulf", Journal of Petroleum Science and Engineering, Vol. 122, pp. 187-207, 2014, doi: [10.1016/j.petrol.2014.07.010](https://doi.org/10.1016/j.petrol.2014.07.010)