

Geology and Geophysics Faculty Publication List in ISI Journals from September 2020 to present

1. Abdelfattah, A.K., Al-amri, A., Abdelrahman, K., Fnais, M. and Qaysi, S., 2021. Attenuation relationships of peak ground motions in the Jazan Region. Arabian Journal of Geosciences, 14(3), pp.1-9. **Q4 GPY**
2. Abdelfattah, A.K., Jallouli, C., Qaysi, S. and Al-Qadasi, B., 2020. Crustal Stress in the Northern Red Sea Region as Inferred from Seismic b-values, Seismic Moment Release, Focal Mechanisms, Gravity, Magnetic, and Heat Flow Data. Surveys in Geophysics, 41(5), pp.963-986. **Q1 GPY**
3. Abdelrahman, K., Al-Amri, A.M., Fnais, M.S., Qaysi, S., Abdelfattah, A.K. and Al-Otaibi, N., 2021. Site effect and microzonation of the Jizan coastal area, southwestern Saudi Arabia, for earthquake hazard assessment based on the geotechnical borehole data. Arabian Journal of Geosciences, 14(8), pp.1-19. **Q4 GPY**
4. Abdelrahman, K., Al-Otaibi, N. and Ibrahim, E., 2021. Assessment of land subsidence as an environmental threat facing Dammam city, eastern Saudi Arabia based on soil geotechnical parameters using downhole seismic approach. Journal of King Saud University-Science, 33(1), p.101233. **Q2 GPY**
5. Abdelrahman, K., Al-Otaibi, N. and Ibrahim, E., 2021. Environmental hazard assessment for ground failure in Jeddah city, western Saudi Arabia, through cross-hole seismic testing. Journal of King Saud University-Science, 33(1), p.101274. **Q2 GPY**
6. Abdelrahman, K., Ibrahim, E., Qaysi, S., Mogren, S., Zaidi, F. and Ghrefat, H., 2021. Evaluation of kinetic moduli and soil competence scale of soil profiles in Jizan area, southwestern Saudi Arabia. Arabian Journal of Geosciences, 14(3), pp.1-19. **Q4 GPY/GEO**
7. Abuamarah, B.A. and Nabawy, B.S., 2021. A proposed classification for the reservoir quality assessment of hydrocarbon-bearing sandstone and carbonate reservoirs: A correlative study based on different assessment petrophysical procedures. Journal of Natural Gas Science and Engineering, 88, p.103807. **Q2 GEO**
8. Abuamarah, B.A., Azer, M.K., Asimow, P.D. and Shi, Q., 2021. Petrogenesis of the post-collisional rare-metal-bearing Ad-Dayheen granite intrusion, Central Arabian Shield. Lithos, 384, p.105956. **Q2 GEO**
9. Abuamarah, B.A., Azer, M.K., Asimow, P.D. and Shi, Q., 2021. Petrogenesis of the post-collisional rare-metal-bearing Ad-Dayheen granite intrusion, Central Arabian Shield. Lithos, 384, p.105956. **Q2 GEO**
10. Abuamarah, B.A., Azer, M.K., Asimow, P.D. and Shi, Q., 2021. Post-collisional volcanism with adakitic signatures in the Arabian-Nubian Shield: A case study of calc-alkaline Dokhan volcanics in the Eastern Desert of Egypt. Lithos, 388, p.106051. **Q2 GEO**
11. Ahmed, N., Siddiqui, N.A., Rahman, A.H., Jamil, M., Usman, M., Sajid, Z. and Zaidi, F.K., 2021. Evaluation of hydrocarbon source rock potential: deep marine shales of Belaga

- Formation of late Cretaceous-late Eocene, Sarawak, Malaysia. Journal of King Saud University-Science, 33(1), p.101268. **Q2 GEO**
12. Al-Arifi, N., El-Din, G.K., Abdelkareem, M. and Abdalla, F., 2021. Integration of remote-sensing, structural, and geochemical data for characterizing granitoid rocks in Um Naggat pluton, Central Eastern Desert, Egypt. Arabian Journal of Geosciences, 14(1), pp.1-22. **Q4 GPY**
13. Alfaifi, H., El-Sorogy, A.S., Qaysi, S., Kahal, A., Almadani, S., Alshehri, F. and Zaidi, F.K., 2021. Evaluation of heavy metal contamination and groundwater quality along the Red Sea coast, southern Saudi Arabia. Marine Pollution Bulletin, 163, p.111975. **Q2 GPY/GEO**
14. Al-Gain, M., Abdelrahman, K., Kahal, A., Al-Zahrani, S., Ibrahim, E. and Al-Otaibi, N., 2020. Impact of 5D regularization and interpolation on subsurface imaging: A case study of Stratton field, South Texas, United States of America. Journal of King Saud University-Science, 32(6), pp.2733-2740. **Q2 GEO/GPY**
15. Ali, G., Hafez, A.G., Said, E.S.S.A., Abdelrahman, K., Ibrahim, E. and Alotaibi, N., 2021. Relationship between precursory signals and corresponding earthquakes using different spectral analysis techniques. Journal of King Saud University-Science, 33(2), p.101338. **Q2 GPY**
16. Ali, S.M., Abdelrahman, K. and Al-Otaibi, N., 2021. Tectonic stress regime and stress patterns from the inversion of earthquake focal mechanisms in NW Himalaya and surrounding regions. Journal of King Saud University-Science, 33(2), p.101351. **Q2 GPY**
17. Al-Johi, A., Ibrahim, E., Mogren, S. and Lashin, A., 2020. Petrophysical analysis of Upper Qishn Clastic Member Reservoir, Tawila Oilfield, Yemen. Arabian Journal of Geosciences, 13(21), pp.1-31. **Q4 GPY**
18. Almadani, S.A., Abdelrahman, K. and Qaysi, S., 2021. Integrated geoinvestigation for evaluation of an engineering site—a case study from the western Riyadh city, central Saudi Arabia. Arabian Journal of Geosciences, 14(5), pp.1-12. **Q4 GPY**
19. Almajed, A., Aldhowian, A. and Abdelrahman, K., 2021. Geological and geotechnical evaluation of limestone rocks along the Riyadh Metro Project (Riyadh City, Saudi Arabia). Arabian Journal of Geosciences, 14(2), pp.1-15. **Q4 GPY**
20. AlSalhi, M.S., Masilamani, V., Alarifi, N., Farooq, W.A., Atif, M., Ramay, S., Althobaiti, H.S., Anwar, S., Elkhedr, I. and Abuamarah, B.A., 2021. Elemental composition and physical characteristics of the massive meteorite of the Saudi empty quarter. Journal of King Saud University-Science, 33(2), p.101341. **Q2 GPY/GEO**
21. Alshehri, F., Almadani, S., El-Sorogy, A.S., Alwaqdani, E., Alfaifi, H.J. and Alharbi, T., 2021. Influence of seawater intrusion and heavy metals contamination on groundwater quality, Red Sea coast, Saudi Arabia. Marine Pollution Bulletin, 165, p.112094. **Q2 GPY/GEO**
22. Anbazhagan, P., Joo, M.R., Rashid, M.M. and Al-Arifi, N.S., 2021. Prediction of different depth amplifications of deep soil sites for potential scenario earthquakes. Natural Hazards, pp.1-29. **Q2 GPY**

23. Andreae, M.O., Al-Amri, A., Andreae, C.M., Guagnin, M., Jochum, K.P., Stoll, B. and Weis, U., 2020. Archaeometric studies on the petroglyphs and rock varnish at Kilwa and Sakaka, northern Saudi Arabia. *Arabian Archaeology and Epigraphy*, 31(2), pp.219-244. **GPY**
24. El Khrepy, S., Koulakov, I., Gerya, T., Al-Arifi, N., Alajmi, M.S. and Qadrouh, A.N., 2021. Transition from continental rifting to oceanic spreading in the northern Red Sea area. *Scientific reports*, 11(1), pp.1-7. **Q1 GPY**
25. El Waheidi, M.M., Ghrefat, H., Qaysi, S., Batayneh, A.T., Russo, G., Jallouli, C., Badhris, O., Maeshi, T., Elawadhi, E.A. and Bahkali, I., 2021. Hydrogeophysical Characterization of the Coastal Aquifer System in the Northeast Gulf of Aqaba (Saudi Arabia): An Investigation in the Context of Groundwater Resources Management. *Journal of Coastal Research*, 37(1), pp.41-51. **Q4 GEP/GPY**
26. El-Sorogy, A.S. and Youssef, M., 2021. Pollution assessment of the Red Sea-Gulf of Aqaba seawater, northwest Saudi Arabia. *Environmental Monitoring and Assessment*, 193(3), pp.1-10. **Q3 GEO**
27. El-Sorogy, A.S., Youssef, M. and Al-Kahtany, K., 2021. Evaluation of coastal sediments for heavy metal contamination, Yanbu area, Red Sea coast, Saudi Arabia. *Marine Pollution Bulletin*, 163, p.111966. **Q2 GEO**
28. El-Sorogy, A.S., Youssef, M. and Al-Malky, M., 2020. Late Pleistocene reef fauna from the Red Sea coast, Northwest Saudi Arabia. *Historical Biology*, 32(7), pp.996-1009. **Q2 GEO**
29. Galmed, M.A., Amarah, B.A., Ghrefat, H.A. and Al-Zahrani, A.A., 2021. Petrology of oolitic ironstones of Ashumaysi Formation of Wadi Fatima, western Arabian Shield, Saudi Arabia. *Journal of King Saud University-Science*, 33(1), p.101266. **Q2 GEO**
30. Ghrefat, H., Kahal, A.Y., Abdelrahman, K., Alfaifi, H.J. and Qaysi, S., 2021. Utilization of multispectral landsat-8 remote sensing data for lithological mapping of southwestern saudi arabia. *Journal of King Saud University-Science*, p.101414. **Q2 GEO/GPY**
31. Hakimi, M.H., Abas, A.N., Hadad, Y.T., Al Faifi, H.J., Kinawy, M. and Lashin, A., 2021. Bulk pyrolysis and biomarker fingerprints of Late Cretaceous Galhak Shale Formation in the northern Melut Basin, Sudan: implications on lacustrine oil-source rock. *Arabian Journal of Geosciences*, 14(6), pp.1-17. **Q4 GEO**
32. Hakimi, M.H., Ahmed, A., Kahal, A.Y., Hersi, O.S., Al Faifi, H.J. and Qaysi, S., 2020. Organic geochemistry and basin modeling of Late Cretaceous Harshiyat Formation in the onshore and offshore basins in Yemen: Implications for effective source rock potential and hydrocarbon generation. *Marine and Petroleum Geology*, 122, p.104701. **Q1 GEO/GPY**
33. Hakimi, M.H., Ahmed, A., Mogren, S., Shah, S.B.A., Kinawy, M.M. and Lashin, A.A., 2020. Thermogenic gas generation from organic-rich shales in the southeastern Say'un-Masila Basin, Yemen as demonstrated by geochemistry, organic petrology, and basin modeling. *Journal of Petroleum Science and Engineering*, 192, p.107322. **Q1 GPY**
34. Howari, F.M. and Ghrefat, H., 2021. Geographic information system: spatial data structures, models, and case studies. In *Pollution Assessment for Sustainable*

Practices in Applied Sciences and Engineering (pp. 165-198). Butterworth-Heinemann. **GEO**

35. Howari, F.M., Ghrefat, H., Nazzal, Y., Galmed, M.A., Abdelghany, O., Fowler, A.R. and Sharma, M., 2020. Delineation of Copper Mineralization Zones at Wadi Ham, Northern Oman Mountains, United Arab Emirates Using Multispectral Landsat 8 (OLI) Data. *Frontiers in Earth Science*, 8, p.417. **GEO**
36. Hussein, H., Abd El-Raouf, A., Almadani, S., Abdelrahman, K., Ibrahim, E. and Osman, O.M., 2021. Application of geochemical modeling using NETPATH and water quality index for assessing the groundwater geochemistry in the south Wadi El-Farigh area, Egypt. *Journal of King Saud University-Science*, 33(2), p.101284. **Q2 GPY**
37. Ibrahim, E., Abd El-Motaal, E., Lashin, A., Alfaifi, H., Qaysi, S. and Kahal, A., 2021. Faulting intersections and magma-feeding zones in Tihamat-asir, Southeast red sea rift: Aeromagnetic and structural perspective. *Journal of African Earth Sciences*, 173, p.104044. **Q3 GEO/GPY**
38. Kahal, A.Y., Abdelrahman, K., Alfaifi, H.J. and Yahya, M.M., 2021. Landslide hazard assessment of the Neom promising city, northwestern Saudi Arabia: An integrated approach. *Journal of King Saud University-Science*, 33(2), p.101279. **Q2 GEO/GPY**
39. Kahal, A.Y., Alfaifi, H.J., Abdelrahman, K. and Zaidi, F.K., 2021. Physio-chemical properties of groundwater and their environmental hazardous impact: Case study of Southwestern Saudi Arabia. *Journal of King Saud University-Science*, 33(2), p.101292. **Q2 GEO/GPY**
40. Mogren, S., 2021. Geo-hazard assessment of the NEOM area, Northwest Saudi Arabia, using seismological and potential field data. *Arabian Journal of Geosciences*, 14(2), pp.1-12. **Q4 GPY**
41. Mohamed, A.M.O., Howari, F.M., Ghrefat, H. and Paleologos, E.K., 2021. Site investigation. In *Pollution Assessment for Sustainable Practices in Applied Sciences and Engineering* (pp. 289-354). Butterworth-Heinemann. **GEO**
42. Mukhopadhyay, M., Mukhopadhyay, B., Elawadi, E., Venkatesh, K.D. and Al-Arifi, N., 2021. Crustal structure beneath the volcanic field in the Tihamat Plains, Saudi Arabia: An integrated model constrained by gravity modelling and receiver function results. *Journal of Asian Earth Sciences*, 206, p.104614. **Q2 GEO**
43. Nabawy, B.S., Ibrahim, E., Kahal, A., Alfaifi, H.J. and Lashin, A.A., 2020. Impact of authigenic iron oxides, clay content and grain size on the aquifer quality properties of the Cambrian-Ordovician Wajid Sandstone, southwest Saudi Arabia. *Journal of African Earth Sciences*, 172, p.104000. **Q4 GEO/GPY**
44. Otter, L.M., Macholdt, D.S., Jochum, K.P., Stoll, B., Weis, U., Weber, B., Scholz, D., Haug, G.H., Al-Amri, A.M. and Andreae, M.O., 2020. Geochemical insights into the relationship of rock varnish and adjacent mineral dust fractions. *Chemical Geology*, 551, p.119775. **Q2 GPY**
45. Pyle, M.L., Gök, R., Al-Amri, A., El-Hussain, I. and Al-Rawahi, Y., 2020. Seismic monitoring and high-frequency noise using arrays in the Arabian Peninsula. *Arabian Journal of Geosciences*, 13(19), pp.1-8. **Q4 GPY**

46. Qaysi, S., Alzahrani, H. and Abdelrahman, K., 2021. Seismic hazard assessment for the proposed site of electric power plant: Comprehensive approach. *Journal of King Saud University-Science*, 33(3), p.101360. **Q2 GPY**
47. Rabie, E., Hafez, A.G., Saad, O.M., El-Sayed, A.H.M., Abdelrahman, K. and Al-Otaibi, N., 2021. Geomagnetic micro-pulsation automatic detection via deep learning approach guided with discrete wavelet transform. *Journal of King Saud University-Science*, 33(1), p.101263. **Q2 GPY**
48. Saada, S.A., Eldosouky, A.M., Al-Otaibi, N., Ibrahim, E. and Ibrahim, A., 2021. New insights into the contribution of gravity data for mapping the lithospheric architecture. *Journal of King Saud University-Science*, p.101400. **Q2 GPY**
49. Sahour, H., Vazifedan, M. and Alshehri, F., 2020. Aridity trends in the Middle East and adjacent areas. *Theoretical and Applied Climatology*, 142(3), pp.1039-1054. **Q2 GEO**
50. Saleh, M.M., El-Sorogy, A.S., Youssef, M. and Al-Kahtany, K., 2021. Evaluation of geoenvironmental hazards at Qasr Al-Farid tomb, Mada'in Saleh, northwestern Saudi Arabia. *Arabian Journal of Geosciences*, 14(1), pp.1-14. **Q4 GEO**
51. Salman, A., Al-Tayib, M., Hag-Elsafi, S., Zaidi, F.K. and Al-Duwarij, N., 2021. Spatiotemporal Assessment of Air Quality and Heat Island Effect Due to Industrial Activities and Urbanization in Southern Riyadh, Saudi Arabia. *Applied Sciences*, 11(5), p.2107. **Q2 GEO**
52. Shi, X., Al-Arif, N., Abdelkareem, M. and Abdalla, F., 2020. Application of remote sensing and GIS techniques for exploring potential areas of hydrothermal mineralization in the central Eastern Desert of Egypt. *Journal of Taibah University for Science*, 14(1), pp.1421-1432. **GPY**
53. Siyar, S.M., Zafar, M., Jahandad, S., Khan, T., Ali, F., Ahmad, S., Fnais, M.S., Abdelrahman, K. and Ansari, M.J., 2021. Hydrocarbon generation potential of Chichali Formation, Kohat Basin, Pakistan: A case study. *Journal of King Saud University-Science*, 33(1), p.101235. **Q2 GPY**
54. Thakur, T.K., Patel, D.K., Dutta, J., Kumar, A., Kaushik, S., Bijalwan, A., Fnais, M.S., Abdelrahman, K. and Ansari, M.J., 2021. Assessment of decadal land use dynamics of upper catchment area of Narmada River, the lifeline of Central India. *Journal of King Saud University-Science*, 33(2), p.101322. **Q2 GPY**
55. Youssef, M., El-Sorogy, A., Al-Kahtany, K. and Saleh, M., 2021. Benthic Foraminifera as Bio-indicators of Coastal Marine Environmental Contamination in the Red Sea-Gulf of Aqaba, Saudi Arabia. *Bulletin of Environmental Contamination and Toxicology*, pp.1-11. **Q3 GPY**