References

Absar, N., 2013. Discussion on Geochronological (Rb-Sr and Sm-Nd) Studies on Intrusive Gabbros and Dolerite Dykes from parts of Northern and Central Indian Cratons: Implications for the Age of Onset of Sedimentation in Bijawar and Chattisgarh Basins and Uranium Mineralisa. J. Geol. Soc. India 81, 438–441.

Ahmad, T., Dragusanu, C., Tanaka, T., 2008. Provenance of Proterozoic Basal Aravalli mafic volcanic rocks from Rajasthan, Northwestern India: Nd isotopes evidence for enriched mantle reservoirs. Precambrian Res. 162, 150–159. doi:10.1016/j.precamres.2007.07.011

Ahmad, T., Kaulina, T. V, Wanjari, N., Mishra, M.K., Nitkina, E.A., 2009. U-Pb zircon chronology and Sm-Nd isotopic characteristics of the Amgaon and Tirodi Gneissic Complex, Central Indian Shield: constraits on Precambrian crustal evolution, in: Singh, V.K., Chandra, R. (Eds.), 2nd International Conference on Precambrian Continental Growth and Tectonism. Excel India Publishers, New Delhi, pp. 137–138. doi:10.1016/j.gr.2006.10.019

Ashwal, L.D., Solanki, A.M., Pandit, M.K., Corfu, F., Hendriks, B.W.H., Burke, K., Torsvik, T.H., 2013. Geochronology and geochemistry of Neoproterozoic Mt. Abu granitoids, NW India: Regional correlation and implications for Rodinia paleogeography. Precambrian Res. 236, 265–281. doi:10.1016/j.precamres.2013.07.018

Awasthi, A.K., Parkash, B., 1981. Depositional environments of unfossiliferous sediments of the Jodhpur Group, western India. Sediment. Geol. 30, 15–42. doi:10.1017/CBO9781107415324.004

Bartley, J.K., Kah, L.C., 2004. Marine carbon reservoir, Corg-Ccarb coupling, and the evolution of the Proterozoic carbon cycle. Geology 32, 129–132. doi:10.1130/G19939.1

Bartley, J.K., Semikhatov, M.A., Kaufman, A.J., Knoll, A.H., Pope, M.C., Jacobsen, S.B., 2001. Global events across the Mesoproterozoic–Neoproterozoic boundary: C and Sr isotopic evidence from Siberia. Precambrian Res. 111, 165–202. doi:10.1016/S0301-9268(01)00160-7

Bekker, A., Holland, H.D., 2012. Oxygen overshoot and recovery during the early Paleoproterozoic, Earth and Planetary Science Letters.

Bekker, A., Holland, H.D., Wang, P.-L., Rumble, D., Stein, H.J., Hannah, J.L., Coetzee, L.L., Beukes, N.J., 2004. Dating the rise of atmospheric oxygen. Nature 427, 117–120. doi:10.1038/nature02260

Bengtson, S., Sallstedt, T., Belivanova, V., Whitehouse, M., 2017. Three-dimensional preservation of cellular and subcellular structures suggests 1.6 billion-year-old crown-group red algae. PLOS Biol. 15, e2000735. doi:10.1371/journal.pbio.2000735

Bhattacharya, P., Patranabis-Deb, S., 2016. Stratigraphic evolution of the Proterozoic succession in the western part of the Chattisgarh basin, India. J. Geol. Soc. India 87, 287–307. doi:10.1007/s12594-016-0396-7

Bhowmik, S.K., Dasgupta, S., 2012. Tectonothermal evolution of the Banded Gneissic Complex in central Rajasthan, NW India: Present status and correlation. J. Asian Earth Sci. 49, 339–348. doi:10.1016/j.jseaes.2011.07.025

Bhowmik, S.K., Wilde, S.A., Bhandari, A., 2011. Zircon U-Pb/Lu-Hf and monazite chemical dating of the Tirodi biotite gneiss: Implication for latest Palaeoproterozoic to Early Mesoproterozoic orogenesis in the Central Indian Tectonic Zone. Geol. J. 46, 574–596. doi:10.1002/gj.1299

Bhowmik, S.K., Wilde, S.A., Bhandari, A., Pal, T., Pant, N.C., 2012. Growth of the Greater Indian Landmass and its assembly in Rodinia: Geochronological evidence from the Central Indian Tectonic Zone. Gondwana Res. 22, 54–72. doi:10.1016/j.gr.2011.09.008

Bickford, M.E., Basu, A., Mukherjee, A., Hietpas, J., Schieber, J., Patranabis-Deb, S., Kumar Ray, R., Guhey, R., Bhattacharya, P., Dhang, P.C., 2011b. New U-Pb SHRIMP Zircon Ages of the Dhamda Tuff in the Mesoproterozoic Chhattisgarh Basin, Peninsular India: Stratigraphic Implications and Significance of a 1-Ga Thermal-Magmatic Event. J. Geol. 119, 535–548. doi:10.1086/661193

Bickford, M.E., Basu, A., Patranabis-Deb, S., Dhang, P.C., Schieber, J., 2011a. Depositional History of the Chhattisgarh Basin, Central India: Constraints from New SHRIMP Zircon Ages. J. Geol. 119, 33–50. doi:10.1086/657300

Biju-Sekhar, S., Yokoyama, K., Pandit, M.K., Okudaira, T., Yoshida, M., Santosh, M., 2003. Late Paleoproterozoic magmatism in Delhi Fold Belt, NW India and its implication: Evidence from EPMA chemical ages of zircons. J. Asian Earth Sci. 22, 189–207. doi:10.1016/S1367-9120(02)00188-8

Bora, S., Kumar, S., 2015. Geochemistry of biotites and host granitoid plutons from the Proterozoic Mahakoshal Belt, central India tectonic zone: implication for nature and tectonic setting of magmatism. Int. Geol. Rev. 57, 1686–1706. doi:10.1080/00206814.2015.1032372

Bora, S., Kumar, S., Yi, K., Kim, N., Lee, T.H., 2013. Geochemistry and U-Pb SHRIMP zircon chronology of granitoids and microgranular enclaves from Jhirgadandi Pluton of Mahakoshal Belt, Central India Tectonic Zone, India. J. Asian Earth Sci. 70–71, 99–114. doi:10.1016/j.jseaes.2013.03.006

Brand, W.A., Assonov, S.S., Coplen, T.B., 2010. Correction for the ^{17}O interference in δ(13C) measurements when analyzing CO_2 with stable isotope mass spectrometry (IUPAC Technical Report). Pure Appl. Chem. 82, 1719–1733. doi:10.1351/PAC-REP-09-01-05

Brasier, M., McCarron, G., Tucker, R., Leather, J., Allen, P., Shields, G., 2000. New U-Pb zircon dates for the Neoproterozoic Ghubrah glaciation and for the top of the Huqf Supergroup, Oman. Geology 28, 175–178. doi:10.1130/0091-7613(2000)28<175:NUZDFT>2.0.CO

Brasier, M.D., Lindsay, J.F., 1998. A billion years of environmental stability and the emergence of eukaryotes : New data from northern Australia. Geology 26, 555–558. doi:10.1130/0091-7613(1998)026<0555

Buick, I.S., Allen, C., Pandit, M., Rubatto, D., Hermann, J., 2006. The Proterozoic magmatic and metamorphic history of the Banded Gneiss Complex, central Rajasthan, India: LA-ICP-MS U–Pb zircon constraints. Precambrian Res. 151, 119–142. doi:10.1016/j.precamres.2006.08.006

Butterfield, N.J., 2000. Bangiomorpha pubescens n. gen., n. sp.: implications for the evolution of sex, multicellularity, and the Mesoproterozoic/Neoproterozoic radiation of eukaryotes. Paleobiology 26, 386–404. doi:10.1666/0094-8373(2000)026<0386:bpngns>2.0.co;2

Canfield, D.E., Poulton, S.W., Narbonne, G.M., 2007. Late-Neoproterozoic Deep-Ocean Oxygenation and the Rise of Animal Life. Science 315, 92–95. doi:10.1126/science.1135013

Carter, L., 2005. Granitic and rhyolitic magmatism: constraints on continental reconstruction from geochemistry, geochronology and palaeomagnetism. M Sc Thesis, University of Johannesburg, Johannesburg, pp. 54.

Chakraborty, P.P., Das, P., Das, K., Saha, S., Balakrishnan, S., 2012. Regressive depositional architecture on a Mesoproterozoic siliciclastic ramp: Sequence stratigraphic and Nd isotopic evidences from Bhalukona Formation, Singhora Group, Chhattisgarh Supergroup, central India. Precambrian Res. 200–203, 129–148. doi:10.1016/j.precamres.2012.01.004

Chakraborty, P.P., Saha, S., Das, P., 2015. Geology of Mesoproterozoic Chhattisgarh Basin, central India: current status and future goals. Geol. Soc. London, Mem. 43, 185–205. doi:10.1144/M43.13

Chauhan, D.S., Mathur, K.M., Ram, N., 2001. Geological nature of the Pokaran boulder bed: Paleoenvironmental, paleoclimatic and stratigraphic implications. J. Geol. Soc. India 58, 425–433.

Chauhan, D.S., Ram, B., Ram, N., 2004. Jodhpur sandstone: A gift of ancient beaches to western Rajasthan. J. Geol. Soc. India 64, 265–276.

Choudhary, A.K., 1984. Precambrian Geochronology of Rajasthan, western India. PhD Thesis, Gujarat University, Ahmedabad, pp. 257.

Collins, A.S., Pisarevsky, S.A., 2005. Amalgamating eastern Gondwana: The evolution of the Circum-Indian Orogens. Earth-Science Rev. 71, 229–270. doi:10.1016/j.earscirev.2005.02.004

Cozzi, A., Rea, G., Craig, J., 2012. From global geology to hydrocarbon exploration: Ediacaran-Early Cambrian petroleum plays of India, Pakistan and Oman. Geol. Soc. London, Spec. Publ. 366, 131–162. doi:10.1144/SP366.14

Craig, H., 1957. Isotopic standards for carbon and oxygen and correction factors for mass-spectrometric analysis of carbon dioxide. Geochim. Cosmochim. Acta 12, 133–149.

doi:10.1016/0016-7037(57)90024-8

Crawford, A.R., Compston, W., 1970. The age of the Vindhyan System of Peninsular India. Q. J. Geol. Soc. 125, 351–371. doi:10.1144/gsjgs.125.1.0351

Das, D.P., Kundu, A., Das, N., Dutta, D.R., Kumaran, K., Ramamurthy, S., Thanavelu, C., Rajaiya, V., 1992. Lithostratigraphy and sedimentation of Chhattisgarh basin. Indian Miner. 46, 271–288.

Das, K., Chakraborty, P.P., Horie, K., Tsutsumi, Y., Saha, S., Balakrishnan, S., 2017. Detrital Zircon U-Pb Geochronology, Nd Isotope Mapping, and Sediment Geochemistry From the Singhora Group, Central India, Sediment Provenance: Influences on Compositional Change from Source to Sink. Elsevier.

Das, K., Yokoyama, K., Chakraborty, P.P., Sarkar, A., 2009. Basal Tuffs and Contemporaneity of the Chattisgarh and Khariar Basins Based on New Dates and Geochemistry. J. Geol. 117, 88–102. doi:10.1086/593323

Das, P., Das, K., Chakraborty, P.P., Balakrishnan, S., 2011. 1420 Ma diabasic intrusives from the Mesoproterozoic Singhora Group, Chhattisgarh Supergroup, India: Implications towards non-plume intrusive activity. J. Earth Syst. Sci. 120, 223–236. doi:10.1007/s12040-011-0057-6

Das Gupta, S.P., 1996. Marwar Supergroup Evaporites, Rajasthan. Mem. Geol. Soc. India 49–58.

Davis, J.K., Meert, J.G., Pandit, M.K., 2014. Paleomagnetic analysis of the Marwar Supergroup, Rajasthan, India and proposed interbasinal correlations. J. Asian Earth Sci. 91, 339–351. doi:10.1016/j.jseaes.2013.09.027

Des Marais, D.J., 1994. Tectonic control of the crustal organic carbon reservoir during the Precambrian. Chem. Geol. 114, 303–314. doi:10.1016/0009-2541(94)90060-4

Des Marais, D.J., Strauss, H., Summons, R.E., Hayes, J.M., 1992. Carbon isotope evidence for the stepwise oxidation of the Proterozoic environment. Nature 359, 605–609. doi:10.1038/359605a0

Dey, A., Mukherjee, S., Sanyal, S., Ibanez-Mejia, M., Sengupta, P., 2017. Deciphering Sedimentary Provenance and Timing of Sedimentation From a Suite of Metapelites From the Chotanagpur Granite Gneissic Complex, India, in: Mazumdar, R. (Ed.), Sediment Provenance: Influences on Compositional Change from Source to Sink. Elsevier, pp. 453–486. doi:10.1016/B978-0-12-803386-9.00016-2

Dickson, J.A.D., 1965. A modified staining technique for carbonates in thin section. Nature 205, 587.

Faure, G., 1986. Principles of Isotope Geology, Second. ed. Wiley.

Gee, E.R., 1989. Overview of the geology and structure of the Salt Range, with observations on related areas of northern Pakistan. Spec. Pap. Geol. Soc. Am. 232, 95–112.

doi:10.1130/SPE232-p95

George, B.G., Ray, J.S., 2017. Provenance of sediments in the Marwar Supergroup, Rajasthan, India: Implications for basin evolution and Neoproterozoic global events. J. Asian Earth Sci. 147, 254–270. doi:10.1016/j.jseaes.2017.07.027

Ghosh, J.G., 2004. 3.56 Ga tonalite in the central part of the Bastar Craton, India: Oldest Indian date. J. Asian Earth Sci. 23, 359–364. doi:10.1016/S1367-9120(03)00136-6

Glaessner, M.F., 1959. Precambrian Coelenterata from Australia, Africa and England. Nature 183, 1472–1473. doi:10.1038/183055a0

Gopalan, K., Macdougall, J.D., Roy, A.B., Murali, A. V., 1990. Sm-Nd evidence for 3.3 Ga old rocks in Rajasthan, northwestern India. Precambrian Res. 48, 287–297. doi:10.1016/0301-9268(90)90013-G

Gregory, L.C., Meert, J.G., Bingen, B., Pandit, M.K., Torsvik, T.H., 2009. Paleomagnetism and geochronology of the Malani Igneous Suite, Northwest India: Implications for the configuration of Rodinia and the assembly of Gondwana. Precambrian Res. 170, 13–26. doi:10.1016/j.precamres.2008.11.004

Grotzinger, J.P., Fike, D.A., Fischer, W.W., 2011. Enigmatic origin of the largest-known carbon isotope excursion in Earth's history. Nat. Geosci. 4, 285–292.

Halverson, G.P., Shields-Zhou, G., 2011. Chemostratigraphy and the Neoproterozoic glaciations, in: Arnaud, E., Halverson, G., Shields-Zhou, G. (Eds.), The Geological Record of Neoproterozoic Glaciations. Geol. Soc. London, Mem, pp. 51–66. doi:10.1144/M36.4

Hoffman, P.F., Kaufman, A.J., Halverson, G.P., Schrag, D.P., 1998. A Neoproterozoic Snowball Earth. Science 281, 1342–1346. doi:10.1126/science.281.5381.1342

Holland, H.D., 2002. Volcanic gases, black smokers, and the great oxidation event. Geochim. Cosmochim. Acta 66, 3811–3826.

Jiang, G., Kaufman, A.J., Christie-Blick, N., Zhang, S., Wu, H., 2007. Carbon isotope variability across the Ediacaran Yangtze platform in South China: Implications for a large surface-to-deep ocean $\delta^{13}C$ gradient. Earth Planet. Sci. Lett. 261, 303–320. doi:10.1016/j.epsl.2007.07.009

Jiang, G., Shi, X., Zhang, S., Wang, Y., Xiao, S., 2011. Stratigraphy and paleogeography of the Ediacaran Doushantuo Formation (ca. 635-551Ma) in South China. Gondwana Res. 19, 831–849. doi:10.1016/j.gr.2011.01.006

Jiang, G., Sohl, L.E., Christie-Blick, N., 2003. Neoproterozoic stratigraphic comparison of the Lesser Himalaya (India) and Yangtze block (south China): Paleogeographic implications. Geology 31, 917–920. doi:10.1130/G19790.1

Jochum, K.P., Nohl, U., Herwig, K., Lammel, E., Stoll, B., Hofmann, A. W., 2005. GeoReM: a new geochemical database for reference materials and isotopic standards. Geostand. Geoanalytical Res. 29, 333–338. doi:10.1111/j.1751-908X.2005.tb00904.x

Johnston, D.T., Macdonald, F.A., Gill, B.C., Hoffman, P.F., Schrag, D.P., 2012. Uncovering the Neoproterozoic carbon cycle. Nature 483, 320–3.

Kah, L.C., 2000. Depositional d18O Signatures in Proterozoic Dolostones: Constraints on Seawater Chemistry and Early Diagenesis. SEPM Spec. Publ. 67, 345–360.

Kah, L.C., Bartley, J.K., Teal, D.A., 2012. Chemostratigraphy of the Late Mesoproterozoic Atar Group, Taoudeni Basin, Mauritania: Muted isotopic variability, facies correlation, and global isotopic trends. Precambrian Res. 200–203, 82–103. doi:10.1016/j.precamres.2012.01.011

Kaufman, A.J., Jiang, G., Christie-Blick, N., Banerjee, D.M., Rai, V., 2006. Stable isotope record of the terminal Neoproterozoic Krol platform in the Lesser Himalayas of northern India. Precambrian Res. 147, 156–185. doi:10.1016/j.precamres.2006.02.007

Kaur, P., Chaudhri, N., Raczek, I., Kröner, A., Hofmann, A.W., 2007. Geochemistry, zircon ages and whole-rock Nd isotopic systematics for Palaeoproterozoic A-type granitoids in the northern part of the Delhi belt, Rajasthan, NW India: implications for late Palaeoproterozoic crustal evolution of the Aravalli craton. Geol. Mag. 144, 361. doi:10.1017/S0016756806002950

Kaur, P., Chaudhri, N., Raczek, I., Kröner, A., Hofmann, A.W., 2009. Record of 1.82 Ga Andean-type continental arc magmatism in NE Rajasthan, India: Insights from zircon and Sm-Nd ages, combined with Nd-Sr isotope geochemistry. Gondwana Res. 16, 56–71. doi:10.1016/j.gr.2009.03.009

Kaur, P., Chaudhri, N., Raczek, I., Kröner, A., Hofmann, A.W., Okrusch, M., 2011a. Zircon ages of late Palaeoproterozoic (ca. 1.72-1.70 Ga) extension-related granitoids in NE Rajasthan, India: Regional and tectonic significance. Gondwana Res. 19, 1040–1053. doi:10.1016/j.gr.2010.09.009

Kaur, P., Zeh, A., Chaudhri, N., Gerdes, A., Okrusch, M., 2011b. Archaean to Palaeoproterozoic crustal evolution of the Aravalli mountain range, NW India, and its hinterland: The U-Pb and Hf isotope record of detrital zircon. Precambrian Res. 187, 155–164. doi:10.1016/j.precamres.2011.03.005

Kilner, B., Mac Niocaill, C., Brasier, M., 2005. Low-latitude glaciation in the Neoproterozoic of Oman. Geology 33, 413–416. doi:10.1130/G21227.1

Klootwijk, C.T., 1979. A review of palaeomagnetic data from the Indo-Pakistani fragment of Gondwanaland, in: Farah, A., DeJong, K.A. (Eds.), Geodynamics of Pakistan. Geol. Surv. Pakistan, Quetta, pp. 41–80.

Knoll, A.H., Kaufman, A.J., Semikhatov, M.A., 1995. The carbon-isotopic composition of Proterozoic carbonates: Riphean successions from northwestern Siberia (Anabar Massif, Turukhansk uplift). Am. J. Sci. 295, 823–850. doi:10.2475/ajs.295.7.823

Krishnan, M.S., 1966. Salt Tectonics in the Punjab Salt Range, Pakistan. Geol. Soc. Am. Bull. 77, 115–122.

Kumar, S., Ahmad, S., 2014. Microbially induced sedimentary structures (MISS) from the Ediacaran Jodhpur Sandstone, Marwar Supergroup, western Rajasthan. J. Asian Earth Sci. 91, 352–361. doi:10.1016/j.jseaes.2014.01.009

Kumar, S., Misra, P.K., Pandey, S.K., 2009. Ediacaran megaplant fossils with Vaucheriacean affinity from the Jodhpur Sandstone, Marwar Supergroup, western Rajasthan. Curr. Sci. 97, 701–705.

Kumar, S., Pandey, S.K., 2009. Note on the occurrence of Arumberia banksi and associated fossils from the Jodhpur sandstone, Marwar Supergroup, western Rajasthan. J. Palaeontol. Soc. India 54, 171–178.

Kumar, S., Pandey, S.K., 2010. Trace fossils from the Nagaur Sandstone, Marwar Supergroup, Dulmera area, Bikaner district, Rajasthan, India. J. Asian Earth Sci. 38, 77–85. doi:10.1016/j.jseaes.2009.10.003

Kumar, V., 1999. Evolution and geological set-up of the Nagaur-Ganganagar Basin, northwestern Rajasthan, in: Paliwal, B.S. (Ed.), Geological Evolution of Northwestern India. Scientific Publishers, India, Jodhpur, pp. 34–60.

Kump, L.R., Arthur, M.A., 1999. Interpreting carbon-isotope excursions: carbonates and organic matter. Chem. Geol. 161, 181–198. doi:10.1016/S0009-2541(99)00086-8

Le Guerroue, E., 2006. Sedimentology and Chemostratigraphy of the Ediacaran Shuram Formation, Nafun Group, Oman. PhD Thesis, Swiss Federal Institute of Technology, Zurich (ETHZ).

Li, Z.X., Bogdanova, S. V., Collins, A.S., Davidson, A., De Waele, B., Ernst, R.E., Fitzsimons, I.C.W., Fuck, R.A., Gladkochub, D.P., Jacobs, J., Karlstrom, K.E., Lu, S., Natapov, L.M., Pease, V., Pisarevsky, S.A., Thrane, K., Vernikovsky, V., 2008. Assembly, configuration, and break-up history of Rodinia: A synthesis. Precambrian Res. 160, 179–210. doi:10.1016/j.precamres.2007.04.021

Linnemann, U., Sharma, M., 2014. U-Pb LA-ICP-MS zircon ages from the Marwar Supergroup and its underlying basement, in: Sharma, M., Pandey, S.K., Kumar, S. (Eds.), International Field Workshop on the Marwar Supergroup, Rajasthan, India. The Society of Earth Scientists, India. pp. 76.

Longjam, K.C., Ahmad, T., 2012. Geochemical characterization and petrogenesis of Proterozoic Khairagarh volcanics: Implication for Precambrian crustal evolution. Geol. J. 47, 130–143. doi:10.1002/gj.1312

Ludwig, K.R., 2012. Isoplot v3.75, A Geochronological Toolkit for Excel., Berkeley Geochronology Center, Spec. Publ. No. 5. Berkeley Geochronological Centre, Berkeley, California, pp. 75.

Lyons, T.W., Reinhard, C.T., Planavsky, N.J., 2014. The rise of oxygen in Earth's early ocean and atmosphere. Nature 506, 307–15. doi:10.1038/nature13068

Macouin, M., Besse, J., Ader, M., Gilder, S., Yang, Z., Sun, Z., Agrinier, P., 2004. Combined

paleomagnetic and isotopic data from the Doushantuo carbonates, South China: Implications for the "snowball Earth" hypothesis. Earth Planet. Sci. Lett. 224, 387–398. doi:10.1016/j.epsl.2004.05.015

Malone, S.J., Meert, J.G., Banerjee, D.M., Pandit, M.K., Tamrat, E., Kamenov, G.D., Pradhan, V.R., Sohl, L.E., 2008. Paleomagnetism and Detrital Zircon Geochronology of the Upper Vindhyan Sequence, Son Valley and Rajasthan, India: A ca. 1000Ma Closure age for the Purana Basins? Precambrian Res. 164, 137–159. doi:10.1016/j.precamres.2008.04.004

Martin, A.P., Condon, D.J., Prave, A.R., Lepland, A., 2013. A review of temporal constraints for the Palaeoproterozoic large, positive carbonate carbon isotope excursion (the Lomagundi-Jatuli Event). Earth-Science Rev. 127, 242–261. doi:10.1016/j.earscirev.2013.10.006

Mazumdar, A., Bhattacharya, S.K., 2004. Stable isotopic study of late Neoproterozoic-early Cambrian (?) sediments from Naguar-Ganganagar basin, western India: Possible signatures of global and regional C-isotopic events. Geochem. J. 38, 163–175.

Mazumdar, A., Strauss, H., 2006. Sulfur and strontium isotopic compositions of carbonate and evaporite rocks from the late Neoproterozoic–early Cambrian Bilara Group (Nagaur-Ganganagar Basin, India): Constraints on intrabasinal correlation and global sulfur cycle. Precambrian Res. 149, 217–230. doi:10.1016/j.precamres.2006.06.008

McArthur, J.M., Howarth, R.J., Shields, G.A., 2012. Strontium isotope stratigraphy, in: Gradstein, F.M., Ogg, J.G., Schmitz, M.D., Ogg, G.M. (Eds.), The Geologic Time Scale. Elsevier, pp. 127–144. doi:10.1016/B978-0-444-59425-9.00007-X

McElhinny, M.W., 1970. Palaeomagnetism of the cambrian purple sandstone from the Salt Range, west Pakistan. Earth Planet. Sci. Lett. 8, 149–156.

McFadden, K.A., Huang, J., Chu, X., Jiang, G., Kaufman, A.J., Zhou, C., Yuan, X., Xiao, S., 2008. Pulsed oxidation and biological evolution in the Ediacaran Doushantuo Formation. Proc. Natl. Acad. Sci. U. S. A. 105, 3197–202. doi:10.1073/pnas.0708336105

McKenzie, N.R., Hughes, N.C., Myrow, P.M., Banerjee, D.M., Deb, M., Planavsky, N.J., 2013. New age constraints for the Proterozoic Aravalli-Delhi successions of India and their implications. Precambrian Res. 238, 120–128. doi:10.1016/j.precamres.2013.10.006

McKenzie, N.R., Hughes, N.C., Myrow, P.M., Xiao, S., Sharma, M., 2011. Correlation of Precambrian-Cambrian sedimentary successions across northern India and the utility of isotopic signatures of Himalayan lithotectonic zones. Earth Planet. Sci. Lett. 312, 471–483. doi:10.1016/j.epsl.2011.10.027

McLennan, S.M., Hemming, S., 1992. Samarium/neodymium elemental and isotopic systematics in sedimentary rocks. Geochim. Cosmochim. Acta 56, 887–898. doi:10.1016/0016-7037(92)90034-G

Meert, J.G., 2003. A synopsis of events related to the assembly of the eastern Gondwana. Tectonophysics 362, 1–40. doi:10.1016/S0040-1951(02)00629-7

Meert, J.G., Pandit, M.K., Kamenov, G.D., 2013. Further geochronological and paleomagnetic

constraints on Malani (and pre-Malani) magmatism in NW India. Tectonophysics 608, 1254–1267. doi:10.1016/j.tecto.2013.06.019

Meert, J.G., Pandit, M.K., Pradhan, V.R., Banks, J., Sirianni, R., Stroud, M., Newstead, B., Gifford, J., 2010. Precambrian crustal evolution of Peninsular India: A 3.0 billion year odyssey. J. Asian Earth Sci. 39, 483–515. doi:10.1016/j.jseaes.2010.04.026

Meert, J.G., Santosh, M., 2017. The Columbia supercontinent revisited. Gondwana Res. 50, 67–83. doi:10.1016/j.gr.2017.04.011

Mohanty, S.P., Barik, A., Sarangi, S., Sarkar, A., 2015. Carbon and oxygen isotope systematics of a Paleoproterozoic cap-carbonate sequence from the Sausar Group, Central India. Palaeogeogr. Palaeoclimatol. Palaeoecol. 417, 195–209. doi:10.1016/j.palaeo.2014.10.036

Moitra, A.K., 2003. Stromatolite biostratigraphy in the Chhattisgarh basin and possible correlation with the Vindhyan basin. J. Palaeontol. Soc. India 48, 215–223.

Mukherjee, A., Ray, R.K., Tewari, D., Ingle, V.K., Sahoo, B.K., Khan, M.W.Y., 2014. Revisiting the stratigraphy of the Mesoproterozoic Chhattisgarh Supergroup, Bastar craton, India based on subsurface lithoinformation. J. Earth Syst. Sci. 123, 617–632. doi:10.1007/s12040-014-0418-z

Murti, K.S., 1987. Startigraphy and sedimentation in Chhattisgarh Basin. Purana Basins Penins. India Mem. Geol. Soc. India 6, 239–260.

Nance, R.D., Murphy, J.B., Santosh, M., 2014. The supercontinent cycle: A retrospective essay. Gondwana Res. 25, 4–29. doi:10.1016/j.gr.2012.12.026

Narbonne, G.M., 2005. The Ediacara Biota: Neoproterozoic Origin of Animals and Their Ecosystems. Annu. Rev. Earth Planet. Sci. 33, 421–442. doi:10.1146/annurev.earth.33.092203.122519

Narbonne, G.M., Xiao, S., Shields, G.A., Gehling, J.G., 2012. The Ediacaran Period, in: Gradstein, F.M., Ogg, J.G., Schmitz, M., Ogg, G. (Eds.), The Geologic Time Scale. Elsevier, pp. 413–435. doi:10.1016/B978-0-444-59425-9.00018-4

Och, L.M., Shields-Zhou, G.A., 2012. The Neoproterozoic oxygenation event: Environmental perturbations and biogeochemical cycling. Earth-Science Rev. doi:10.1016/j.earscirev.2011.09.004

Paliwal, B.S., 1998. Felsic volvanics interlayered with sediments of the Marwar Supergroup of Chhoti Khatu, District Nagaur, Rajasthan. J. Geol. Soc. India 52, 81–86.

Pandey, D.K., Bahadur, T., 2009. A review of the stratigraphy of Marwar Supergroup of west-central Rajasthan. J. Geol. Soc. India 73, 747–758. doi:10.1007/s12594-009-0060-6

Pandey, U.K., Sastry, D.V.L.N., Pandey, B.K., Roy, M., Rawat, T.P.S., Ranjan, R., Shrivastava, V.K., 2012. Geochronological (Rb-Sr and Sm-Nd) studies on intrusive gabbros and dolerite dykes from parts of northern and central Indian cratons: Implications for the age of onset of sedimentation in Bijawar and Chattisgarh basins and uranium mineralisation. J. Geol. Soc.

India 79, 30–40. doi:10.1007/s12594-012-0007-1

Pandit, M.K., Carter, L.M., Ashwal, L.D., Tucker, R.D., Torsvik, T.H., Jamtveit, B., Bhushan, S.K., 2003. Age, petrogenesis and significance of 1 Ga granitoids and related rocks from the Sendra area, Aravalli Craton, NW India. J. Asian Earth Sci. 22, 363–381. doi:10.1016/S1367-9120(03)00070-1

Pandit, M.K., Sial, A.N., Jamrani, S.S., Ferreira, V.P., 2001. Carbon Isotopic Profile Across the Bilara Group Rocks of Trans-Aravalli Marwar Supergroup in Western India: Implications for Neoproterozoic — Cambrian Transition. Gondwana Res. 4, 387–394. doi:http://dx.doi.org/10.1016/S1342-937X(05)70338-5

Pareek, H.S., 1981. Basin configuration and sedimentary stratigraphy of western Rajasthan. J. Geol. Soc. India 22, 517–527.

Pareek, H.S., 1984. Pre-Quaternary geology and mineral resources of northwestern Rajasthan. Mem. Geol. Soc. India 115.

Patranabis-Deb, S., Bickford, M.E., Hill, B., Chaudhuri, A.K., Patranabis-deb, S., Bickford, M.E., Hill, B., Chaudhuri, A.K., Basu, A., 2007. SHRIMP Ages of Zircon in the Uppermost Tuff in Chattisgarh Basin in Central India Require ~500 Ma Adjustment in Indian Proterozoic Stratigraphy. J. Geol. 115, 407–415.

Pu, J.P., Bowring, S.A., Ramezani, J., Myrow, P., Raub, T.D., Landing, E., Mills, A., Hodgin, E., Macdonald, F.A., 2016. Dodging snowballs: Geochronology of the Gaskiers glaciation and the first appearance of the Ediacaran biota. Geology 44, 955–958. doi:10.1130/G38284.1

Purohit, R., Papineau, D., Kröner, A., Sharma, K.K., Roy, A.B., 2012. Carbon isotope geochemistry and geochronological constraints of the Neoproterozoic Sirohi Group from northwest India. Precambrian Res. 220–221, 80–90. doi:10.1016/j.precamres.2012.07.012

Raghav, K.S., De, C., Jain, R.L., 2005. The first record of Vendian Medusoids and trace fossil-bearing algal matgrounds from the basal part of the Marwar Supergroup of Rajasthan, India. Indian Miner. 59, 23–30.

Ramakrishnan, M., Vaidyanadhan, R., 2010. Geology of India, 2nd ed. Geological Society of India, Bangalore.

Rathore, S.S., Venkatesan, T.R., Srivastava, R.., 1999. Rb-Sr Isotope Dating of Neoproterozoic (Malani Group) Magmatism from Southwest Rajasthan , India : Evidence of Younger Pan-African Thermal Event by ^{40}Ar-^{39}Ar Studies. Gondwana Res. 271–281. doi:10.1016/S1342-937X(05)70151-9

Ray, J.S., Veizer, J., Davis, W.J., 2003. C, O, Sr and Pb isotope systematics of carbonate sequences of the Vindhyan Supergroup, India: age, diagenesis, correlations and implications for global events. Precambrian Res. 121, 103–140.

Rekha, S., Upadhyay, D., Bhattacharya, A., Kooijman, E., Goon, S., Mahato, S., Pant, N.C., 2011. Lithostructural and chronological constraints for tectonic restoration of Proterozoic accretion in the Eastern Indian Precambrian shield. Precambrian Res. 187, 313–333.

doi:10.1016/j.precamres.2011.03.015

Rieu, R., Allen, P.A., Cozzi, A., Kosler, J., Bussy, F., 2007. A composite stratigraphy for the Neoproterozoic Huqf Supergroup of Oman: integrating new litho-, chemo- and chronostratigraphic data of the Mirbat area, southern Oman. J. Geol. Soc. London. 164, 997–1009. doi:10.1144/0016-76492006-114

Rogers, J.J.W., Santosh, M., 2002. Configuration of Columbia, a Mesoproterozoic Supercontinent. Gondwana Res. 5, 5–22. doi:10.1016/S1342-937X(05)70883-2

Roy, A., Kagami, H., Yoshida, M., Roy, A., Bandyopadhyay, B.K., Chattopadhyay, A., Khan, A.S., Huin, A.K., Pal, T., 2006. Rb-Sr and Sm-Nd dating of different metamorphic events from the Sausar Mobile Belt, central India: Implications for Proterozoic crustal evolution. J. Asian Earth Sci. 26, 61–76. doi:10.1016/j.jseaes.2004.09.010

Roy, A.B., Jakhar, S.R., 2002. Geology of Rajasthan (Northwest India) : Precambrian to recent. Scientific Publishers, India. pp. 421.

Roy, A.B., Kröner, A., 1996. Single zircon evaporation ages constraining the growth of the Archaean Aravalli craton, northwestern Indian shield. Geol. Mag. 133, 333–342. doi:10.1017/S0016756800009067

Roy, A.B., Kröner, A., Bhattachaya, P.K., Rathore, S., 2005. Metamorphic evolution and zircon geochronology of early Proterozoic granulites in the Aravalli Mountains of northwestern India. Geol. Mag. 142, 287–302. doi:10.1017/S0016756805000804

Saha, D., Patranabis-Deb, S., 2014. Proterozoic evolution of Eastern Dharwar and Bastar cratons, India – An overview of the intracratonic basins, craton margins and mobile belts. J. Asian Earth Sci. 91, 230–251. doi:10.1016/j.jseaes.2013.09.020

Sahoo, S.K., Planavsky, N.J., Kendall, B., Wang, X., Shi, X., Scott, C., Anbar, A.D., Lyons, T.W., Jiang, G., 2012. Ocean oxygenation in the wake of the Marinoan glaciation. Nature 489, 546–9.

Sarkar, A., Chakraborty, P.P., Mishra, B., Bera, M.K., Sanyal, P., Paul, S., 2010. Mesoproterozoic sulphidic ocean, delayed oxygenation and evolution of early life: sulphur isotope clues from Indian Proterozoic basins. Geol. Mag. 147, 206. doi:10.1017/S0016756809990380

Sarkar, S., Bose, P., Samanta, P., Sengupta, P., Eriksson, P., 2008. Microbial mat mediated structures in the Ediacaran Sonia Sandstone, Rajasthan, India, and their implications for proterozoic sedimentation. Precambrian Res. 162, 248–263. doi:10.1016/j.precamres.2007.07.019

Sen, A., Pande, K., Sheth, H.C., Sharma, K.K., Sarkar, S., Dayal, a. M., Mistry, H., 2013. An Ediacaran-Cambrian thermal imprint in Rajasthan, western India: Evidence from 40Ar-39Ar geochronology of the Sindreth volcanics. J. Earth Syst. Sci. 122, 1477–1493. doi:10.1007/s12040-013-0359-y

Sharma, R.S., 2009. Cratons and Fold Belts of India, 1st ed, Lecture Notes in Earth Sciences.

Springer, Berlin, Heidelberg. doi:10.1007/978-3-540-75761-0

Shields, G.A., Veizer, J., 2002. The Precambrian marine carbonate isotope database: version 1.1. Geochemistry Geophys. Geosystems 3, 1–12. doi:10.1029/2001GC000266

Singh, V.K., Babu, R., 2013. Neoproterozoic Chert Permineralized Silicified Microbiota from the Carbonate Facies of Raipur Group, Chhattisgarh Basin, India: their Biostratigraphic significance. Spec. Publ. Geol. Soc. India 1, 449–468. doi:10.17491/cgsi/2013/63321

Singh, V.K., Sharma, M., 2016. Mesoproterozoic organic-walled microfossils from the Chaporadih Formation, Chandarpur Group, Chhattisgarh Supergroup, Odisha, India. J. Palaeontol. Soc. India 61, 75–84.

Sreenivas, B., Sharma, S. Das, Kumar, B., Patil, D.J., Roy, A.B., Srinivasan, R., 2001. Positive $\delta^{13}C$ excursion in carbonate and organic fractions from the Paleoproterozoic Aravalli Supergroup, Northwestern India. Precambrian Res. 106, 277–290. doi:10.1016/S0301-9268(00)00131-5

Sun, S. -s., McDonough, W.F., 1989. Chemical and isotopic systematics of oceanic basalts: implications for mantle composition and processes. Geol. Soc. London, Spec. Publ. 42, 313–345. doi:10.1144/GSL.SP.1989.042.01.19

Tang, H., Chen, Y., 2013. Global glaciations and atmospheric change at ca. 2.3 Ga. Geosci. Front. 4, 583–596. doi:10.1016/j.gsf.2013.02.003

Tewari, V.C., Sial, A.N., 2007. Neoproterozoic-Early Cambrian isotopic variation and chemostratigraphy of the Lesser Himalaya, India, Eastern Gondwana. Chem. Geol. 237, 82–106. doi:10.1016/j.chemgeo.2006.06.015

Tobisch, O.T., Collerson, K.D., Bhattacharyya, T., Mukhopadhyay, D., 1994. Structural relationships and Sr-Nd isotope systematics of polymetamorphic granitic gneisses and granitic rocks from central Rajasthan, India: implications for the evolution of the Aravalli craton. Precambrian Res. 65, 319–339. doi:10.1016/0301-9268(94)90111-2

Torsvik, T.H., Carter, L.M., Ashwal, L.D., Bhushan, S.K., Pandit, M.K., Jamtveit, B., 2001. Rodinia refined or obscured: Palaeomagnetism of the Malani igneous suite (NW India). Precambrian Res. 108, 319–333. doi:10.1016/S0301-9268(01)00139-5

Tripathy, G.R., Singh, S.K., 2011. Re-Os isotopes and redox-sensitive elements of the Himalayan black shales : Implications to marine anoxia near the Pc-C boundary. Mineral. Mag. 75, 2031.

Turner, C.C., Meert, J.G., Pandit, M.K., Kamenov, G.D., 2014. A detrital zircon U-Pb and Hf isotopic transect across the Son Valley sector of the Vindhyan Basin, India: Implications for basin evolution and paleogeography. Gondwana Res. 26, 348–364. doi:10.1016/j.gr.2013.07.009

Van Lente, B., Ashwal, L.D., Pandit, M.K., Bowring, S.A., Torsvik, T.H., 2009. Neoproterozoic hydrothermally altered basaltic rocks from Rajasthan, northwest India: Implications for late Precambrian tectonic evolution of the Aravalli Craton. Precambrian Res. 170, 202–222.

doi:10.1016/j.precamres.2009.01.007

Wang, X., Shi, X., Jiang, G., Zhang, W., 2012. New U-Pb age from the basal Niutitang Formation in South China: Implications for diachronous development and condensation of stratigraphic units across the Yangtze platform at the Ediacaran-Cambrian transition. J. Asian Earth Sci. 48, 1–8. doi:10.1016/j.jseaes.2011.12.023

Wiedenbeck, M., Goswami, J.N., 1994. High precision $^{207}Pb/^{206}Pb$ zircon geochronology using a small ion microprobe. Geochim. Cosmochim. Acta 58, 2135–2141. doi:10.1016/0016-7037(94)90291-7

Wiedenbeck, M., Goswami, J.N., Roy, A.B., 1996. Stabilization of the Aravalli Craton of northwestern India at 2.5 Ga: An ion microprobe zircon study. Chem. Geol. 129, 325–340. doi:10.1016/0009-2541(95)00182-4

Xiao, S., Narbonne, G.M., Zhou, C., Laflamme, M., Grazhdankin, D. V., Moczydlowska-Vidal, M., Cui, H., 2016. Towards an Ediacaran Time Scale: Problems, Protocols, and Prospects. Episodes 39, 540. doi:10.18814/epiiugs/2016/v39i4/103886

Xu, H., Meert, J.G., 2014. New ICP-MS U-Pb Zircon Ages from Khatu Rhyolites in the Jodhpur Group, India: Constraints on the Lower Age Limit for the Marwar Supergroup, in: AGU Fall Meeting Abstracts. AGU, p. 3560.

Yadav, B., Ahmad, T., Kaulina, T., Bayanova, T., 2015. Geochemistry and petrogenesis of Paleo-Proterozoic granitoids from Mahakoshal Supracrustal Belt (MSB), CITZ. EGU Gen. Assem. Conference Abstr. 17.

Yang, Y.H., Chu, Z.Y., Wu, F.Y., Xie, L.W., Yang, J.H., 2011. Precise and accurate determination of Sm, Nd concentrations and Nd isotopic compositions in geological samples by MC-ICP-MS. J. Anal. At. Spectrom. 26, 1237–1244. doi:10.1039/C1JA00001B

Young, G.M., 2013. Precambrian supercontinents, glaciations, atmospheric oxygenation, metazoan evolution and an impact that may have changed the second half of Earth history. Geosci. Front. 4, 247–261. doi:10.1016/j.gsf.2012.07.003