

REFERENCES

- Agarwal, G. C., 1984, Further studies on tertiary and quaternary sequences of south Gujarat with reference to their structural Style and geomorphic expressions [Ph.D: M.S University.
- , 1986, Structure and tectonics of exposed Tertiary rocks between Narmada and Kim rivers in South Gujarat Journal of the Geological Society of India, v. 27, no. 6, p. 531-542.
- Ahmad, A., and Akhtar, K., 1990, Clastic environments and facies of the Lower Cretaceous Narmada basin, India: Cretaceous Research, v. 11, no. 2, p. 175-190.
- Akhtar, K., and Ahmad, A., 1991, Single-cycle cratonic quartzarenites produced by tropical weathering: the Nimar sandstone (Lower Cretaceous), Narmada basin, India: Sedimentary Geology, v. 71, no. 1-2, p. 23-32.
- Al Yuncha, Z., and Luzon, F., 2000, On the horizontal-to-vertical spectral ratio in sedimentary basins Bulletin of the Seismological Society of America, v. 90, no. 4, p. 1101.
- Alagarsamy, R., 2009, Environmental magnetism and application in the continental shelf sediments of India: Marine Environmental Research, v. 68, no. 2, p. 49-58.
- Albani, A., 1968, Recent Foraminiferida from Port Hacking: New South Wales. Contributions from the Cushman Foundation for Foraminiferal Research, v. 19, no. 3, p. 85-119.
- Allchin, B., Goudie, A., and Hegde, K., 1978, The Prehistory and Palaeogeography of the Great Indian Desert, London, Academic Press.
- Allchin, B., and Hegde, K. T. M., 1969, The background of early man in the Narmada Valley, Gujarat: a preliminary report of the 1969 season's field work Journal of the MS University of Baroda, v. 12, no. 1, p. 141-145.
- Almogi-Labin, A., Perelis-Grossovicz, L., and Raab, M., 1992, Living Ammonia from a hypersaline inland pool, Dead Sea area, Israel: The Journal of Foraminiferal Research, v. 22, no. 3, p. 257.
- An, Z., Kukla, S., Porter, S. C., and Xiao, J. L., 1991, Magnetic susceptibility evidence of monsoon variation on the Loess Plateau of Central China during the last 13 000 years Quarter Res, v. 36, p. 29.

- Ao, H., 2010, Mineral-magnetic signal of long-term climatic variation in Pleistocene fluvio-lacustrine sediments, Nihewan Basin (North China): Journal of Asian Earth Sciences, v. 39, no. 6, p. 692-700.
- Arai, H., and Tokimatsu, K., 2005, S-wave velocity profiling by joint inversion of microtremor dispersion curve and horizontal-to-vertical (H/V) spectrum Bulletin of the Seismological Society of America, v. 95, no. 5, p. 1766.
- Babu, P., 1984, A structural synthesis of the lower Narmada river basin and its bearing on the Mesozoic oil prospects: Petroleum Asia Jour, p. 97-101.
- Banerjee, A., and Rao, K., 1993, Geochemical evaluation of part of the Cambay Basin, India: AAPG bulletin, v. 77, p. 29-29.
- Banner, F., and Culver, S., 1978, Quaternary Haynesina n. gen. and Paleogene Protelphidium Haynes; their morphology, affinities and distribution: The Journal of Foraminiferal Research, v. 8, no. 3, p. 177.
- Barbieri, R., Hohenegger, J., and Pugliese, N., 2006, Foraminifera and environmental micropaleontology: Marine Micropaleontology, v. 61, no. 1-3, p. 1-3.
- Barras, C., Geslin, E., Duplessy, J.-C., and Jorissen, F. J., 2009, Reproduction and growth of the deep-sea benthic foraminifer *Bulimina marginata* under different laboratory conditions: Journal of Foraminiferal Research, v. 39, no. 3, p. 155-165.
- Bartholdy, J., Christiansen, C., and Pedersen, J. B. T., 2007, Comparing spatial grain-size trends inferred from textural parameters using percentile statistical parameters and those based on the log-hyperbolic method: Sedimentary Geology, v. 202, no. 3, p. 436-452.
- Basavaiah, N., 2011, Geomagnetism: Solid Earth and Upper Atmosphere Perspectives, Springer.
- Basavaiah, N., and Khadkikar, A. S., 2004, Environmental Magnetism and its application towards Palaeomonsoon Reconstruction: J. Ind. Geophys. Union (Jan. 2004), v. 8, no. 1, p. 1-14.
- Bé, A. W. H., and Hutson, W. H., 1977, Ecology of Planktonic Foraminifera and Biogeographic Patterns of Life and Fossil Assemblages in the Indian Ocean: Micropaleontology, v. 23, no. 4, p. 369-414.
- Bedi, N., and Vaidyanadhan, R., 1982, Effect of neotectonics on the morphology of the Narmada river in Gujarat, Western India Z.Geomorph.N.F, p. 87-102.

References

- Beer, J., Shen, C., Heller, F., Liu, T., Bonani, G., Beate, D., Suter, M., and Kubik, P. W., 1993, ^{10}Be and magnetic susceptibility in Chinese loess: Geophysical Research Letters, v. 20, no. 1, p. 57-60.
- Begét, J. E., Stone, D. B., and Hawkins, D. B., 1990, Paleoclimatic forcing of magnetic susceptibility variations in Alaskan loess during the late Quaternary: *Geology*, v. 18, no. 1, p. 40.
- Bhandari, S., 2004a, Late Quaternary Sedimentation, Neotectonics and Palaeoenvironment of the Lower Narmada Basin, Western India [Ph.D Ph.D Thesis]: The Maharaja Sayajirao Unuversity of Baroda.
- , 2004b, The Quaternary Sedimentation, Neotectonics and Palaeoenvironment of the Lower Narmada Basin, Western India: Maharaja Sayajirao University of Baroda.
- Bhandari, S., Maurya, D. M., and Chamyal, L. S., 2005, Late Pleistocene alluvial plain sedimentation in Lower Narmada Valley, Western India: Palaeoenvironmental implications *Journal of Asian Earth Sciences*, v. 24, no. 4, p. 433-444.
- Bhandari, S., Raj, R., Maurya, D. M., and Chamyal, L. S., 2001, Formation and Erosion of Holocene Alluvial Fans along the Narmada-Son Fault near Rajpipla in Lower Narmada Basin, Western India *Journal of the Geological Society of India*, v. 58, no. 6, p. 519-532.
- Biswas, S., and Deshpande, S., 1983, Geology and hydrocarbon prospects of Kutch, Saurashtra and Narmada basins: *Petroliferous Basins of India*, p. 111-126.
- Blanford, W., 1869, Geology of the area between Tapti and Narmada valley and the adjoining districts of Malwa and Gujarat: *Geol. Surv. Ind. Mem*, v. 6, no. 3, p. 1-222.
- Blott, S. J., and Pye, K., 2006, Particle size distribution analysis of sand-sized particles by laser diffraction: an experimental investigation of instrument sensitivity and the effects of particle shape: *Sedimentology*, v. 53, no. 3, p. 671-685.
- Blum, M. D., and Tornqvist, T. E., 2000, Fluvial responses to climate and sea-level change: a review and look forward *Sedimentology*, v. 47, no. s 1, p. 2-48.
- Bond, G., Showers, W., Cheseby, M., Lotti, R., Almasi, P., Demenocal, P., Priore, P., Cullen, H., Hajdas, I., and Bonani, G., 1997, A pervasive millennial-scale cycle in North Atlantic Holocene and glacial climates: *science*, v. 278, no. 5341, p. 1257.

- Booth, C. A., Fullen, M. A., Waiden, J., Worsley, A. T., Marcinkonis, S., and Coker, A. O., 2008, Problems and potential of mineral magnetic measurements as a soil particle size proxy: *Journal of Environmental Engineering and Landscape Management*, v. 16, no. 3, p. 151-158.
- Booth, C. A., Walden, J., Neal, A., and Smith, J. P., 2005, Use of mineral magnetic concentration data as a particle size proxy: A case study using marine, estuarine and fluvial sediments in the Carmarthen Bay area, South Wales, U.K: *Science of The Total Environment*, v. 347, no. 1-3, p. 241-253.
- Bornmalm, L., Corliss, B. H., and Tedesco, K., 1997, Laboratory observations of rates and patterns of movement of continental margin benthic foraminifera: *Marine Micropaleontology*, v. 29, no. 3-4, p. 175-184.
- Bose, P., 1884, Geology of the lower Narmada valley between Nimawar and Kawant: *Memoir- Geological Society of India*, no. 2, p. 69-80.
- Bradshaw, J., 1957, Laboratory Studies on the Rate of Growth of the Foraminifer, "Streblus beccarii (Linné) var. tepida (Cushman)": *Journal of Paleontology*, v. 31, no. 6, p. 1138-1147.
- Brady, H., 1895, Report on the Foraminifera Dredged by HMS Challenger During the Years 1873-1876, Gt. Brit. Challenger Office.
- Brandono, M., Freezza, V., Tomassetti, L., Pedley, M., and Matteucci, R., 2009, Facies analysis and palaeoenvironmental interpretation of the Late Oligocene Attard Member (Lower Coralline Limestone Formation), Malta: *Sedimentology*, v. 56, no. 4, p. 1138-1158.
- Brünnich, M., 1872, *Zoologiae fundamenta praelectionibus academicis accomodata: Grunde i Dyrelaeren: Hafniae et Lipsiae*, v. 254.
- Burgess, M. V., and Schnitker, D., 1990, Morphometry of *Bulimina aculeata* Orbigny and *Bulimina marginata* Orbigny: *Journal of Foraminiferal Research*, v. 20, no. 1, p. 37-49.
- Buscombe, D., and Masselink, G., 2009, Grain-size information from the statistical properties of digital images of sediment: *Sedimentology*, v. 56, p. 421-438.
- Cacho, I., Grimalt, J. O., Sierro, F. J., Shackleton, N., and Canals, M., 2000, Evidence for enhanced Mediterranean thermohaline circulation during rapid climatic coolings: *Earth and planetary science letters*, v. 183, no. 3-4, p. 417-429.
- Carpenter, W., Parker, W., Jones, T., and Society, R., 1862, Introduction to the study of the Foraminifera, Published for the Ray society by R. Hardwicke.

- Celebi, M., Dietel, C., Prince, J., Onate, M., and Chavez, G., 1987, Site Amplification in Mexico City (determined from 19 September 1985 strong-motion records and from recording of weak motions) *Ground Motion and Eng Seis*, p. 141-152.
- Chamyal, L. S., Khadkikar, A. S., Malik, J. N., and Maurya, D. M., 1997, Sedimentology of the Narmada alluvial fan, western India *Sedimentary Geology*, v. 107, no. 3-4, p. 263-279.
- Chamyal, L. S., Maurya, D. M., Bhandari, S., and Raj, R., 2002, Late Quaternary geomorphic evolution of the lower Narmada valley, Western India: implications for neotectonic activity along the Narmada-Son Fault *Geomorphology*, v. 46, no. 3-4, p. 177-202.
- Chamyal, L. S., and Merh, S. S., 1992, Sequence stratigraphy of the surface Quaternary deposits in the semi-arid basins of Gujarat *Man and Environment*, v. 17, no. 1, p. 33-40.
- Chamyal, L. S., Sharma, B., Merh, S. S., and Karami, H., 1994, Significance of bank material at Tilakwada in lower Narmada Valley *Current Science*, v. 66, no. 4, p. 306-307.
- Chandra, P., and Chowdhary, L., 1969, Stratigraphy of the Cambay basin: *Bull. ONGC*, v. 6, no. 2, p. 37-50.
- Chaturvedi, S. K., 2001, Distribution and ecology of foraminifera in Kharo Creek and adjoining shelf area of Kachchh, Gujarat [Ph.D: Goa University].
- Cheetham, M. D., Keene, A. F., Bush, R. T., Sullivan, L. A., and Erskine, W. D., 2008, A comparison of grain-size analysis methods for sand-dominated fluvial sediments *Sedimentology*, v. 55, no. 6, p. 1905-1913.
- Chiplonkar, G., Badve, R., and Ghare, M., On the stratigraphy of the Bagh Beds of the Lower Narmada Valley 1977a.
- Chiplonkar, G., Ghare, M., and Badve, R., 1977b, Bagh Beds—their fauna, age and affinities: A retrospect and prospect: *Biovigyanam*, v. 3, no. 1, p. 33-60.
- Cioppa, M. T., Porter, N. J., Trenhaile, A. S., Igokwe, B., and Vickers, J., 2010, Beach Sediment Magnetism and Sources: Lake Erie, Ontario, Canada: *Journal of Great Lakes Research*, v. 36, no. 4, p. 674-685.
- Citterio, A., and Piegay, H., 2009, Overbank sedimentation rates in former channel lakes: characterization and control factors: *Sedimentology*, v. 56, no. 2, p. 461-482.
- Collins, A. C., 1958, Foraminifers. : British Museum Natural History.

- Cronin, T. M., Dwyer, G. S., Kamiya, T., Schwede, S., and Willard, D. A., 2003, Medieval warm period, little ice age and 20th century temperature variability from Chesapeake Bay: *Global and Planetary Change*, v. 36, no. 1-2, p. 17-29.
- Crowley, T. J., 2000, Causes of Climate Change Over the Past 1000 Years: *science*, v. 289, no. 5477, p. 270-277.
- Crowley, T. J., and Lowery, T. S., 2000, How warm was the medieval warm period?: *AMBIO: A Journal of the Human Environment*, v. 29, no. 1, p. 51-54.
- Cui, J., Zhou, S., Wang, J., and Han, H., Fluvial-lacustrine sediments and Holocene climatic and hydrologic events in the middle of the Hebei Plains 2005 2005, Volume 7.
- Culver, S., 1988, New foraminiferal depth zonation of the northwestern Gulf of Mexico: *Palaaios*, v. 3, no. 1, p. 69-85.
- Cushman, J., 1927, Recent foraminifera from off the west coast of America, University of California press.
- , 1928, Additional foraminifera from the upper Eocene of Alabama: *Contrib. Cushman Lab. Foram. Research*, v. 4, no. Pt 3.
- , 1933, Foraminifera: their classification and economic use: *Cushman Lab: Foram. Res., Contr., Spec. Pub*, v. 4, p. 1-349.
- , 1934, A Recent Gumbelitria (?) from the Pacific: *Contr. Cush. Lab. Foram. Res*, v. 10, no. 4, p. 105.
- , 1939, A monograph of the foraminiferal family Nonionidae, US Govt. Print. Off.
- d'Orbigny, A., 1826, Tableau methodique de la classe des Cephalopodes: *Ann: Sci. Nat*, v. 7, p. 245-314.
- , 1839, Foraminifera in Roman de la Sagra: *Histoire Physique politique Nationale Cuba*, French (ed.), v. 8, p. 1-224.
- Das, A., and Krishnaswami, S., 2007a, Elemental geochemistry of river sediments from the Deccan Traps, India: Implications to sources of elements and their mobility during basalt-water interaction: *Chemical Geology*, no. 232, p. 254.
- , 2007b, Elemental geochemistry of river sediments from the Deccan Traps, India: Implications to sources of elements and their mobility during basalt-water interaction: *Chemical Geology*, v. 242, no. 1-2, p. 232-254.

- Dealing, J. A., Hay, K. L., Baban, S. M. J., Huddleston, A. S., Wellington, E. M. H., and Loveland, P. J., 1996, Magnetic susceptibility of soil: an evaluation of conflicting theories using a national data set: *Geophysical Journal International*, v. 127, no. 3, p. 728-734.
- Dekkers, M. J., 1997, Environmental magnetism: an introduction: *Geologie en Mijnbouw*, v. 76, no. 1, p. 163-182.
- Delage, Y., and Herouard, E., 1896, *Traité de Zoologie Concrète*, Paris, La Cellule et les Protozoaires.
- Delgado, J., Lopez Casado, C., Estevez, A., Giner, J., Cuenca, A., and Molina, S., 2000, Mapping soft soils in the Segura river valley (SE Spain): a case study of microtremors as an exploration tool: *Journal of Applied Geophysics*, v. 45, no. 1, p. 19-32.
- Denys-De-Montfort, P., 1808, *Conchyliologie systematique et classification méthodique des coquilles*, Schoell.
- Deotare, B., Kajale, M., Rajaguru, S., and Basavaiah, N., 2004, Late Quaternary geomorphology, palynology and magnetic susceptibility of playas in western margin of the Indian Thar Desert: *Indian Geophysical Union*, v. 8, no. 1, p. 15-25.
- Dessai, D. V. G., Nayak, G., and Basavaiah, N., 2009, Grain size, geochemistry, magnetic susceptibility: Proxies in identifying sources and factors controlling distribution of metals in a tropical estuary, India: *Estuarine, Coastal and Shelf Science*, v. 85, no. 2, p. 307-318.
- Dinesh, B. V., Nair, G. J., Prasad, A. G. V., Nakkeeran, P. V., and Radhakrishna, M. C., 2010, Estimation of sedimentary layer shear wave velocity using microtremor H/V ratio measurements for Bangalore city: *Soil Dynamics and Earthquake Engineering*, v. 30, no. 11, p. 1377-1382.
- Doeglas, D. J., 1968, Grain-size indices, classification and environment: *Sedimentology*, v. 10, no. 2, p. 83-100.
- Edwards, R., and Horton, B., 2000, Reconstructing relative sea-level change using UK salt-marsh foraminifera: *Marine Geology*, v. 169, no. 1-2, p. 41-56.
- Ehrenberg, C., 1838, *Über die Bildung der Kreidefelsen und des Kreidemergels durch unsichtbare Organismen: Physikalische Abhandlungen der Königlichen Akademie der Wissenschaften zu Berlin*, p. 59-147.
- , 1839, *Über dem blossen Auge unsichtbare Kalkthierchen und Kieselthierchen als Hauptbestandtheile der Kreidegebirge: Annalen der Physik*, v. 123, no. 7, p. 502-508.

- Ellwood, B. B., Balsam, W. L., and Roberts, H. H., 2006, Gulf of Mexico sediment sources and sediment transport trends from magnetic susceptibility measurements of surface samples: *Marine Geology*, v. 230, no. 3-4, p. 237-248.
- Evans, M. E., and Heller, F., 2003, *Environmental Magnetism: Principle and Applications of Enviromanetics*, Academic Press, International Geophysis Series, v. 86.
- Farias, J. R., 1977, Murrayinella: taxa nuevo para la ciencia de foraminiferos del Reciente de Agua Somera: *Revista Espanola de Micropaleontologia*, v. 9, p. 343-345.
- Faust, D., Zielhofer, C., Baena Escudero, R., and Diaz del Olmo, F., 2004, High-resolution fluvial record of late Holocene geomorphic change in northern Tunisia: climatic or human impact?: *Quaternary science reviews*, v. 23, no. 16-17, p. 1757-1775.
- Fedo, C. M., Wayne Nesbitt, H., and Young, G. M., 1995, Unraveling the effects of potassium metasomatism in sedimentary rocks and paleosols, with implications for paleoweathering conditions and provenance: *Geology*, v. 23, no. 10, p. 921.
- Fermor, L. L., 1909, *The manganese-ore deposits of India*, Government of India.
- Field, E., and Jacob, K., 1993, The theoretical response of sedimentary layers to ambient seismic noise *Geophysical Research Letters*, v. 20, p. 2925-2928.
- Field, E. H., Hough, S. E., and Jacob, K. H., 1990, Using microtremors to assess potential earthquake site response: a case study in Flushing Meadows, New York City *Bulletin of the Seismological Society of America*, v. 80, no. 6A, p. 1456-1480.
- Folk, R. L., 1966, A review of grain-size parameters: *Sedimentology*, v. 6, no. 2, p. 73-93.
- , 1974, *Petrology of Sedimentary Rocks*, Austin, TX, Hemphil Publishing Company.
- Friedman, G. M., 1967, Dynamic processes and statistical parameters compared for size frequency distribution of beach and river sands *Journal of Sedimentary Petrology*, v. 37, no. 2, p. 327-354.
- Friend, P. F., Slater, M. J., and Williams, R. C., 1979, Vertical and lateral building of river sandstone bodies, Ebro Basin, Spain: *Journal of the Geological Society London*, v. 136, no. 1, p. 39-46.

- Gadekar, D. R., 1975, Geology of the Tertiary rocks of south Gujarat with special reference to their stratigraphy and sedimentation: M.S University of Baroda.
- , 1976, Particle size determination of tertiary rocks from south Gujarat and their significance in the reconstruction of depositional environment: Bull. Ind. Geol. Assoc, v. 10, no. 2, p. 45-56.
- , 1978, Heavy mineral analysis Tertiary sedimentary rocks around Jhagadia, Dis. Baaroach, Gujarat and its significance in the inference of provenance: Bull. Earth. Sci, v. 6, no. 7-12.
- , 1980a, Petrology of the Tertiary rocks around Jhagadia, Dist. Bharoach, Gujarat and its significance in the inference of provenance and depositional environment: J. Ind. Assoc. Sedi, v. 2, p. 9-23.
- , 1980b, Some aspects of diagenesis of the Broach group of Tertiary sediments around Jhagadia, district Broach, Gujarat: Journal of Geological Society, v. 21, no. 440-445.
- Gadekar, D. R., Naik, S. D., and Sahai, B., 1981, Some Aspects of Geomorphic Evolution of the Lower Narmada and Mahi Rivers from Landsat Imagery Recent researches in geology, p. 32-41.
- Galloway, J., 1933, A manual of Foraminifera, Principia Press.
- Garcia-Jerez, A., Luzon, F., Navarro, M., and Perez-Ruiz, J. A., 2006, Characterization of the sedimentary cover of the Zafarraya basin, southern Spain, by means of ambient noise Bulletin of the Seismological Society of America, v. 96, no. 3, p. 957-967.
- Gebhardt, H., Kuhnt, W., and Holbourn, A., 2004, Foraminiferal response to sea level change, organic flux and oxygen deficiency in the Cenomanian of the Tarfaya Basin, southern Morocco: Marine Micropaleontology, v. 53, no. 1-2, p. 133-157.
- Gehrels, W., 1999, Middle and late Holocene sea-level changes in eastern Maine reconstructed from foraminiferal saltmarsh stratigraphy and AMS ¹⁴C dates on basal peat: Quaternary Research, v. 52, no. 3, p. 350-359.
- Ghose, N., 1976, Composition and origin of Deccan basalts: Lithos, v. 9, no. 1, p. 65-73.
- Ghosh, A., Saha, S., Saraswati, P., Banerjee, S., and Burley, S., 2009, Intertidal foraminifera in the macro-tidal estuaries of the Gulf of Cambay: Implications for interpreting sea-level change in palaeo-estuaries: Marine and Petroleum Geology, v. 26, no. 8, p. 1592-1599.

References

- Ghosh, A., Saha, S., Saraswati, P. K., Banerjee, S., Burley, S., and Rao, G., 2008, *Gallitellia*—a proxy for palaeo-monsoonal upwelling on the western coast of India?: *Current Science*, v. 95, no. 11, p. 1608-1611.
- Glaessner, M. F., 1937, On a new family of foraminifera: *Moscow, Univ., Pal. Lab., Etyudy Mikropal*, v. 1, no. 3, p. 19-29.
- Goossens, D., 2008, Techniques to measure grain-size distributions of loamy sediments: a comparative study of ten instruments for wet analysis: *Sedimentology*, v. 55, no. 1, p. 65-96.
- Gopalan, K., Trivedi, J., Merh, S., Patel, P., and Patel, S., 1979, Rb-Sr age of Godhra and related granites, Gujarat, India: *Proceedings of the Indian Academy of Sciences-Earth and Planetary Sciences*, v. 88, no. 1, p. 7-17.
- Gopinath, K., and Krishnamurthy, B., 1968, Probable structure and lithological controls of copper and lead mineralization in the Narukot-Pani Mine area, Baroda and Panchmahal district, Gujarat: *Mineral wealth*, v. 5, no. 243, p. 33-36.
- Gregory, K., Benito, G., Dikau, R., Golosov, V., Jones, A., Macklin, M., Parsons, A., Passmore, D., Poesen, J., and Starkel, L., 2006, Past hydrological events related to understanding global change: An ICSU research project: *Catena*, v. 66, no. 1-2, p. 2-13.
- Grove, J. M., 1988, *The Little Ice Age*, London and New York, Methuen.
- Grove, J. M., and Switsur, R., 1994, Glacial geological evidence for the Medieval Warm Period Climatic Change, v. 26, no. 2, p. 143-169.
- Guerzoni, S., Portaro, R., Trincardi, F., Molinaroli, E., Langone, L., Correggiari, A., Vigliotti, L., Pistolato, M., De Falco, G., and Boccini, V., 1996, Statistical analyses of grain-size, geochemical and mineralogical data in core CM92-43, Central Adriatic basin: *Mem.Ist.ital.Idrobiol*, v. 55, p. 231-245.
- Guha, D., and Pandey, J., Neogene geological history of Cambay Basin 1972, p. 50-60.
- Gupta, B., and Mukherjee, P., 1938, The geology of Gujarat and southern Rajputana: *Rec. Geol. Surv. India*, v. 73, no. 2, p. 103-208.
- Gupta, H., and Chakrapani, G. J., 2005, Temporal and spatial variations in water flow and sediment load in Narmada River Basin, India: natural and man-made factors: *Environmental Geology*, v. 48, no. 4/5.
- Gupta, H., and Chakrapani, G. J., 2007, Temporal and spatial variations in water flow and sediment load in the Narmada river: *Current Science*, v. 92, no. 5.

- Hajek, E. A., Huzurbazar, S. V., Mohrig, D., Lynds, R. M., and Heller, P. L., 2010, Statistical Characterization of Grain-Size Distributions in Sandy Fluvial Systems: *Journal of Sedimentary Research*, v. 80, no. 2, p. 184-192.
- Hayward, B., Buzas, M., Buzas-Stephens, P., and Holzmann, M., 2003, The lost types of *Rotalia beccarii* var. *tepida* Cushman 1926: *The Journal of Foraminiferal Research*, v. 33, no. 4, p. 352.
- Hayward, B., Holzmann, M., Grenfell, H., Pawlowski, J., and Triggs, C., 2004a, Morphological distinction of molecular types in *Ammonia*-towards a taxonomic revision of the world's most commonly misidentified foraminifera: *Marine Micropaleontology*, v. 50, no. 3-4, p. 237-271.
- Hayward, B. W., Grenfell, H. R., Nicholson, K., Parker, R., Wilmhurst, J., Horrocks, M., Swales, A., and Sabaa, A. T., 2004b, Foraminiferal record of human impact on intertidal estuarine environments in New Zealand's largest city: *Marine Micropaleontology*, v. 53, no. 1-2, p. 37-66.
- Hayward, B. W., Grenfell, H. R., Sabaa, A. T., and Kay, J., 2010, Using foraminiferal faunas as proxies for low tide level in the estimation of Holocene tectonic subsidence, New Zealand: *Marine Micropaleontology*, v. 76, no. 1-2, p. 23-36.
- Heller, F., Liu, X., Liu, T., and Xu, T., 1991, Magnetic susceptibility of loess in China: *Earth and planetary science letters*, v. 103, no. 1-4, p. 301-310.
- Heller, F., and Tung-sheng, L., 1986, Palaeoclimatic and sedimentary history from magnetic susceptibility of loess in China: *Geophysical Research Letters*, v. 13, no. 11, p. 1169-1172.
- Heron-Allen, E., and Earland, A., 1915, The Foraminifera of the Kerimba Archipelago (Portuguese East Africa: *The Transactions of the Zoological Society of London*, v. 20, no. 17, p. 543-794.
- Heron-Allen, E., and Earland, A., 1932, Foraminifera: The Ice-free Area of the Falkland Islands and Adjacent Seas, University Press.
- Hobson, G., 1926, The metamorphic rocks and intrusive granite of Chhota Udepur state: *Ree. Geol. Surv. Ind.* 59: 304, v. 57.
- Horton, B., and Edwards, R., 2006, Quantifying Holocene sea level change using intertidal foraminifera: lessons from the British Isles: *Departmental Papers (EES)*, p. 50.
- Horton, B. P., Edwards, R. J., and Lloyd, J. M., 1999, UK intertidal foraminiferal distributions: implications for sea-level studies: *Marine Micropaleontology*, v. 36, no. 4, p. 205-223.

- Hough, S. E., Field, E. H., and Jacob, K. H., Using microtremors to assess site-specific earthquake hazard 1991 1991, Earthquake Engineering Research Institute, p. 385.
- Hughes, M. K., and Diaz, H. F., 1994, Was there a 'Medieval Warm Period', and if so, where and when? : Climatic Change, v. 26, no. 2, p. 109-142.
- Ibs-von Seht, M., and Wohlenberg, J., 1999, Microtremor measurements used to map thickness of soft sediments Bulletin of the Seismological Society of America, v. 89, no. 1, p. 250-259.
- Jackson, R. G., 1975, Hierarchical attributes and a unifying model of bed forms composed of cohesionless material and produced by shearing flow: Bulletin of the Geological Society of America, v. 86, no. 11, p. 1523.
- Jambusaria, B. B., 1970, Geology of the area around shivarajpur (Dis. Panchmahal, Gujarat) with special reference to the stratigraphy, Structure and Metmorphism [Ph.D: M. S University of Baroda, 1-282 p.
- Johnsen, S., Clausen, H. B., Dansgaard, W., Fuhrer, K., Gundestrup, N., Hammer, C. U., Iversen, P., Jouzel, J., Stauffer, B., and Steffensen, J. P., 1992, Irregular glacial interstadials recorded in a new Greenland ice core: Nature, v. 359, no. 6393, p. 311-313.
- Johnsson, M., 1993, The system controlling the composition of clastic sediments, *in* Johnsson, M., and Basu, A., eds., Processes Controlling the Composition of Clastic Sediments, Volume 284, Geological Society of America Special Paper, p. 1-9.
- Juyal, N., Pant, R., Basavaiah, N., Yadava, M., Saini, N., and Singhvi, A., 2004, Climate and seismicity in the higher Central Himalaya during 20-10 ka: evidence from the Garbayang basin, Uttaraanchal, India: Palaeogeography, Palaeoclimatology, Palaeoecology, v. 213, no. 3-4, p. 315-330.
- Kaila, K. L., Krishna, V. G., and Mall, D. M., 1981, Crustal structure along Mehmabad-Billimora profile in the Cambay basin, India from deep seismic soundings: Tectonophysics, v. 76, no. 1-2, p. 99-113.
- Kale, V. S., Hire, P., and Baker, V. R., 1997, Flood hydrology and geomorphology of monsoon-dominated rivers: the Indian Peninsula: Water international, v. 22, no. 4, p. 259-265.
- Kameswara Rao, K., 1971, On some foraminifera from the northeastern part of the Arabian Sea: Proceedings: Plant Sciences, v. 73, no. 4, p. 155-178.
- Kanai, K., 1957, The requisite conditions for the predominant vibration of ground: Bulletin Earthquake Research Institute, v. 35, p. 457-471.

- Kanai, K., and Tanaka, T., 1961, On Microtremors: VIII, Bull. Earthquake Res. Inst., v. 39, p. 97-114.
- Karant, R., Sant, D., and Shah, N., 1988a, Geology and structure of the area around Naswadi with special reference to Bagh Bed exposures, Baroda district, Gujarat: Journal of the Geological Society of India, v. 32, no. 3, p. 239-243.
- Karant, R. V., Sant, D. A., and Shah, N. C., 1988b, Geology and structure of the area around Naswadi with special reference to Bagh Bed exposures, Baroda district, Gujarat: Journal of the Geological Society of India, v. 32, no. 3, p. 239-243.
- Kathiara, R. S., and Bhatt, B. K., 1968, Sedimentolgy of Bhurilignite area, Broach district: Gujarat Mineral Wealth, v. 4, no. 2, p. 12-16.
- Khadkikar, A. S., Mathew, G., Malik, J. N., Gundurao, T. K., Chowgaonkar, M. P., and Merh, S. S., 2010, The influence of the South-West Indian Monsoon on continental deposition over the pst 130 kyr, Gujarat, Western India: Terra Nova, v. 11, no. 6, p. 273-277.
- Khare, N., Chaturvedi, S. K., and Saraswat, R., 2009, Oxygen Isotope records of Globigerina Bulloides across a north-south transect in the south-western Ocean: Ocean Sci. J., v. 44, no. 2, p. 117-123.
- Kim, J.-M., and Kennett, J. P., 1998, Paleoenvironmental changes associated with the Holocene marine transgression, Yellow Sea (Hwanghae): Marine Micropaleontology, v. 34, no. 1-2, p. 71-89.
- Kimoto, K., Ishimura, T., Tsunogai, U., Itaki, T., and Ujié, Y., 2009, The living triserial planktic foraminifer Gallitellia vivans (Cushman): Distribution, stable isotopes, and paleoecological implications: Marine Micropaleontology, v. 71, no. 1-2, p. 71-79.
- King, J., Banerjee, S. K., Marvin, J., and Ozdemir, O., 1982, A comparison of different magnetic methods for determining the relative grain size of magnetite in natural materials: some results from lake sediments: Earth and planetary science letters, v. 59, no. 2, p. 404-419.
- Konno, K., and Ohmachi, T., 1998, Ground-motion characteristics estimated from spectral ratio between horizontal and vertical components of microtremor Bulletin of the Seismological Society of America, v. 88, no. 1, p. 228-241.
- Krishnamurthy, P., and Cox, K., 1977, Picrite basalts and related lavas from the Deccan Traps of western India: Contributions to Mineralogy and Petrology, v. 62, no. 1, p. 53-75.

- Krumbein, W. C., 1934, Size frequency distribution of sediments: *Journal of Sedimentary Petrology*, v. 4, no. 2, p. 65-77.
- Kukla, G., Heller, F., Ming, L. X., Chun, X. T., Sheng, L. T., and Sheng, A. Z., 1988, Pleistocene climates in China dated by magnetic susceptibility: *Geology*, v. 16, no. 9, p. 811.
- Lakhmapurkar, J., and Bhatt, N., 2010, Geo-environmental appraisal of the Meda creek, Saurashtra, Gujarat: *Journal of the Geological Society of India*, v. 75, no. 5, p. 695-703.
- Laskar, A. H., Sharma, N., Ramesh, R., Jani, R. A., and Yadava, M. G., 2010, Paleoclimate and paleovegetation of Lower Narmada Basin, Gujarat, Western India, inferred from stable carbon and oxygen isotopes: *Quaternary International*, v. 227, no. 2, p. 183-189.
- Lee, J. I., Park, B. K., Jwa, Y. J., Yoon, H. I., Yoo, K. C., and Kim, Y., 2005, Geochemical characteristics and the provenance of sediments in the Bransfield Strait, West Antarctica: *Marine Geology*, v. 219, no. 2-3, p. 81-98.
- Lermo, J., and Chavez-Garcia, F. J., 1993, Site effect evaluation using spectral ratios with only one station *Bulletin of the Seismological Society of America*, v. 83, no. 5, p. 1574-1594.
- , 1994, Are microtremors useful in site response evaluation? : *Bulletin of the Seismological Society of America*, v. 84, no. 5, p. 1350-1364.
- Lermo, J., Rodriguez, M., and Singh, S. K., 1988, The Mexico earthquake of September 19, 1985—Natural period of sites in the valley of Mexico from microtremor measurements and strong motion data *Earthquake Spectra*, v. 4, p. 805-814.
- Lespez, L., Le Drezen, Y., Garnier, A., Rasse, M., Eichhorn, B., Ozainne, S., Ballouche, A., Neumann, K., and Huysecom, E., 2011, High-resolution fluvial records of Holocene environmental changes in the Sahel: the Yamé River at Ounjougou (Mali, West Africa): *Quaternary science reviews*, v. 30, no. 5-6, p. 737-756.
- Lewin, J., Macklin, M. G., and Johnstone, E., 2005, Interpreting alluvial archives: sedimentological factors in the British Holocene fluvial record: *Quaternary science reviews*, v. 24, no. 16-17, p. 1873-1889.
- Li, L., Gallagher, S., and Finlayson, B., 2000, Foraminiferal response to Holocene environmental changes of a tidal estuary in Victoria, southeastern Australia: *Marine Micropaleontology*, v. 38, no. 3-4, p. 229-246.

- Linne, K., 1758, *Regnum Animale*. v.1 of *Systema naturae*.
- Liu, J., Zhu, R., and Li, G., 2003, Rock magnetic properties of the fine-grained sediment on the outer shelf of the East China Sea: implication for provenance: *Marine Geology*, v. 193, no. 3-4, p. 195-206.
- Liu, S., Zhang, W., He, Q., Li, D., Liu, H., and Yu, L., 2010a, Magnetic properties of East China Sea shelf sediments off the Yangtze Estuary: Influence of provenance and particle size: *Geomorphology*, v. 119, no. 3-4, p. 212-220.
- Liu, S., Zhang, W., He, Q., Li, D., Liu, H., and Yu, L., 2010b, Magnetic properties of East China Sea shelf sediments off the Yangtze Estuary: Influence of provenance and particle size: *Geomorphology*, v. 119, no. 3, p. 212-220.
- Loeblich, A., and Tappan, H., 1964, *Treatise on Invertebrate Paleontology: Part C. Protista 2, Sarcodina, Chiefly "thecamoebians" and Foraminiferida*/by Alfred R. Loeblich and Helen Tappan, Geological Society of America.
- , 1987, *Foraminiferal Genera and their Classification*. Vols. 1–2: Van Norstrand Reinhold Company, New York.
- , 1988, *Foraminiferal genera and their classification*, Van Nostrand Reinhold New York.
- , 1994, *Foraminifera of the Sahul Shelf and Timor Sea: Cushman Foundation for Foraminiferal Research: Special publication*, v. 31.
- Loeblich Jr, A., and Tappan, H., 1986, Some new and revised genera and families of hyaline calcareous Foraminiferida (Protozoa): *Transactions of the American Microscopical Society*, v. 105, no. 3, p. 239-265.
- Maher, B. A., and Thompson, R., 1999, Quaternary Climates, Environments and Magnetism, *in* Maher, B. A., and Thompson, R., eds., *Quaternary Climates, Environments and Magnetism*, Cambridge University Press.
- Mahoney, J. J., 1988, Deccan traps: Continental flood basalts, p. 151-194.
- Mamtani, M., and Karanth, R., 1997, Syntectonic growth of porphyroblasts over crenulation cleavages-an example from the Precambrian rocks of the Lunavada Group, Gujarat: *Journal of Geological Society of India*, v. 50, p. 171-178.
- Manikyamba, C., Kerrich, R., González--lvarez, I., Mathur, R., and Khanna, T. C., 2008, Geochemistry of Paleoproterozoic black shales from the Intracontinental Cuddapah basin, India: implications for provenance, tectonic setting, and weathering intensity: *Precambrian Research*, v. 162, no. 3-4, p. 424-440.

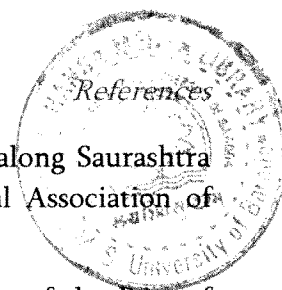
- Martinius, A. W., 2000, Labyrinthine Facies Architecture of the Tortola Fluvial System and Controls on Deposition (Late Oligocene-Early Miocene, Loranca Basin, Spain): *Journal of Sedimentary Research*, v. 70, no. 4, p. 850-867.
- Martins, L. R., 1965, Significance of skewness and kurtosis in environmental interpretation *Journal of Sedimentary Research*, v. 35, no. 3, p. 768.
- Massey, A., Gehrels, W., Charman, D., and White, S., 2006, An intertidal foraminifera-based transfer function for reconstructing Holocene sea-level change in southwest England: *The Journal of Foraminiferal Research*, v. 36, no. 3, p. 215.
- Maurya, D. M., Chamyal, L. S., and Merh, S. S., 1995, Tectonic evolution of the central Gujarat plain, western India *Current Science*, v. 69, no. 7, p. 610-613.
- Mayenkar, D. M., 1994, Distribution of foraminifera off Mangalore-Cochin Sector- West Coast of India [Ph.D: Goa University.
- McCulloch, I., 1977, Qualitative observations on Recent foraminiferal tests with emphasis on the Eastern Pacific. : Special Publication- University of Southern California, Los Angeles, v. 1-3, p. 1-1079.
- Melis, R., and Violanti, D., 2006, Foraminiferal biodiversity and Holocene evolution of the Phetchaburi coastal area (Thailand Gulf): *Marine Micropaleontology*, v. 61, no. 1-3, p. 94-115.
- Merh, S. S., and Chamyal, L. S., 1993, The Quaternary sediments in Gujarat: *Current Science*, v. 64, no. 11, p. 823-827.
- Miall, A., 1978, Lithofacies types and vertical profile models in braided river deposits: a summary: *Fluvial sedimentology*, v. 5, p. 597-604.
- Miall, A. D., 1985, Architectural-element analysis: a new method of facies analysis applied to fluvial deposits *Earth Science Reviews*, v. 22, p. 261-308.
- Montanaro-Gallitelli, E., 1958, Specie nuove e note di foraminiferi del Cretaceo superiore di Serramazzoni (Modena): *Atti e Mem., Accad. Sci. Lett. e Arti Modena*, ser, v. 5, no. 16, p. 3-38.
- Moodley, L., and Hess, C., 1992, Tolerance of infaunal benthic foraminifera for low and high oxygen concentrations: *The Biological Bulletin*, v. 183, no. 1, p. 94.
- Morales, J., Seo, K., Samano, T., Peña, J. A., Ibanez, J. M., and Vidal, F., 1993, Site response on seismic motion in the Granada basin (southern Spain) based on

- microtremor measurements: *Journal of Physics of the Earth*, v. 41, no. 4, p. 221-238.
- Mukherjee, M. K., 1983, Petroleum prospects of Cretaceous sediments of the Cambay basin, Gujarat, India *Journal of Petroleum Geology*, v. 5, no. 3, p. 275-286.
- Murthy, R. S., and Pofali, R. M., 1984, Geomorphological map of Gujarat from landsat imagery analysis: *Journal of the Indian Society of Remote Sensing*, v. 12, no. 1, p. 29-35.
- Nakamura, Y., 1989, A method for dynamic characteristics estimation of subsurface using microtremor on the ground surface *Qr of rtri*, v. 30, no. 1, p. 25-33.
- Nath, B. N., Kunzendorf, H., and Pluger, W. L., 2000, Influence of Provenance, Weathering, and Sedimentary Processes on the Elemental Ratios of the Fine-Grained Fraction of the Bedload Sediments from the Vembanad Lake and the Adjoining Continental Shelf, Southwest Coast of India: *Journal of Sedimentary Research*, v. 70, no. 5, p. 1081-1094.
- Nesbitt, H., Young, G., McLennan, S., and Keays, R., 1996, Effects of chemical weathering and sorting on the petrogenesis of siliciclastic sediments, with implications for provenance studies: *The Journal of Geology*, v. 104, no. 5, p. 525-542.
- Nesbitt, H. W., and Markovics, G., 1980, Chemical processes affecting alkalis and alkaline earths during continental weathering: *Geochimica et Cosmochimica Acta*, v. 44, no. 11, p. 1659-1666.
- Nesbitt, H. W., and Young, G. M., 1982, Early Proterozoic climates and plate motions inferred from major element chemistry of lutites: *Nature*, v. 299, no. 5885, p. 715-717.
- Nesbitt, H. W., and Young, G. M., 1996, Petrogenesis of sediments in the absence of chemical weathering: effects of abrasion and sorting on bulk composition and mineralogy: *Sedimentology*, v. 43, no. 2, p. 341-358.
- Nigam, R., 1984, Living benthonic foraminifera in a tidal environment: Gulf of Khambhat (India): *Marine Geology*, v. 58, no. 3-4, p. 415-425.
- Nigam, R., and Khare, N., 1999, Spatial and Temporal Distribution of Foraminifera in Sediments off the Central West Coast of India and Use of Their Test Morphologies for the Reconstruction of Paleomonsoonal Precipitation: *Micropaleontology*, v. 45, no. 3, p. 285-303.

- Oh, K.-C., Kim, J.-Y., Yang, D.-Y., Lee, J.-Y., and Hong, S.-S., 2008, An assessment of the sand resources in old riverbeds and flood plain deposits within a branch of the Geum River, South Korea: *Quaternary International*, v. 176-177, p. 156-171.
- Ohta, Y. U. T. A., Kagami, H. I. R. O., Goto, N. O. R. I., and Kudo, K. A. Z. U., 1978, Observation of 1- to 5-second microtremors and their application to earthquake engineering. Part I: Comparison with long-period accelerations at the Tokachi-oki earthquake of 1968 *Bulletin of the Seismological Society of America*, v. 68, no. 3, p. 767-779.
- Oldfield, F., Hao, Q., Bloemendal, J. A. N., Gibbs-Eggar, Z., Patil, S., and Guo, Z., 2009, Links between bulk sediment particle size and magnetic grain-size: general observations and implications for Chinese loess studies: *Sedimentology*, v. 56, no. 7, p. 2091-2106.
- Oldfield, F., and Yu, L., 1994, The influence of particle size variations on the magnetic properties of sediments from the north-eastern Irish Sea: *Sedimentology*, v. 41, no. 6, p. 1093-1108.
- Ottesen, R. T., Bogen, J., Bølviken, B., and Volden, T., 1989, Overbank sediment: a representative sample medium for regional geochemical mapping: *Journal of Geochemical Exploration*, v. 32, no. 1-3, p. 257-277.
- Pal, P., and Bhimasankaran, V., 1971, Volcanism, orogeny and drift of the Indian Plate: *Bull. Nat. Geophys. Res. Inst*, v. 9, p. 57-66.
- Pandey, S. K., Singh, A. K., and Hasnain, S. I., 2002, Grain-size distribution, morphoscopy and elemental chemistry of suspended sediments of Pindari Glacier, Kumaon Himalaya, India: *Hydrological Sciences Journal*, v. 47, no. 2, p. 213-226.
- Pant, R., Basavaiah, N., Juyal, N., Saini, N., Yadava, M., Appel, E., and Singhvi, A., 2005, A 20-ka climate record from Central Himalayan loess deposits: *Journal of Quaternary Science*, v. 20, no. 5, p. 485-492.
- Parolai, S., Bormann, P., and Milkereit, C., 2002, New relationships between Vs, thickness of sediments, and resonance frequency calculated by the H/V ratio of seismic noise for the Cologne area (Germany) *Bulletin of the Seismological Society of America*, v. 92, no. 6, p. 2521-2527.
- Parolai, S., Bormann, P., Milkereit, C., and Potsdam, G. F. Z., Measurements of the fundamental resonance frequency of the sedimentary cover in the Cologne area: contribution to the seismic microzonation 2001, p. 301-305.
- Passega, R., 1964, Grain size representation by CM patterns as a geologic tool: *Journal of Sedimentary Research*, v. 34, no. 4, p. 830.

- Patel, M. P., Patel, S. G., and Merh, S. S., 1984, Geomorphic evidences of quaternary sea-level changes in Mahi-Tapi coastal segment of Gujarat Proc Symp Quat Episod Dept Geology M.S.U Baroda, p. 49-62.
- Pattan, J. N., Parthiban, G., Banakar, V. K., Tomer, A., and Kulkarni, M., 2008, Relationship between chemical composition and magnetic susceptibility in sediment cores from Central Indian Ocean Basin Journal of Earth System Science, v. 117, no. 2, p. 113-119.
- Peeters, F., Brummer, G., and Ganssen, G., 2002, The effect of upwelling on the distribution and stable isotope composition of Globigerina bulloides and Globigerinoides ruber (planktic foraminifera) in modern surface waters of the NW Arabian Sea: Global and Planetary Change, v. 34, no. 3-4, p. 269-291.
- Peters, C., and Dekkers, M., 2003, Selected room temperature magnetic parameters as a function of mineralogy, concentration and grain size: Physics and Chemistry of the Earth, Parts A/B/C, v. 28, no. 16-19, p. 659-667.
- Pinto, L., Hérail, G., Moine, B., Fontan, F., Charrier, R., and Dupre, B., 2004, Using geochemistry to establish the igneous provenances of the Neogene continental sedimentary rocks in the Central Depression and Altiplano, Central Andes: Sedimentary Geology, v. 166, no. 1-2, p. 157-183.
- Poizot, E., Méar, Y., and Biscara, L., 2008, Sediment Trend Analysis through the variation of granulometric parameters: A review of theories and applications: Earth Science Reviews, v. 86, no. 1-4, p. 15-41.
- Prasad, K., and Ray, D., 1963, Stratigraphy of the Tertiary rocks around Ankleswar, Broach District, Gujarat: Records of the Geological Survey of India, v. 92, p. 235-238.
- Price, J. R., and Velbel, M. A., 2003, Chemical weathering indices applied to weathering profiles developed on heterogeneous felsic metamorphic parent rocks: Chemical Geology, v. 202, p. 397-416.
- Provansal, M., Villiet, J., Eyrolle, F., Raccasi, G., Gurriaran, R., and Antonelli, C., 2010, High-resolution evaluation of recent bank accretion rate of the managed Rhone: A case study by multi-proxy approach Geomorphology, v. 117, no. 3-4, p. 287-297.
- Purkait, B., 2006, Grain-size distribution patterns of a point bar system in the Usri River, India: Earth Surface Processes and Landforms, v. 31, no. 6, p. 682-702.

- Raj, R., 2007, Strike slip faulting inferred from offsetting of drainages: Lower Narmada basin, western India: *Journal of Earth System Science*, v. 116, no. 5, p. 413-421.
- , 2008, Occurrence of volcanic ash in the Quaternary alluvial deposits, lower Narmada basin, western India *Journal of Earth System Science*, v. 117, no. 1, p. 41-48.
- Raj, R., Bhandari, S., Maurya, D. M., and Chamyal, L. S., 2003, Geomorphic Indicators of Active Tectonics in the Karjan River Basin, Lower Narmada Valley, Western India: *Journal of the Geological Society of India*, v. 62, no. 6, p. 739-752.
- Raj, R., and Yadava, M. G., 2009, Late Holocene uplift in the lower Narmada basin, western India *Current Science*, v. 96, no. 7, p. 985-988.
- Rajaguru, S. N., Gupta, A., Kale, V. S., Mishra, S., Ganjoo, R. K., Ely, L. L., Enzel, Y., and Baker, V. R., 1995, Channel form and processes of the flood-dominated Narmada River, India: *Earth Surface Processes and Landforms*, v. 20, no. 5, p. 407-421.
- Rajshekhar, C., Gawali, P., Mudgal, T., Reddy, P., and Basavaiah, N., 1991, Micropaleontology and Mineral magnetic evidences of the Holocene mudflats of Navlakhi, Gulf of Kachchh: *J. Ind. Geophys. Union* (Jan. 2004), v. 8, no. 1, p. 71-77.
- Raju, A., 1968, Geological evolution of Assam and Cambay Tertiary basins of India: *AAPG Bull*, v. 52, no. 12, p. 2422-2437.
- Ramanathan, S., 1981, Some aspects of Deccan volcanism of western Indian shelf and Cambay basin: *Deccan Volcanism and Related Basalt Provinces in other Parts of the World. Mem.-Geol. Soc. India*, v. 3, p. 198-217.
- Ramanathan, S., and Pandey, J., 1988, Neogene/Quaternary boundary in Indian basins *Journal of the Palaeontological Society of India*, v. 33, p. 21-45.
- Rao, B. R., 1931, *The Geology of the Baria State* (Rewakantha Agency), Govt. of Baria.
- Rao, K., 1969, Lithostratigraphy of Paleogene succession of southern Cambay basin: *Bulletin of The Oil and Natural Gas Commission*, v. 6, no. 1, p. 24-37.
- Rao, K., Jayalakshmy, K., Venugopal, P., Gopalakrishnan, T., and Rajagopal, M., 2000, Foraminifera from the Chilka Lake on the east coast of India.



- Rao, K., and Srinath, M., 2002, Foraminifera from beach sands along Saurashtra coast, north-west India: Journal of the Marine Biological Association of India, v. 44, no. 1 & 2, p. 22-36.
- Rao, N. R., 1998, Recent foraminifera from inner Shelf sediments of the BAY of Bangal, off Karikkattukuppam, near Madras, South India. [Ph.D: Madras University.
- Rao, T. V., and Rao, M. S., 1974, Recent Foraminifera of Suddagedda Estuary, East Coast of India: Micropaleontology, v. 20, no. 4, p. 398-419.
- Rasul, S. H., Aravalli conglomerates of the Jaban-Richhbar areas, district Panchamahar, Gujarat state, *in* Proceedings Proc. ind. Sc. Cong 1965.
- Reddy, K., and Jagadiswara Rao, R., 1984, Foraminifera-salinity relationship in the Pennar Estuary, India: The Journal of Foraminiferal Research, v. 14, no. 2, p. 115.
- Reddy, P. P., 2006, Late Quaternary Foraminifera from the Intertidal deposits of Gulf of Kachchh and their implications on the depositional environment, Northwestern India [Ph.D: Pune University.
- Ren, J., and Packman, A. I., 2007, Changes in fine sediment size distributions due to interactions with streambed sediments: Sedimentary Geology, v. 202, no. 3, p. 529-537.
- Reuss, A., 1850, Neue Foraminiferen aus den Schichten des österreichischen Tertiärbeckens.
- Richard, G. A., Julien, P. Y., and Baird, D. C., 2005, Statistical analysis of lateral migration of the Rio Grande, New Mexico: Geomorphology, v. 71, no. 1-2, p. 139-155.
- Roddaz, M., Viers, J., Brusset, S., Baby, P., Boucayrand, C., and Hérail, G., 2006, Controls on weathering and provenance in the Amazonian foreland basin: Insights from major and trace element geochemistry of Neogene Amazonian sediments Chemical Geology, v. 226, no. 1-2, p. 31-65.
- Rossi, V., and Vaiani, S. C., 2008, Benthic foraminiferal evidence of sediment supply changes and fluvial drainage reorganization in Holocene deposits of the Po Delta, Italy: Marine Micropaleontology, v. 69, no. 2, p. 106-118.
- Rotman, R., Naylor, L., McDonnell, R., and MacNiocaill, C., 2008, Sediment transport on the Freiston Shore managed realignment site: An investigation using environmental magnetism: Geomorphology, v. 100, no. 3, p. 241-255.
- Roy, P. D., Caballero, M., Lozano, R., and Smykatz-Kloss, W., 2008, Geochemistry of late quaternary sediments from Tecocomulco lake, central Mexico:

- Implication to chemical weathering and provenance: *Chemie der Erde-Geochemistry-Interdisciplinary Journal for Chemical Problems of the Geosciences and Geoecology*, v. 68, no. 4, p. 383-393.
- Ruiz, F., González-Regalado, M. L., Pendón, J. G., Abad, M., Olías, M., and Muñoz, J. M., 2005, Correlation between foraminifera and sedimentary environments in recent estuaries of Southwestern Spain: Applications to holocene reconstructions: *Quaternary International*, v. 140-141, p. 21-36.
- Sahni, B., 1936, The occurrence of *Matonidium* and *Weichselia* in India.
- Sahu, B. K., 1964, Depositional mechanisms from the size analysis of clastic sediments: *Journal of Sedimentary Petrology*, v. 34, no. 11, p. 73-83.
- Saidova, K., 1975, Benthic foraminifera of Tikhogo Okeana (Benthic foraminifera of the Pacific Ocean), *Institute Okeanologii*.
- Sangode, S. J., Sinha, R., Phartiyal, B., Chauhan, O. S., Mazari, R. K., Bagati, T. N., Suresh, N., Mishra, S., Kumar, R., and Bhattacharjee, P., 2007, Environmental magnetic studies on some Quaternary sediments of varied depositional settings in the Indian sub-continent *Quaternary International*, v. 159, no. 1, p. 102-118.
- Sant, D. A., and Karanth, R. V., 1988, Morphological Parameters and their Correlation with Lithology and Structure of the Area between Uchh Nadi and Narmada River in Central India: *Navnirman*, v. 19, no. 2, p. 17-28.
- , 1990, Emplacement of dyke swarms in the Lower Narmada valley, western India Mafic dykes and emplacement mechanisms. *Balkema, Rotterdam*, p. 383-389.
- , 1993, Drainage evolution of the lower Narmada valley, western India *Geomorphology*, v. 8, no. 2-3, p. 221-244.
- Sant, D. A., Rangarajan, G., Krishnan, K., Basavaiah, N., Pandya, C., Sharma, M., and Trivedi, Y., 2006, Flood Plain Record of the Southwest Indian Monsoon During the Last Glacial Man and Environment, v. 31, no. 2, p. 9-20.
- Schultze, M., 1854, Über den Organismus der Polythalamien (Foraminiferen) nebst Bemerkungen über die Rhizopoden im allgemeinen, W. Engelmann.
- Schwager, C., 1866, Fossile Foraminiferen von Kar Nikobar, Reise der Österreichischen Fregatte Novara um die Erde in den Jahren 1857, 1858, 1859 unter den Befehlen des Commodore B. Von Wüllerstorff-Urbair.: *Geologischer Theil*, v. 2, no. 1, p. 187-268.

- , 1876, Saggio di una classificazione dei foraminiferi avuto riguardo alle loro famiglie naturali: Bolletino R. Comitato Geologico d'Italia, v. 7, p. 475-485.
- Seibold, I., 1975, Benthic Foraminifera from the coast and lagoon of Cochin (south India): Rev. Espanola de Micropal, v. 7, p. 175-213.
- Seo, K., A joint work for measurements of microtremors in the Ashigara valley 1992, Volume 1, ESG Japan, p. 43-52.
- Setty, M., and Nigam, R., 1980, Microenvironments and anomalous benthic foraminiferal distribution within the neritic regime of the Dabhol-Vengurla sector (Arabian Sea): Revista Italiana de Paleontologia and Stratigrafia, p. 417-428.
- Sharma, S., Joachimski, M., Sharma, M., Tobschall, H. J., Singh, I. B., Sharma, C., Chauhan, M. S., and Morgenroth, G., 2004, Lateglacial and Holocene environmental changes in Ganga plain, Northern India: Quaternary science reviews, v. 23, no. 1-2, p. 145-159.
- Sifeta, K., Roser, B. P., and Kimura, J. I., 2005, Geochemistry, provenance, and tectonic setting of Neoproterozoic metavolcanic and metasedimentary units, Werri area, Northern Ethiopia: Journal of African Earth Sciences, v. 41, no. 3, p. 212-234.
- Silvestri, A., 1923, Lo stipite della Elissoforme e le sue affinità: Memorie della Pontificia Accademia della Scienze, Nuovi Lincei, ser. v. 2, no. 6, p. 231-270.
- Simonetti, A., Bell, K., and Viladkar, S., 1995, Isotopic data from the Amba Dongar carbonatite complex, west-central India: evidence for an enriched mantle source: Chemical Geology, v. 122, no. 1-4, p. 185-198.
- Singh, M., Sharma, M., and Tobschall, H. J., 2005, Weathering of the Ganga alluvial plain, northern India: implications from fluvial geochemistry of the Gomati River: Applied Geochemistry, v. 20, no. 1, p. 1-21.
- Singh, P., 2009, Major, trace and REE geochemistry of the Ganga River sediments: Influence of provenance and sedimentary processes Chemical Geology, v. 266, no. 3-4, p. 251-264.
- Singh, P., 2010, Geochemistry and provenance of stream sediments of the Ganga River and its major tributaries in the Himalayan region, India: Chemical Geology, v. 269, no. 3-4, p. 220-236.
- Singh, P., and Rajamani, V., 2001a, Geochemistry of the Floodplain Sediments of the Kaveri River, Southern India: Journal of Sedimentary Research, v. 71, no. 1, p. 50-60.

- Singh, P., and Rajamani, V., 2001b, REE geochemistry of recent clastic sediments from the Kaveri floodplains, southern India: Implication to source area weathering and sedimentary processes: *Geochimica et Cosmochimica Acta*, v. 65, no. 18, p. 3093-3108.
- Singh, S., Genus *Anomalinea* from the Upper Eocene Rocks of Surat, Western India 1972, p. 170-174.
- Singh, S., and Srivastava, H., 1981, Lithostratigraphy of Bagh Beds and its correlation with Lameta Beds: *J. Palaeontol. Soc. India*, v. 26, p. 77-85.
- Sinha, R., Bhattacharjee, P., Sangode, S., Gibling, M., Tandon, S., Jain, M., and Godfrey-Smith, D., 2007a, Valley and interfluvial sediments in the southern Ganga plains, India: exploring facies and magnetic signatures: *Sedimentary Geology*, v. 201, no. 3-4, p. 386-411.
- Sinha, R., and Sarkar, S., 2009, Climate-induced variability in the Late Pleistocene-Holocene fluvial and fluvio-deltaic successions in the Ganga plains, India: A synthesis: *Geomorphology*, v. 113, no. 3-4, p. 173-188.
- Sinha, S., Islam, R., Ghosh, S. K., Kumar, R., and Sangode, S. J., 2007b, Geochemistry of Neogene Siwalik mudstones along Punjab re-entrant, India: Implications for source-area weathering, provenance and tectonic setting: *Current Science*, v. 92, no. 8, p. 1103-1113.
- Smith, D. G., Hubbard, S. M., Leckie, D. A., and Fustic, M., 2009, Counter point bar deposits: lithofacies and reservoir significance in the meandering modern Peace River and ancient McMurray Formation, Alberta, Canada: *Sedimentology*, v. 56, no. 6, p. 1655-1669.
- Snowball, I. F., 1993, Geochemical control of magnetite dissolution in subarctic lake sediments and the implications for environmental magnetism: *Journal of Quaternary Science*, v. 8, no. 4, p. 339-346.
- Sridhar, A., and Chamyal, L. S., 2010, Sediment records as archives of the Late Pleistocene-Holocene hydrological change in the alluvial Narmada River basin, western India: *Proceedings of the Geologists' Association*, v. 121, no. 2, p. 195-202.
- Steiger, J., Gurnell, A., Ergenzinger, P., and Snelder, D., 2001, Sedimentation in the riparian zone of an incising river: *Earth Surface Processes and Landforms*, v. 26, no. 1, p. 91-108.
- Steinwachs, M., 1974, Systematische Untersuchungen der kurzperiodischen seismischen Bodenrüttelung in der Bundesrepublik Deutschland: *Geologisches Jahrbuch*, v. E3.

- Sudhakar, R., and Basu, D., 1973, A reappraisal of the Paleogene stratigraphy of southern Cambay Basin: *Bulletin of The Oil and Natural Gas Commission*, v. 10, p. 55-76.
- Suganuma, Y., Yamazaki, T., and Kanamatsu, T., 2009, South Asian monsoon variability during the past 800 kyr revealed by rock magnetic proxies: *Quaternary science reviews*, v. 28, no. 9-10, p. 926-938.
- Sukheswala, R., 1981, Deccan basalt volcanism: Deccan volcanism. *Geol. Soc. India Mem*, v. 3, p. 8-18.
- Sukheswala, R., and Avasia, R., 1971, Carbonatite-alkalic complex of Panwad-Kawant, Gujarat, and its bearing on the structural characteristics of the area: *Bulletin of Volcanology*, v. 35, no. 3, p. 564-578.
- Sukheswala, R., Avasia, R., and Gangopadhyay, M., 1972, Observations on the occurrence of secondary minerals in the Deccan Traps of Western India: *Indian Mineralogist*, v. 13, p. 50-68.
- Sundaram, R. M., Rai, V., and Pal, N. K., Quaternary landforms and neotectonic activity in Bharuch area, Gujarat 1991 1991, M.S university of Baroda, p. 195-202.
- Tenner, W. F., 2007, Suite statistics: The hydrodynamic evolution of the sediment pool, *in* Syvitski, J. P., ed., *Principle, methods, and Application of Particle Size Analysis*: Cambridge, New York, Cambridge University Press, p. 225-236.
- Terquem, O., 1875, *Essai sur le classement des animaux qui vivent sur la plage et dans les environs de Dunkerque: Mémoires de la Société dunkerquoise.*
- Tewari, H. C., Murty, A. S. N., Kumar, P., and Sridhar, A. R., 2001, A tectonic model of the Narmada region *Current Science*, v. 80, no. 7, p. 873-878.
- Theobald, W., 1860, On the tertiary and alluvial deposits of the central portion of the Nerbudda Valley: *Memoirs of the Geological Survey of India*, v. 2, p. 279-298.
- Thompson, R., and Morton, D., 1979, Magnetic susceptibility and particle size distribution in recent sediments of the Loch Lomond drainage basin, Scotland: *Journal of Sedimentary Petrology*, v. 49, no. 3, p. 0801-0812.
- Thompson, R., and Oldfield, F., 1986, *Environmental magnetism* Allen & Unwin London.
- Tripathi, J. K., Ghazanfari, P., Rajamani, V., and Tandon, S. K., 2007, Geochemistry of sediments of the Ganges alluvial plains: Evidence of large-

- scale sediment recycling *Quaternary International*, v. 159, no. 1, p. 119-130.
- Verosub, K. L., Fine, P., Singer, M. J., and TenPas, J., 1993, Pedogenesis and paleoclimate: Interpretation of the magnetic susceptibility record of Chinese loess-paleosol sequences: *Geology*, v. 21, no. 11, p. 1011.
- Verosub, K. L., and Roberts, A. P., 1995, Environmental magnetism: Past, present, and future *J.Geophys.Res.*, v. 100, no. B2, p. 2175-2192.
- Visher, G. S., 1969, Grain size distributions and depositional processes: *Journal of Sedimentary Petrology*, v. 39, no. 3, p. 1074-1106.
- Vredenburg, E., 1907, The Ammonites of the Bagh beds: *Rec: Geol. Surv. India*, XXVI, Pt, v. 2.
- Wainwright, G., 1964, The Pleistocene Deposits of the Lower Narmada River and an Early Stone Age Industry from the River Chambal, Dept. of Archaeology and Ancient History, Faculty of Arts, Maharaja Sayajirao University of Baroda.
- Wang, J., Chen, F., and Yang, B., New advance in research on the international little ice age climate change 2005 2005, Volume 7.
- Wang, S., Hassan, M., and Xie, X., 2006, Relationship between suspended sediment load, channel geometry and land area increment in the Yellow River Delta: *Catena*, v. 65, no. 3, p. 302-314.
- Wang, Y., Dong, H., Li, G., Zhang, W., Oguchi, T., Bao, M., Jiang, H., and Bishop, M. E., 2010a, Magnetic properties of muddy sediments on the northeastern continental shelves of China: Implication for provenance and transportation: *Marine Geology*, v. 274, no. 1, p. 107-119.
- Wang, Y., Dong, H., Li, G., Zhang, W., Oguchi, T., Bao, M., Jiang, H., and Bishop, M. E., 2010b, Magnetic properties of muddy sediments on the northeastern continental shelves of China: Implication for provenance and transportation: *Marine Geology*, v. 274, no. 1-4, p. 107-119.
- Warrier, A. K., and Shankar, R., 2009, Geochemical evidence for the use of magnetic susceptibility as a paleorainfall proxy in the tropics v. 265, no. 3-4, p. 553-562.
- Wennrich, V., Meng, S., and Schmiedl, G., 2007, Foraminifers from Holocene sediments of two inland brackish lakes in central Germany: *Journal of Foraminiferal Research*, v. 37, no. 4, p. 318-326.
- Williamson, W., 1858, On the recent foraminifera of Great Britain, Printed for the Ray society.

- Williamson, W. C., 1848, On the Recent British species of the genus *Lagena*.: *Annals and Magazine of Natural Hist*, v. 1, p. 1-20.
- Wonsuk, K., 2011, Decoupling allogenic forcing from autogenic precess: Experimental geomorphology and stratigraphy: *UTIG Seminars*.
- Woodroffe, S., 2009, Recognising subtidal foraminiferal assemblages: implications for quantitative sea-level reconstructions using a foraminifera-based transfer function: *Journal of Quaternary Science*, v. 24, no. 3, p. 215-223.
- Yamada, K., Kamite, M., Saito-Kato, M., Okuno, M., Shinozuka, Y., and Yasuda, Y., 2010, Late Holocene monsoonal-climate change inferred from Lakes Ni-no-Megata and San-no-Megata, northeastern Japan: *Quaternary International*, v. 220, no. 1-2, p. 122-132.
- Yamanaka, H., Takemura, M., Ishida, H., and Niwa, M., 1994, Characteristics of long-period microtremors and their applicability in exploration of deep sedimentary layers *Bulletin of the Seismological Society of America*, v. 84, no. 6, p. 1831-1841.
- Zervas, D., Nichols, G. J., Hall, R., Smyth, H. R., Lnthje, C., and Murtagh, F., 2009, *SedLog: A shareware program for drawing graphic logs and log data manipulation: Computers and Geosciences*, v. 35, no. 10, p. 2151-2159.
- Zhao, B., Xie, X., Chai, C., Ma, H., Xu, X., Peng, D., Yin, W., and Tao, J., 2007, Imaging the graben structure in the deep basin with a microtremor profile crossing the Yinchuan City *Journal of Geophysics and Engineering*, v. 4, p. 293-300.
- Zhu, L., Zhang, P., Xia, W., Li, B., and Chen, L., 2003, 1400-year cold/warm fluctuations reflected by environmental magnetism of a lake sediment core from the Chen Co, southern Tibet, China: *Journal of Paleolimnology*, v. 29, no. 4, p. 391-401.
- Zicheng, L. U. O. C., Jianfeng, Z. Z. L. I., and Chenlin, Z., 2008, Multi-proxy evidence for Late Pleistocene Holocene climatic and environmental changes in Lop-Nur, Xinjiang, Northwest China: *Chin.J.Geochem*, v. 27, no. 3.