

References

- Aboye, S. A., R. D. Andrus, N. Ravichandran, A. H. Bhuiyan, J. R. Martin, and N. E. Harman (2014). A New Seismic Site Coefficient Model Based on Conditions in the South Carolina Coastal Plain, *Bull. Seismol. Soc. Am.* **104**(6), 2866-2883.
- Abrahamson, N. A. and J. J. Litehiser (1989). Attenuation of vertical peak acceleration, *Bull. Seismol. Soc. Am.* **79**, 549–580.
- Acharyya, S. K. and B. A. Shah (2010). Groundwater arsenic pollution affecting deltaic West Bengal, India, *Curr. Sci.* **99**(12), 1787-1794.
- Acharyya S. K. (2007). Evolution of the Himalayan Paleogene foreland basin, influence of its litho-packet on the formation of thrust-related domes and windows in the Eastern Himalayas–A review, *J. Asian Earth Sci.* **1**(31), 1-17.
- Aghataher, R., M. R. Delavar, M. H. Nami, and N. Samnay (2008). A Fuzzy-AHP Decision Support System for Evaluation of Cities Vulnerability against Earthquakes, *World Applied Sciences*, IDOSI Publications **3**, 66-72.
- Ahmed, K. M., P. Bhattacharya, M. A. Hasan, S. H. Akhter, S. M. M. Alam, M. A. H. Bhuyian, M. B. Imam, A. A. Khan, and O. Sracek (2004). Arsenic enrichment in groundwater of the alluvial aquifers in Bangladesh: an overview, *Appl. Geochem.* **19**, 181–200.
- Aki, K. (1993). Local site effects on weak and strong ground motion, *Tectonophysics* **218**(1), 93-111.
- Aki, K. (1957). Space and time spectra of stationary stochastic waves, with special reference to microtremors, *Bull. Earthq. Res. Ins.* **35**, 415–456.
- Aki, K. and P. G. Richards (2002). Quantitative seismology, San Francisco.
- Aki, K. (1965). Maximum likelihood estimate of b in the formula $\log N = a - bM$ and its confidence limits, *Bull. Earthq. Res. Ins.* **43**, 237-239.
- Alam, M., M. M. Alam, J. R. Curray, M. L. R. Chowdhury, and M. R. Gani (2003). An overview of sedimentary geology of the Bengal Basin in relation to the regional framework and basin-fill history, *Sedimentary Geology* **155**, 179–208.
- Alam, M. G. M., G. Allinson, F. Stagnitti, A. Tanaka, and M. Westbrooke (2002). Arsenic contamination in Bangladesh groundwater: a major environmental and social disaster, *Int. J. Environ. Health Res.* **12**(3), 235-253.
- Alam, M. K., A. K. M. Hasan, M. R. Khan, and J. W. Whitney (1990). Geological map of Bangladesh, *Published by Ministry of Energy and Mineral Resources*, Geol. Survey of Bangladesh with cooperation of US Geol. Survey.
- Al-Ani, H., O. Erwin, and C. Gary (2013). Characteristics of embedded peat in coastal environments, *Int. J. Geomate* **5**(1), 609-618.
- Albarello, D., R. Camassi, and A. Rebez (2001). Detection of space and time heterogeneity in the completeness of a seismic catalog by a statistical approach: an application to the Italian area, *Bull. Seismol. Soc. Am.* **91**, 1694–1703.
- Algermissen, S. T. and D. M. Perkins (1976). A probabilistic estimate of maximum acceleration in rock in the contiguous United States, *U.S. Geological Survey Open-file Report* **45**, 76–416.
- Allen, T. I., G. Gibson, A. Brown, and J. P. Cull (2004). Depth variation of seismic source scaling relations: Implications for earthquake hazard in southeastern Australia, *Tectonophysics* **390**, 5–24.
- Alvarez, L., J. Garcia, F. Vaccari, G. F. Panza, B. González, C. Reyes, B. Fernández, R. Pico, J. A. Zapata, and E. Arango (2004). Ground Motion Zoning of Santiago de Cuba: An Approach by SH Waves Modelling, *Pure Appl. Geophys.* **161** (5–6), 1041–1059.

- Ambraseys, N. N. (1988). Engineering seismology: part II, *Earthq. Eng. Struct. Dyn.* **17**(1), 51–105.
- Ambraseys, N. N. (1990). Uniform magnitude reevaluation of European earthquakes associated with strong-motion recordings, *Earthq. Eng. Struct. Dyn.* **19**, 1–20.
- Ambraseys, N. and J. J. Douglas (2004). Magnitude calibration of north Indian earthquakes, *Geophys. J. Int.* **159**, 165–206.
- Ambraseys, N. N. and R. Bilham (2003a). Reevaluated intensities for the Great Assam earthquake of 12th June 1897, Shillong, India, *Bull. Seismol. Soc. Am.* **93**(2), 655–673.
- Ambraseys, N. and R. Bilham (2003b). Earthquakes in Afghanistan, *Seismol. Res. Lett.* **74**, 107–123.
- Ambraseys, N. and S. Sarma (1969). Liquefaction of soils induced by earthquakes, *Bull. Seismol. Soc. Am.* **59**(2), 651–664.
- Ameen, S. M. M., M. S. H. Khan, E. Akon, and A. I. Kazi (1998). Petrography and major oxide chemistry of some Precambrian crystalline rocks from Maddhapara, Dinajpur, *Bangladesh Geoscience Journal* **4**, 1–19.
- Ameen, S. M. M., K. R. Chowdhury, M. S. H. Khan, E. Akon, and M. Z. Kabir (2001). Chemical petrology of the Precambrian crystalline basement rocks from Maddhapara, Dinajpur District, Bangladesh, *10th Geological Conf. Bangladesh Geol. Soc., Dhaka*, Abstr., p. 63.
- Anbazhagan, P., K. K. S. Thingbaijam, S. K. Nath, J. N. Narendara Kumar, and T. G. Sitharam (2010). Multi-criteria seismic hazard evaluation for Bangalore city, India, *J. Asian Earth Sci.* **38**, 186–198.
- Anbazhagan, P. and T. G. Sitharam (2010). Relationship between Low Strain Shear Modulus and Standard Penetration Test ‘N’ Values, *ASTM Geotech. Test. J.* **33**(2), 150–164.
- Anderson, J. G., S. G. Wesnousky, and M. W. Stirling (1996). Earthquake size as a function of fault slip rate, *Bull. Seismol. Soc. Am.* **86**, 683–690.
- Andrus, R. D. and K. H. Stokoe (2000). Liquefaction resistance of soils from shear-wave velocity, *J. Geotech. Geoenviron. Eng. ASCE.* **126**(11), 1015–1025.
- Andrus, R. D., T. L. Youd, and R. R. Carter (1986). Geotechnical evaluation of a liquefaction induced lateral spread, Thousand Springs Valley, Idaho, *Proceedings 22nd Annual Symposium on Engineering Geology and Soils Engineering*, Boise, Idaho.
- Ansal, A. (2004). Recent advances in earthquake geotechnical engineering and microzonation, *Springer Science and Business*, Media 1.
- Arango, I. (1996). Magnitude scaling factors for soil liquefaction evaluations, *J. Geotech. Eng. ASCE.* **122**(11), 929–936
- ASTM (1994). Designation: D 3441-94 Standard Test Method for Deep, Quasi-Static, Cone and Friction-Cone Penetration Tests, *American Society for Testing and Materials: Annual Book of Standards* **4**(8) Soil and Rock (I):D420–D4914, 348–354.
- ATC (1996). Seismic evaluation and retrofit of concrete buildings, report ATC-40, Applied Technology Council, Redwood City.
- Athanasopoulos, G. A. (1995). Empirical correlations Vs -N SPT for soils of Greece: A comparative study of reliability, *In Proc. of 7th Int. Conf. on Soil Dyn. Earthq. Eng.* pp 19–25.
- Atkinson, G. M. and D. M. Boore (2006). Earthquake ground-motion predictions for eastern North America, *Bull. Seismol. Soc. Am.* **96**, 2181–2205.
- Auden, J. B. (1959). Earthquakes in relation to the Damodar Valley project, 1st. *In Symp. on Earthq. Eng., Univ. of Roorke*, Roorkee, India.
- Azzaro, R., L. Ferreli, A. M. Michetti, L. Serva, and E. Vittori (1998). Environmental Hazard of Capable Faults: The Case of the Pernicana Fault, Mt. Etna, Sicily, *Nat. Hazards* **17**(2), 147–162.
- Badoux, M. (1998). Comparison of Seismic Retrofitting Strategies with the Capacity Spectrum Method, *Eleventh European Conference on Earthquake Engineering*, September 6–11th 1998, Paris.
- Baeza, C. and J. Corominas (2001). Assessment of shallow landslide susceptibility by means of multivariate statistical techniques, *Earth surf. Proc. Land.* **26**(12), 1251–1263.

- Balasubrahmanyam, M. N. (2006). Geology and tectonics of India: An overview, *Int. Assoc. Gondwana Res. Memoir No. 9*.
- Ball, V. (1877b). Geology of the Rajmahal Hills, *Mem. of the GSI*. **13**(II), 155-248.
- Banerjee, M. and P. K. Sen (1987). Paleobiology in understanding the change of sea level and coast line in Bengal Basin during the Holocene period, *Indian J. Earth Sci.* **14**, 307-320.
- Banerji, R. K. (1981). Cretaceous—Eocene sedimentation, tectonism and biofacies in the bengal basin, India, *Palaeogeography, Palaeoclimatology, Palaeoecology* **34**, 57-85.
- Bard, P. Y. (1999). Microtremor measurements: a tool for site effect estimation? In: Irikura, K., Kudo, K., Okada, H. and Sasatani, T. (eds.), *The Effects of Surface Geology on Seismic Motion – Recent progress and new Horizon on ESG Study*, Volume III, Balkema, Rotterdam, 1251-1279.
- Bard, P. Y., C. Czitrom, J. L. Durville, P. Godefroy, J. P. Meneroud, P. Mouroux, and A. Pecker (1995). Guidelines for seismic microzonation studies, Delegation of major risks of the French Ministry of the environment-direction for prevention, pollution and risks.
- Bardet, J. P., K. Ichii, and C. H. Lin (2000). EERA: a computer program for equivalent-linear earthquake site response analyses of layered soil deposits, University of Southern California, Department of Civil Engineering.
- Bardet, J. P. and T. Tobita (2001). NERA: a computer program for Nonlinear Earthquake site Response Analyses of layered soil deposits, University of Southern California, Los Angeles, Department of Civil Engineering.
- Barui, N. C. and S. Chanda (1992). Late Quaternary pollen analysis in relation to palaeoecology, biostratigraphy and dating of Calcutta peat, *Proceedings of the Indian National Science Academy Part-B, Biological Sciences* **58**(4), 191-200.
- Barrow, B. L. and K. E. Stokoe (1983). Field investigation of liquefaction sites in Northern California, Geotechnical Engineering Thesis, GT: 83-1, British Standard 5930:1999, University of Sheffield, Uncontrolled Copy, (c) BSI, 2004.
- Bapat, A., R. C. Kulkarni, and S. K. Guha (1983). Catalogue of Earthquakes in India and Neighborhood from historical period up to 1979, *Indian Society Earthquake Technology*, Roorkee, India.
- Bender, B. (1983). Maximum likelihood estimation of b-values for magnitude grouped data, *Bull. Seismol. Soc. Am.* **73**, 831-851.
- Bender, B. (1984). Incorporating acceleration variability into seismic hazard analysis, *Bull. Seismol. Soc. Am.* **74**, 1451-1462.
- Bendick, R., R. Bilham, E. Fielding, V. Gaur, S. Hough, G. Kier, M. Kulkarni, S. Martin, K. Mueller, and M. Mukul (2001). The January 26, 2001 Bhuj Earthquake, India, *Seismol. Res. Lett.* **73**, 328-335.
- Bendick, R., R. Bilham, M. A. Khan, and S. F. Khan (2007). Slip on an active wedge thrust from geodetic observations of the 8 October 2005 Kashmir earthquake, *Geology* **35**, 267-270.
- Besana, G. M. and M. Ando (2005). The central Philippine Fault Zone: Location of great earthquakes, slow events, and creep activity, *Earth Planets Space* **57**, 987-994.
- BGS (2001). Arsenic Contamination of Groundwater in Bangladesh, *BGS Technical Report 2*, WC/00/19.
- Bhattacharya, P. M., R. K. Majumdar, and J. R. Kayal (2002). Fractal dimension and b-value mapping in northeast India, *Curr. Sci.* **82**(12), 1486-1491.
- Bhattacharya, P. M. and J. R. Kayal (2003). Mapping the b-value and its correlation with the fractal dimension in the northeast region of India, *J. Geol. Soc. India* **62**, 680-695.
- Bhatia, S. C., M. R. Kumar, and H. K. Gupta (1999). A probabilistic seismic hazard map of India and adjoining regions, *Annali di Geofisica* **42**(6), 1153-1166.
- Bilham, R. (1999). Slip parameters for the Rann of Kachchh, India, 16th June 1819 earthquake quantified from contemporary accounts, *Coastal Tectonics, Geological Society London* **146**, 295-318.
- Bilham, R. (2008). Tom La Touche and the great Assam earthquake of 12 June 1897: Letters from the epicenter, *Seismol. Res. Lett.* **79**(3), 426-437.

- Bilham, R. (2004). Urban earthquake fatalities: a safer world, or worse to come?, *Seismol. Res. Lett.* **75**(6), 706-712.
- Bilham, R., V. K. Gaur, and P. Molnar (2001). Himalayan seismic hazard, *Science* **293**, 1442-1444.
- Bilham, R., E. R. Engdahl, N. Feldl, and S. P. Satyabala (2005). Partial and complete rupture of the Indo-Andaman plate boundary 1847-2004, *Seismol. Res. Lett.* **76**, 299-311.
- Bilham, R. and P. England (2001). Plateau 'pop up' in the great 1897 Assam earthquake, *Nature* **410**, 806-809.
- Bilham, R., R. Bendick, and K. Wallace (2003). Flexure of the Indian plate and intraplate earthquakes, *J. Earth Sys. Sci.* **112**(3), 315-329.
- Billington, S., B. L. Isacks, and M. Barazangi (1977). Spatial distribution and focal mechanisms of mantle earthquakes in the Hindu Kush-Pamir region: A contorted Benioff zone, *Geology* **5**(11), 699-704.
- BIS (2002). IS 1893-2002 (Part 1): Indian Standard Criteria for Earthquake Resistant Design of Structures, Part 1 – General Provisions and Buildings, Bureau of Indian Standards, New Delhi.
- Bishop, Y. M. M., S. E. Fienberg, and P.W. Holland (1975). *Discrete Multivariate Analysis Theory and Practice*, MIT Press, Cambridge, Massachusetts, p 557.
- Biswas, S. K. (1991). Stratigraphy and sedimentary evolution of the Mesozoic basin of Kutch, western India, Stratigraphy and sedimentary evolution of western India, *Gyanodaya Prakashan*, Nainital, 74-103.
- Biswas, S. K. (1999). A review on the evolution of rift basins in India during Gondwana with special reference to western Indian basins and their hydrocarbon prospects, *Proceedings-Indian National Science Academy* **65**(3), 261-284.
- Blake, T. F. (1996). Formula (4), In: T. L. Youd and I. M. Idriss, Eds., Summary Report of Proceedings of the NCEER Workshop on Evaluation of Liquefaction Resistance of Soils, Technical Report NCEER 97-0022.
- BMTPC (1997). Vulnerability Atlas of India: Earthquake, Windstorm and Flood Hazard Maps and Damaged Risk to Housing, Ministry of Housing & Urban poverty Alleviation, First Revision, Government of India.
- Bommer, J. J. and N. A. Abrahamson (2006). Why Do Modern Probabilistic Seismic-Hazard Analysis Often Lead to Increase Hazard Estimates?, *Bull. Seismol. Soc. Am.* **96**, 1967-1977.
- Bonilla, L. F., J. H. Steidl, G. T. Lindley, A. G. Tumarkin, and R. J. Archuleta (1997). Site amplification in the San Fernando Valley, California: variability of site-effect estimation using the S-wave, coda, and H/V methods, *Bull. Seismol. Soc. Am.* **87**(3), 710-730.
- Bonnefoy-Claudet, S., C. Cornou, P.-Y. Bard, F. Cotton, P. Moczo, J. Kristek, and D. Fäh (2006). H/V ratio: A tool for site effects evaluation. Results from 1-D noise simulations, *Geophys. J. Int.* **167**, 827-837.
- Bonnefoy-Claudet, S., S. Baize, L. F. Bonilla, C. Berge-Thierry, C. Pasten, J. Campos, P. Volant, and R. Verdugo (2009). Site effect evaluation in the basin of Santiago de Chile using ambient noise measurements, *Geophys. J. Int.* **176**(3), 925-937.
- Boore, D. M. (1983). Stochastic simulation of high-frequency ground motions based on seismological models of the radiated spectra, *Bull. Seismol. Soc. Am.* **73**, 1,865-1, 894.
- Boore, D. M. and W. B. Joyner (1997). Site Amplifications for Generic Rock Sites, *Bull. Seismol. Soc. Am.* **87**, 327-341.
- Boore, D. M. (2004). Can site response be predicted?, *J. Earthq. Eng.* **8**(1), 1-41.
- Borcherdt, R. D. (1994). Estimates of site-dependent response spectra for design (methodology and justification), *Earthq. Spectra* **10**(4), 617-653.
- Borcherdt, R. D. (1996). Preliminary amplification estimates inferred from strong ground-motion recordings of the Northridge earthquake of January 17, 1994, In *Proc. International Workshop on Site Response Subjected to Strong Earthquake Motions* **2**, 21-46.
- Bormann, P., R. Liu, X. Ren, R. Gutdeutsch, D. Kaiser, and S. Castellaro (2007). Chinese national network magnitudes, their relation to NEIC magnitudes, and recommendations for new IASPEI magnitude standards, *Bull. Seismol. Soc. Am.* **97**, 114-127.
- Boulanger, R. W. and I. M. Idriss (2006). Liquefaction susceptibility criteria for silts and clays, *J. Geotech. Geoenviron. Eng.* **132**(11), 1413-1426.

- Braunmiller, J. and J. Nábelek (2002). Seismotectonics of the Explorer region, *J. Geophys. Res.* **107**(B10), doi: 10.1029/2001JB000220.
- Braunmiller, J., N. Deichmann, D. Giardini, and S. Wiemer (2005). Homogeneous moment-magnitude calibration in Switzerland, *Bull. Seismol. Soc. Am.* **95**, 58-74.
- Bray, J. D., R. B. Sancio, M. F. Riemer, and T. Durgunoglu (2004). Liquefaction susceptibility of fine-grained soils. In Proceedings of the 11th international conference on soil dynamics and earthquake engineering and third international conference on earthquake geotechnical engineering, Berkeley, CA, 655-62.
- Bray, J. D. and R. B. Sancio (2006). Assessment of the liquefaction susceptibility of fine-grained soils, *J. Geotech. Geoenviron. Eng.* **132**(9), 1165-1177.
- Brocher, T. M. (2008). Key elements of regional seismic velocity models for long period ground motion simulations, *J. Seismol.* **12**(2), 217-221.
- BSSC (2001). NEHRP Recommended Provisions for Seismic Regulations for New Buildings and Other Structures, Building Seismic Safety Council, Part 1.
- Bune, V. I., N. A. Vvedenskaya, I. V. Gorbunova, K. K. Zapolsky, N. V. Kondorskaya, and I. V. Fedorova (1973). To the problem of earthquake magnitudes determination, *Pageoph.* **103**, 350-361.
- Burke, K., L. F. Dewey, A. Edelstein, W. S. F. Kidd, K. D. Nelson, A. M. C. Sengor, and J. Stroup (1978). Rift and sutures of the world (NASA-CR-175201) compiled for Goddard Space Flight Center, Greenbelt, Maryland, *Albany Global Tectonics*.
- Burmister, D. M. (1949). Principles and Techniques of Soil Identification, Proceedings of the Highway Research Board, 402.
- Cáceres, D., D. Monterroso, and B. Tavakoli (2005). Crustal deformation in northern Central America, *Tectonophysics* **404**, 119-131.
- Campbell, K. W. and C. M. Duke (1976). Correlations Among Seismic Velocity, Depth and Geology in the Los Angeles Area, School of Engineering and Applied Science, Report No. UCLA-ENG-7662, University of California, Los Angeles.
- Campbell, K. W. and Y. Bozorgnia (2003). Updated near-source ground-motion (attenuation) relations for the horizontal and vertical components of peak ground acceleration and acceleration response spectra, *Bull. Seismol. Soc. Am.* **93**, 314-331.
- Campbell, K. W. and Y. Bozorgnia (2008). NGA ground motion model for the geometric mean horizontal component of PGA, PGV, PGD and 5% damped linear elastic response spectra for periods ranging from 0.01 to 10s, *Earthq. Spectra* **24**, 139-171.
- Carroll, R. I. and D. Ruppert (1996). The use and misuse of orthogonal regression in linear errors-in-variables models, *Am. Stat.* **50**(1), 1-6.
- Castellaro, S., F. Mulargia, and Y. Y. Kagan (2006). Regression problems for magnitudes, *Geophys. J. Int.* **165**, 913-930.
- Castellaro, S. and P. Bormann (2007). Performance of different regression procedures on the magnitude conversion problem, *Bull. Seismol. Soc. Am.* **97**, 1167-1175.
- Cavallini, F. and A. Rebez (1996). Representing earthquake intensity-magnitude relationship with a nonlinear function, *Bull. Seismol. Soc. Am.* **86**, 73-78.
- Cetin, K. O., R. B. Seed, A. Der Kiureghian, K. Tokimatsu, L. F. Jr. Harder, R. E. Kayen, and R. E. Moss (2004). Standard penetration test-based probabilistic and deterministic assessment of seismic soil liquefaction potential, *J. Geotech. Geoenviron. Eng.* **130**(12), 1314-1340.
- Chandra, U. (1977). Earthquakes of Peninsular India-A seismotectonic study, *Bull. Seismol. Soc. Am.* **67**, 1387-1413.
- Chandra, U. (1978). Seismicity, earthquake mechanisms and tectonics along the Himalayan mountain range and vicinity, *Phys. Earth Planet. Interiors* **16**(2) 109-131.

- Chakraborty, S., S. K. Bhattacharya, M. Banerjee, and P. Sen (2011). Study of Holocene precipitation variation from the carbon isotopic composition of sediment organic matter from south Bengal Basin, *Earth Sci. India* **4** (2), 39-48.
- Chakrabarti, R. (2013). The Kolkata Cyclone/Earthquake of 1737: Random Scribbles.
- Chang, H. S., H. R. Lim, and J. H. Hong (1999). Borehole seismics: Review and its application to civil engineering, in Symposium on the application of geophysical technologies to engineering problems, *The 2nd Conference of KSEG*, 176-201.
- Chatterjee, G. C., A. B. Biswas, S. Basu, and B. N. Niyogi (1964). Geology and groundwater resources of the Greater Calcutta Metropolitan Area, West Bengal, *Bull. Geol. Sur. India Series B*(21), 1-150.
- Chen, C. J. and C. H. Juang (2000). Calibration of SPT and CPT-based liquefaction evaluation methods, *Geotech. Special Pub.*, 49-64.
- Cheng, N. and A. C. H. Cheng (1995). Decomposition and particle motion of acoustic dipole log in anisotropic formation, *65th Ann. Internat. Mtg. Soc. of Expl. Geophys.*, 1-4.
- Chien, L. K., M. C. Lin, and Y. N. OH (2000). Shear wave velocity and SPT-N values of in situ reclaimed soil in west Taiwan, *Geotech. Eng. J., Southeast Asian Geotech. Eng. Society* **31**, 63-77.
- Chin, B. and I. C Aki (1991). Simultaneous study of the source, path, and site effects on strong ground motion during the 1989 Loma Prieta earthquake: a preliminary result on pervasive nonlinear site effects, *Bull. Seismol. Soc. Am.* **81**, 1859-1884.
- Christova, C. (1992). Seismicity depth pattern, seismic energy and b value depth variation in the Hellenic Wadati-Benioff zone, *Phys. Earth Planet. Int.* **72**, 38-48.
- Chung, W-Y. and H. Gao (1995). Source parameters of the Anjar earthquake of July 21, 1956, India and its seismotectonic implications for the Kutch rift basin, *Tectonophysics* **242**, 281-292.
- CIESIN (2010). Center for International Earth Science Information Network, *Columbia University supported by United Nations Food and Agriculture Programme and Centro Internacional de Agricultura Tropical*, Socioeconomic Data and Applications Center, Columbia University. available at <http://sedac.ciesin.columbia.edu/gpw>.
- Coburn, A. and R. Spence (2002). Earthquake protection, Second edition, John Wiley & Sons Limited, 420.
- Congalton, G. R. (1991). Review of assessing the accuracy of classifications of remotely sensed data, *Remote Sens. Environ.* **37**, 35-46.
- Congalton, G. R. and R. Mead (1983). A quantitative method to test for consistency and correctness of photo interpretation, *Photogramm. Eng. Rem. S.* **49**, 69-74.
- Congalton, R. G. and K. Green (1999). Assessing the Accuracy of Remotely Sensed Data: Principles and Practices. CRC Press, Inc, Boca Raton, Florida, pp137.
- Cornell, C. A. (1968). Engineering Seismic Risk Analysis, *Bull. Seismol. Soc. Am.* **58**, 1583-1606.
- Cornell, C. A. and E. H. Vanmarcke (1969). The major influence on seismic risk, *The 4th world conference on earthquake engineering, Santiago, Chile*, 69-93, 1969.
- Cornell, C. A. (1968). Engineering Seismic Risk Analysis. *Bull. Seismol. Soc. Am.* **58**, 1583-1606.
- Cornell, C. A. (1971). Probabilistic analysis of damage to structures under seismic loads, *Dynamic Waves in Civil Engineering*, 473-488.
- Curry, J. R., D. G. Moore, L. A. Lawver, F. J. Emmel, R. W. Raitt, M. Henry, and R. Kieckhefer (1979). Tectonics of the Andaman Sea and Burma: Convergent margins.
- Curry, J. R. and D. G. Moore (1971). Growth of the Bengal deep-sea fan and denudation in the Himalayas, *Geol. Soc. Am. Bull.* **82**(3), 563-572.
- Curry, J. R., F. J. Emmel, D. G. Moore, and R. W. Raitt (1982). Structure tectonics and geological history of the northeastern Indian Ocean, *In: The Ocean Basins and Margins*, v. VI. *The Indian Ocean, A.E.M. Nairn and F.G. Stehli (eds)*, 399-450, Plenum, New York.
- Curry, J. R. (1989). The Sunda Arc: A model for oblique plate convergence, *J. Sea Res.* **24**, 131-140.
- Curry, J. R. and T. Munasinghe (1989). Timing of intraplate deformation, northeastern Indian Ocean, *Earth Planet. Sci. Lett.* **94**(1), 71-77.

- Cutter, S. L., B. J. Boruff, and W. L. Shirley (2003). Social vulnerability to environmental hazards, *Social Science Quarterly* **84**, 242–261.
- Dai, F. C., Y. Liu, and S. Wang (1994). Urban geology: a case study of Tongchuan City, Shaanxi Province, China, *Eng. Geology* **38**, 165–175.
- Dai, F. C., C. F. Lee, and X. H. Zhang (2001). GIS-based geo-environmental evaluation for urban land-use planning: a case study, *Eng. geology* **61**(4), 257–271.
- Das, S. and C. Henry. (2003). Spatial relation between main earthquake slip and its aftershock distribution, *Reviews of Geophys.* **41**, 3 /1013.
- Das, D. and B. C. Chattopadhyay (2010). Methods for Seismic Microzonation with SWV: A Comparative Study, Indian Geotechnical Conference, GEOTrendz, IGS Mumbai Chapter & IIT Bombay, 16–18.
- Das, R., H. R. Wason, and M. L. Sharma (2011). Global regression relations for conversion of surface wave and body wave magnitudes to moment magnitude, *Nat. Hazards* **59**, 801–810.
- Das, R., H. R. Wason, and M. L. Sharma (2012). Magnitude conversion to unified moment magnitude using orthogonal regression relation, *J. Asian Earth Sci.* **50**, 44–51.
- Das, S., I. D. Gupta, and V. K. Gupta (2006). A probabilistic seismic hazard analysis of northeast India, *Earthq. Spectra* **22**, 1–27.
- Das, D. and B. C. Chattopadhyay (2009). Characterization of soil over Kolkata municipal area, *IGC*, Guntur, India.
- Dasgupta, S., P. Pande, D. Ganguly, Z. Iqbal, K. Sanyal, N. V. Venaktraman, S. Dasgupta, B. Sural, L. Harendranath, K. Mazumdar, S. Sanyal, A. Roy, L. K. Das, P. S. Misra, and H. Gupta (2000). Seismotectonic Atlas of India and its Environs, *Geological Survey of India*, Calcutta, India, Spl. Publicaiton, **59**, 87.
- Dasgupta, S., M. Mukhopadhyaya, A. Bhattacharya, and T. K. Jana (2003). The geometry of the Burmese-Andaman subducting lithosphere, *J. Seismol.* **7**, 155–174.
- Dasgupta, S. (2011). Earthquake geology, geomorphology and hazard scenario in northeast India: an appraisal. In National workshop on earthquake risk mitigation strategy in north east, New Delhi, *National Institute of Disaster Management*, pp. 24–39.
- Day, R. (2012). Geotechnical Earthquake Engineering, McGraw Hill Professional.
- Dehlinger, P. (1978). Marine gravity, *Elsevier*.
- Delavaud, E., F. Scherbaum, N. Kuehn, and C. Riggelsen (2009). Information-theoretic selection of ground-motion prediction equations for seismic hazard analysis: An applicability study using Californian data, *Bull. Seismol. Soc. Am.* **99**, 3248–3263.
- Dewey, J. F. and J. M. Bird (1970). Mountain belts and the new global tectonics, *J. Geophys. Res.* **75**, 2625–2647.
- Diagourtas, D., A. Tzani, and K. Makropoulos (2001). Comparative study of microtremor analysis method, *Pure Appl. Geophys.* **158**, 2463–2479.
- Dietz, L. D. and W. L. Ellsworth (1990). The October 17, 1989, Loma Prieta, California, earthquake and its aftershocks: geometry of the sequence from high-resolution locations, *Geophys. Res. Lett.* **17**, 1417–1420.
- Dikmen, U. (2009). Statistical correlations of shear wave velocity and penetration resistance for soils, *J. Geophys. Eng.* **6**, 61–72.
- Ding, Z., Y. T. Chen, and G. F. Panza (2004). Estimation of Site Effects in Beijing City, *Pure Appl. Geophys.* **161** (5–6), 1107–1123.
- Dixit, J., D. M. Dewaikar, and R. S. Jangid (2012). Assessment of liquefaction potential index for Mumbai city, *Nat. Hazards Earth Sys. Sci.* **12**(9), 2759–2768.
- Dobry, R., R. Ramos, and M. Power (1999). Site factors and site categories in seismic codes, Technical Report MCEER-99-0010, Multidisciplinary Center for Earthquake Engineering Research.

- Dunbar, P. K., P. A. Lockridge, and L. S. Whiteside (1992). Catalog of Significant Earthquakes, 2150 BC-1991 AD: Including Quantitative Casualties and Damage, *US Department of Commerce, National Oceanic and Atmospheric Administration, Environmental Data and Information Service*, National Geophysical Data Center.
- Dunbar, P. K., R. G. Bilham, and M. J. Laituri (2003). Earthquake loss estimation for India based on macroeconomic indicators, in: *Risk Science and Sustainability*, edited by: Beer, T. and A. Ismail-Zadeh, *Kluwer Academic Publishers*, Dordrecht, 163–180.
- Dutta, T. K. (1964). Seismicity of Assam belts of tectonic activities, *Bull. National Geophys. Res. Instt.* **2**, 152–163.
- El-Sayed, A., I. Korrat, and H. M. Hussein (2004). Seismicity and Seismic Hazard in Alexandria (Egypt) and its Surroundings, *Pure Appl. Geophys.* **161** (5–6), 1003–1019.
- Esteva, L. (1970). Seismic Risk and Seismic Design Decisions, In *Seismic Design for Nuclear Power Plants*. R. J. Hansen (Editor), Massachusetts Institute of Technology Press, Cambridge, MA, USA, 142–82.
- Evans, P. (1964). The tectonic framework of Assam, *Geol. Soc. India* **5**, 80-96.
- Fajfar, P. (1999). Capacity spectrum method based on inelastic demand spectra, *Earthq. Eng. Struct. Dyn.* **28**, 979-939.
- Fajfar, P. (1999). Trends in seismic design and performance evaluation approaches, *In Earthquake Engineering-Invited Papers: Proceedings of the eleventh European conference*, Paris, France, CRC Press **2**, p. 237).
- Fäh, D., F. Kind, and D. Giardini (2001). A theoretical investigation of average H/V ratios, *Geophys. J. Int.* **145**(2), 535-549.
- Feldl, N. and R. Bilham (2006). Great Himalayan earthquakes and the Tibetan plateau, *Nature* **444**(7116), 165-170.
- Engdahl, E. R., R. Van Der Hilst, and R. Bulland (1998). Global teleseismic earthquake relocation with improved travel times and procedures for depth determination, *Bull. Seismol. Soc. Am.* **88**, 722–743.
- Fabbrocino, S., G. Lanzano, G. Forte, F. S. de Magistris, and G. Fabbrocino (2015). SPT blow count vs. shear wave velocity relationship in the structurally complex formations of the Molise Region (Italy), *Eng. Geol.* **187**, 84-97.
- FEMA (1994). Assessment of the state-of-the-art earthquake loss estimation methodologies, Washington, DC:FEMA 249
- FEMA (2000). Prestandard and commentary for the Seismic Rehabilitation of Buildings, *Federal Emergency Management Agency* **356**, Washington, D.C.
- FEMA (2001). HAZUS99 Estimated Annualized Earthquake Loss for the United States, Report FEMA 366, *Federal Emergency Management Agency*, Washington, DC, U.S.A.
- FEMA (2003). HAZUS-MH MR1: Technical manual, Earthquake Model, Federal Emergency Management Agency, Washington, D.C.
- Foresman, T. W. (1997). *The History of Geographic Information Systems: Perspectives from the Pioneers*. Prentice Hall, Englewood Cliffs, New Jersey, USA, 320 pp.
- Frankel, A. (1995). Mapping Seismic Hazard in the central and eastern United States, *Bull. Seismol. Soc. Am.* **66**, 8–21, 1995.
- Frankel, A., C. Mueller, T. Barnhard, D. Perkins, E. V. Leyendecker, N. Dickman, S. Hanson, and M. Hopper (2000). USGS National Seismic Hazard Maps, *Earthq. Spectra* **16**, 1–19.
- Frankel, A. D., M. D. Petersen, C. S. Mueller, K. M. Haller, R. L. Wheeler, E. V. Leyendecker, R. L. Wesson, S. C. Harmsen, C. H. Cramer, D. M. Perkins, and K. S. Rukstales (2002). Documentation for the 2002 update of national seismic hazards maps, *U.S. Geol. Survey Open-File Report*, 02–420.
- Freeman, S. A., J. P. Nicoletti, and J. V. Tyrell (1975). Evaluations of existing buildings for seismic risk—a case study of Puget Sound Naval Shipyard, Bremerton, Washington, In: *Proceedings of U.S. National Conference on Earthquake Engineering*, Berkeley, 113–122.

- Freeman, S. A. (1978). Prediction of response of concrete buildings to severe earthquake motion, publication SP-55, American Concrete Institute, Detroit, 589–605.
- Freeman, D. (1998). *Doing teacher research: From inquiry to understanding*. Pacific Grove, CA: Heinle & Heinle.
- Fujiwara, T. (1972). Estimation of ground movements in actual destructive earthquakes, *Proceedings of the 4th European symposium on earthquake engineering*, London, 125–132.
- Fuller, W. A. (1987). *Measurement Error Models*, Wiley, New York.
- Fumal, T. E. and J. C. Tinsley (1985). Mapping shear-wave velocities of near-surface geologic materials, Evaluating earthquake hazards in the Los Angeles region: an earth-science perspective, *US Geol. Surv. Profess. Pap* 1360, 101-126.
- Gahalaut, V. K. (2006). 2005 Kashmir earthquake: not a Kashmir Himalaya seismic gap event, *Curr. Sci.* **90**, 507–508.
- Gallipoli, M. R., M. Mucciarelli, R. R. Castro, G. Monachesi, and P. Contri (2004). Structure, soil–structure response and effects of damage based on observations of horizontal-to-vertical spectral ratios of microtremors, *Soil Dyn. Earthq. Eng.* **24**(6), 487-495.
- Ganapathy, G. P. (2011). First level seismic microzonation map of Chennai city – a GIS approach, *Nat. Hazards Earth Syst. Sci.* **11**, 549–559.
- Ganapathy, G. P. and A. S. Rajawat (2012). Evaluation of liquefaction potential hazard of Chennai city, India: using geological and geomorphological characteristics, *Nat. Hazards* **64**, 1717–1729.
- Ganguly, S. (1997). Petroleum geology and exploration history of the Bengal Basin in India and Bangladesh, *Ind. J. Geol.* **69**(1), 1–25.
- Ganguly, S. and D. P. Rao, (1970). Stratigraphy and structure of the Tertiary foothills of Eastern Himalaya. Darjeeling district; WB Quart, *Jour. Min. Met. Soc. India* **42**(4), 185-195.
- Gansser, A. (1966). The Indian Ocean and the Himalayas—a geological interpretation, *Eclogae Geol. Helv.* **59**, 831–848.
- Gardner, J. K. and L. Knopoff (1974). Is the sequence of earthquakes in Southern California, with aftershocks removed, Poissonian? *Bull. Seismol. Soc. Am.* **64**, 1363–1367.
- Gaur, V. K. and R. K. S. Chouhan (1968). Quantitative measures of seismicity applied to Indian regions, *Bull. Indian Soc. Earthq. Technology* **5**, 63–78.
- Govindaraju, L. and S. Bhattacharya (2012) Site-specific earthquake response study for hazard assessment in Kolkata city, India, *Nat. Hazards* **61**, 943–965.
- Gee, E. R. (1934). The Dhubri earthquake of 3rd July 1930, *Geol. Surv. India Mem.* **65**, 106.
- Geller, R. J. (1997). Earthquake Prediction: A Critical Review, *Geophys. J. Int.* **131**, 425–450.
- Geneletti, D. and H. G. B. Gorte (2003). A method for object-oriented land cover classification combining Landsat TM data and aerial photographs, *Int. J. Remote Sens.* **24**, 1237-1286.
- Gentleman's Magazine (1738). Sylvanus Urban, gentleman/(Editor, pseudo), Chatto and Windus, London, June 1738. Library of Congress Microfiche Collection 05419, Roll 82.
- Ghosh, S. C. (2002). The Raniganj coal basin: an example of an Indian Gondwana rift, *Sedimentary Geology* **147**(1), 155-176.
- Giardini, D., G. Grünthal, K. M. Shedlock, and P. Zhang (1999). The global seismic hazard assessment program (GSHAP), *Annali di Geofisica* **42**, 1225–1228.
- Golesorkhi, R. (1989). Factors influencing the computational determination of earthquake-induced shear stresses in sandy soils, University of California, Berkeley.
- Gomberg, J., P. Bodin, and P. A. Reasenberg (2003). Observing earthquakes triggered in the near field by dynamic deformations, *Bull. Seismol. Soc. Am.* **93**, 118–138.
- Gosar, A. and M. Martinec (2009). Microtremor HVSR study of site effects in the Ilirska Bistrica Town Area (S. Slovenia), *J. Earthq. Eng.* **13**(1), 50-67.

- Goodbred, S. L. and S. A. Kuehl (2000a). The significance of large sediment supply, active tectonism, and eustasy on margin sequence development: Late Quaternary stratigraphy and evolution of the Ganges–Brahmaputra delta, *Sedimentary Geology* **133**(3), 227-248.
- Goodbred, S. L. and S. A. Kuehl (2000b). Enormous Ganges-Brahmaputra sediment discharge during strengthened early Holocene monsoon, *Geology* **28**(12), 1083-1086.
- Goodbred, S. L. (2003). Response of the Ganges dispersal system to climate change: a source-to-sink view since the last interstade, *Sedimentary Geology* **162**(1), 83-104.
- Goodbred, S. L., S. A. Kuehl, M. S. Steckler, and M. H. Sarker (2003). Controls on facies distribution and stratigraphic preservation in the Ganges–Brahmaputra delta sequence, *Sedimentary Geology* **155**(3), 301-316.
- Goodbred, S. L. and S. A. Kuehl (2003). The production, transport, and accumulation of sediment: a cross-section of recent developments with an emphasis on climate effects, *Sedimentary Geology* **162**(1), 1-3.
- Goswami, C. C., D. Mukhopadhyay, and B. C. Poddar. (2013). Geomorphology in relation to tectonics: A case study from the eastern Himalayan foothills of West Bengal, India, *Quaternary International* **298**, 80-92.
- Grünthal, G. (1998). European Macroseismic Scale 1998, *Cahiers du Centre Européen de Géodynamique et de Séismologie* **15**, Luxembourg.
- Grünthal, G. and R. Wahlström (2006). New generation of probabilistic seismic hazard assessment for the area Cologne/Aachen considering the uncertainties of the input data, *Nat. Hazards* **38**, 159–176.
- Grünthal, G., R. Wahlström, D. Stromeyerv. (2009), The unified catalogue of earthquakes in central, northern, and northwestern Europe (CENEC)—updated and expanded to the last millennium, *J. Seismol.* **13**, 517–541.
- GSI (1939). The Bihar-Nepal Earthquake of 1934, *Geol. Surv. India, Mem.* **73**, pp 391.
- GSB (1990). Geological map of Bangladesh, *Geological Survey of Bangladesh*, Dhaka, Bangladesh.
- Gu, G. X. (1983). Chinese Earthquake Catalogue, *Science Press*, Beijing in Chinese.
- Gubin, I. E. (1968). Seismic zoning of Indian Peninsula, *Bulletin of International Ins. Seismol. Earthq. Eng.* **5**, 109–139.
- Guha, S. K. (1962). Seismic regionalization of India, *In proceedings of 2nd Symposium, Earthq. Eng.*, Roorkee, 191–207.
- Guha, D. K., H. Henkel, and B. Imam (2010). Geothermal Potential in Bangladesh-Results from Investigations of Abandoned Deep Wells, *In Proceedings World Geothermal Congress*, 25-29.
- Gupta, H. K. (2005). Artificial water reservoir-triggered earthquakes with special emphasis at Koyna, *Curr. Sci.* **88**(10).
- Gupta, I. D. (2006). Delineation of probable seismic sources in India and neighbourhood by a comprehensive analysis of seismotectonic characteristics of the region, *Soil Dyn. Earthq. Eng.* **26**, 766–790.
- Gupta, S., A. Das, S. Goswami, A. Mondak, and S. Mondal (2010). Evidence for structural discordance in the inverted metamorphic sequence of Sikkim Himalaya: towards resolving the Main Central Thrust controversy, *J. Geol. Soc. India* **75**(1), 313-322.
- Gutdeutsch, R., D. Kaiser, and G. Jentzsch (2002). Estimation of earthquake magnitudes from epicentral intensities and other focal parameters in Central and Southern Europe, *Geophys. J. Int.* **151**(3), 824–834.
- Gutenberg, B. and C. F. Richter (1944). Frequency of earthquakes in California, *Bull. Seismol. Soc. Am.* **34**(4), 185-188.
- Gutenberg, B. (1945). Amplitudes of surface waves and magnitudes of shallow earthquakes, *Bull. Seismol. Soc. Am.* **35**, 3–12.
- Hainzl, S., F. Scherbaum, and C. Beauval (2006), Estimating Background Activity Based on Interevent-Time Distribution, *Bull. Seismol. Soc. Am.* **96**, 313-320, doi:10.1785/0120050053.
- Hait, A. K., H. K. Das, S. Ghosh, A. K. Roy, A. K. Shaha, and S. Chanda (1996). New dates of Pleistocene subcrop samples from South Bengal, India, *Indian J. Earth Sci.* **23**, 79-82.
- Halldorsson, B., G. Dong, and A. S. Papageorgiou (2002). Earthquake motion input and its dissemination via the Internet, *Earthq. Eng. Vibration* **1**(1), 20-26.

- Hanks, T. and H. Kanamori (1979). A moment magnitude scale, *J. Geophys. Res.* **84**, 2348–2350.
- Hanna, K. C. and R. B. Culpepper (1998). GIS and Site Design: New Tools for Design Professionals, *John Wiley & Sons Ltd.*, New York, USA, 240p.
- Hanumantharao, C. and G. V. Ramana (2008). Dynamic soil properties for microzonation of Delhi, India, *J. Earth Sys. Sci.* **117**(2), 719–730.
- HAZUS (1999). National Institute of Building Science - earthquake loss estimation methodology, technical manual, Report prepared for the Federal Emergency Management Agency, Washington, D.C., available at www.fema.gov/plan/prevent/hazus.
- Herak, M., I. Lokmer, F. Vaccari, and G. F. Panza (2004). Linear Amplification of Horizontal Strong Ground Motion in Zagreb (Croatia) for a Realistic Range of Scaled Point Sources, *Pure Appl. Geophys.* **161** (5–6), 1021–1040.
- Herak, M., (2008). ModelHVSR—A Matlab® tool to model horizontal-to-vertical spectral ratio of ambient noise, *Comp. Geosci.* **34**, 1514–1526.
- Harbi, A., S. Maouche, A. Ayadi, D. Benouar, G. F. Panza and H. Benhallou (2004). Seismicity and Tectonic Structures in the Site of Algiers and its Surroundings: A Step towards Microzonation, *Pure Appl. Geophys.* **161** (5–6), 949–967.
- Hasegawa, H. S., P. W. Basham, and M. J. Berry (1981). Attenuation relations for strong seismic ground motion in Canada, *Bull. Seismol. Soc. Am.* **71**, 1943–1962.
- Hasancebi, N. and R. Ulusay (2007). Empirical correlations between shear wave velocity and penetration resistance for ground shaking assessments, *Bull. Eng. Geol. Environ.* **66**(2), 203–213, doi:10.1007/s10064-006-0063-0.
- Hashash, Y. M. and D. Park (2002). Viscous damping formulation and high frequency motion propagation in non-linear site response analysis, *Soil Dyn. Earthq. Eng.* **22**(7), 611–624.
- Hashash, Y. M. A. (2009). DEEPSOIL V 3.7, Tutorial and User Manual, University of Illinois at Urbana-Champaign, Urbana, Illinois.
- Hashash, Y. M. A., D. R. Groholski, C. A. Phillips, and D. Park (2009). DEEPSOIL v3.5 beta User Manual and Tutorial, Department of Civil and Environmental Engineering, University of Illinois at Urbana-Champaign, Urbana, IL, USA.
- Hashash, Y. M. A., D. R. Groholski, C. A. Phillips, D. Park, and M. Musgrove (2011). DEEPSOIL 5.0, user Manual and Tutorial, University of Illinois, Urbana, IL, USA.
- Heukelom, W. and C. R. Foster (1960). Dynamics Testing of Pavements, *J. Soil Mech. Found. Div.* **86**(1), 1–28.
- Holt, W. E., J. F. Ni, T. C. Wallace, and A. J. Haines (1991). The active tectonics of the eastern Himalayan syntaxis and surrounding regions, *J. Geophys. Res.* **96**, 14,595–14,632.
- Holzer, T. L. and J. C. Savage (2013). Global earthquake fatalities and population, *Earthq. Spectra* **29**(1), 155–175.
- Hori, M. (1969). CGS magnitudes for Japanese earthquakes, *Bull. Earth. Res. Ins.* **47**, 1003–1014.
- Horike, M. (1985). Inversion of phase velocity of long-period microtremors to the S-wave-velocity structure down to the basement in urbanized areas, *J. Phys. Earth* **33**(2), 59–96.
- Horike, M., B. Zhao, and H. Kawase (2001). Comparison of site response characteristics inferred from microtremors and earthquake shear waves, *Bull. Seismol. Soc. Am.* **91**, 1526–1536.
- Hough, S. E., S. Martin, R. Bilham, and G. M. Atkinson (2002). The 26 January 2001 M 7.6 Bhuj, India earthquake: observed and predicted ground motions, *Bull. Seismol. Soc. Am.* **92**, 2061–2079.
- Hough, S. E. and R. Bilham (2008). Site response of the Ganges basin inferred from re-evaluated macroseismic observations from the 1897 Shillong, 1905 Kangra, and 1934 Nepal earthquakes, *J. Earth Sys. Sci.* **117**, 773–782.
- Hough, S. E. and R. G. Bilham (2005). After the Earth Quakes: Elastic Rebound on an Urban Planet, *Oxford University Press*.

- IBC (2006). International Building Code, *International Code Council, Inc.*, Country Club Hills, Illinois.
- IBC (2009). International Building Code, *International Code Council, Inc.*, Country Club Hills, Illinois.
- Idriss, I. M. and H. B. Seed (1968). Seismic response of horizontal soil layers, *J. Soil Mech. Found. Div. ASCE* **94** (SM4), 1003-1031.
- Idriss, I. M. (1999). An update to the Seed-Idriss simplified procedure for evaluating liquefaction potential, *Proc., TRB Workshop on New Approaches to Liquefaction, Publ. n. FHWA-RD-99-165*, Federal Highway Administration.
- Idriss, I. M. and R. W. Boulanger (2004). Semi-empirical procedures for evaluating liquefaction potential during earthquakes. *Proc., 11th International conference on soil dynamics and earthquake engineering, and 3rd International conference on earthquake geotechnical engineering*, Stallion Press **1**, 32–56.
- Idriss, I. M. and R. W. Boulanger (2006). Semi-empirical procedures for evaluating liquefaction potential during earthquakes, *Soil. Dyn. Earthq. Eng.* **26**, 115–130.
- Idriss, I. M. and R. W. Boulanger (2010). SPT-based liquefaction triggering procedures, Rep. UCD/CGM-10 2.
- Imai, T., H. Fumoto, and K. Yokota (1975). The relation of mechanical properties of soil to P-and S-wave velocities in Japan, *In Proc. 4th Japan Earthquake Engineering Symp.*, pp. 89-96.
- Imai, T. (1977). P-and S-wave velocities of the ground in Japan. *Proceedings of the IXth international conference on soil mechanics and foundation engineering*, Japan, v. 2, pp 127–132.
- Imai, T. and K. Tonouchi (1982). Correlation of N-value with S wave velocity and shear modulus, *Proceedings of the 2nd European symposium of penetration testing, Amsterdam*, 67–72.
- Imai T and Y. Yoshimura (1975). The relation of mechanical properties of soils to P and S-wave velocities for ground in Japan, Technical note OYO Corporation.
- Imai, T. and Y. Yoshimura (1970). Elastic wave velocity and soil properties in soft soil, *Tsushito-kiso* **18**(1), 17-22.
- IS 2131 (1981). Method for standard penetration test for soils, Bureau of Indian Standards, New Delhi.
- IS (1893–1962). Recommendations for Earthquake Resistant Design of Structures, *Indian Standards Institution*, New Delhi.
- IS (1893–1966). Criteria for Earthquake Resistant Design of Structures (First Revision), *Indian Standards Institution*, New Delhi.
- IS (1893–1970). Criteria for Earthquake Resistant Design of Structures (Second Revision), *Indian Standards Institution*, New Delhi.
- IS (1893–1984). Criteria for Earthquake Resistant Design of Structures (Third Revision), *Indian Standards Institution*, New Delhi.
- IS 10042 (1981). Code of practice for site investigations for foundation in gravel-boulder deposit, Bureau of Indian Standards, New Delhi.
- IS 13372-1 (1992). Code of practice for seismic testing of rock mass, Part 1: within a borehole, Bureau of Indian Standards, New Delhi.
- IS 1892 (1979). Indian Standard code of Practice for subsurface investigation for foundations, Bureau of Indian Standards, New Delhi.
- IS 2131 (1981). Method for standard penetration test for soils, Bureau of Indian Standards, New Delhi.
- IS 2132 (1986). Code of practice for thin-walled tube sampling of soils, Bureau of Indian Standards, New Delhi.
- IS 2720-1 (1983). Methods of test for soils, Part 1:Preparation of dry soil samples for various tests, Bureau of Indian Standards, New Delhi.
- IS 2720-11 (1993). Methods of test for soils, Part 11: Determination of the shear strength parameters of a specimen tested in unconsolidated undrainedtriaxial compression without the measurement of pore water pressure, Bureau of Indian Standards, New Delhi.

- IS 2720-2 (1973). Methods of test for soils, Part 2: Determination of water content, Bureau of Indian Standards, New Delhi.
- IS 2720-3-1 (1980). Methods of test for soils, Part 3: Determination of specific gravity, Section 1: Fine grained soils, Bureau of Indian Standards, New Delhi.
- IS 2720-4 (1985). Methods of test for soils, Part 4: Grain size analysis, Bureau of Indian Standards, New Delhi.
- IS 2720-5 (1985). Methods of test for soils, Part 5: Determination of liquid and plastic limit, Bureau of Indian Standards, New Delhi.
- IS 460-1 (1985). Test Sieves: Part-I Wire Cloth Test Sieves, Bureau of Indian Standards, New Delhi.
- IS 6403 (1981). Code of practice for determination of bearing capacity of shallow foundations, Bureau of Indian Standards, New Delhi.
- IS 9259 (1979). Liquid limit apparatus for soils, Bureau of Indian Standards, New Delhi.
- IS 4968-3 (1976). Method for subsurface sounding for soils, Part 3: Static cone penetration test, Bureau of Indian Standard, New Delhi.
- Ishita, R. P. and S. Khandaker (2010). Application of Analytical Hierarchical Process and GIS in Earthquake Vulnerability Assessment: Case Study of Ward 37 and 69 in Dhaka City, *Journal of Bangladesh Institute of Planners* **3**, 103-112.
- Ishihara, K. (1984). Post-earthquake failure of a tailings dam due to liquefaction of the pond deposit, Proceedings of the International Conference on Case Histories in Geotechnical Engineering, St. Louis.
- Ishihara, K. (1985). Stability of natural deposits during earthquakes, Proc., *11th Int. Conf. on Soil Mechanics and Foundation Engineering. Rotterdam, Netherlands: Balkema* 1.
- Ishihara, K. (1993). Liquefaction and flow failure during earthquakes, *Geotechnique* **43**(3), 351-451.
- Ivanov, J., C. B. Park, R. D. Miller, and J. Xia (2000). Mapping Poisson's ratio of unconsolidated materials from a joint analysis of surface-wave and refraction events, In *Proc. Symp. on the Application of Geophysics to Engineering and Environmental Problems (SAGEEP 2000)*, Arlington, Va, pp 11-17,
- Iwan, W. D. (1967). On a class of models for the yielding behavior of continuous and composite systems, *J. Appl. Mechanics*, **34**(3), 612-617.
- Iwasaki, T. (1986). Soil liquefaction studies in Japan: state-of-the-art, *Soil Dyn. Earthq. Eng.* **5**(1), 2-68.
- Iwasaki, T., K. Tokida, F. Tatsuoka, S. Watanabe, S. Yasuda, and H. Sato (1982). Microzonation for soil liquefaction potential using simplified methods, In: *Proceedings of 3rd international conference on microzonation*, Seattle **3**, 1319-1330.
- Iwasaki, T., F. Tatsuoka, K. I. Tokida, and S. Yasuda (1978). A practical method for assessing soil liquefaction potential based on case studies at various sites in Japan. In *Proceedings 2nd International Conference on Microzonation*, 885-896.
- Iyengar, R. N. and S. Ghosh (2004). Microzonation of earthquake hazard in greater Delhi area, *Curr. Sci.* **87**(9), 1193-1202.
- Iyisan, R. (1996). Correlations between shear wave velocity and insitu penetration test results (in Turkish), *Chamber of Civil Engineers of Turkey, Teknik Dergi*, **7**(2), 1187-1199.
- Jaiswal, K. and R. Sinha (2004). Webportal on earthquake disaster awareness in India, available at www.earthquakeinfo.org.
- Jaiswal, K. and R. Sinha (2007). Probabilistic seismic-hazard estimation for Peninsular India, *Bull. Seismol. Soc. Am.* **97**, 318-330.
- Jafari, M. K., A. Asghari, and I. Rahmani (1997). Empirical correlation between shear wave velocity (V_s) and SPT-N value for south Tehran soils, *Proceedings of the 4th international conference on civil engineering*, Tehran, Iran

- Jafari, M. K., A. Shafiee, and A. Ramzkhah (2002). Dynamic properties of the fine grained soils in south of Tehran, *J. Seismol. Earthq. Eng.* **4**, 25–35
- Jana, B. P. and M. Majumder (2010). Impact of Climate Change on Natural Resource Management, *Pp. 186. Springer*, ISBN: 904813580X, 9789048135806. Edition: illustrated, available at <http://www.springer.com/978-90-481-3580-6>.
- Jensen, J. R. (1996). Introductory Digital Image Processing- A remote sensing perspective, 2nd. Edn., Prentice Hall Inc., Upper Saddle River, New Jersey, USA.
- Jarpe, S. P., L. J. Hutchings, T. F. Hauk, and A. F. Shakal (1989). Selected strong and weak-motion data from the Loma Prieta Earthquake sequence, *Scismol. Res. Lett.* **60**, 167–176.
- Jinan, Z. (1987). Correlation between seismic wave velocity and the number of blow of SPT and depth, *Chinese J. Geotech. Eng. ASCE.* 92–100.
- Johnston, A. C. (1989). The effect of large ice sheets on earthquake genesis. In: Earthquakes in North Atlantic passive margins: Neotectonics and post-glacial rebound, S. Gregersen and P.W. Basham (eds.), *Kluwer Academic Pub.*, 581- 599.
- Johnson, B. D., C. McA. Powell, and J. J. Veevers (1976). Spreading history of the Eastern Indian Ocean and Greater India's northward flight from Antarctica and Australia, *Geol. Soc. Am. Bull.* **87**, 1560-1566.
- Johnston, A. C. (1993). Report TR-102261, Chap. 3, *Electric Power Research Institute*.
- Joyner, W. B. and D. M. Boore (1981). Peak horizontal acceleration and velocity from strong-motion records including records from the 1979 Imperial Valley, California, earthquake, *Bull. Seismol. Soc. Am.* **71**, 2011–2038.
- Juang, C. H. and D. K. Li (2007). Assessment of liquefaction hazards in Charleston Quadrangle, South Carolina, *Eng. Geology* **92**, 59-72, 2007.
- Juang, C. H., J. Ching, Z. Luo, and C. S. Ku (2012). New models for probability of liquefaction using standard penetration tests based on an updated database of case histories, *Eng. Geology* **133**, 85-93.
- Kafka, A. L. (2007). Does seismicity delineate zones where future large earthquakes are likely to occur in intraplate environments?, *Geol. Soc. Am.* **425**, Special Papers, 35–48.
- Kagan, Y. Y. and D. D. Jackson (1991). Long-term earthquake clustering, *Geophys. J. Int.* **104**, 117–133.
- Kagan, Y. Y. and D. D. Jackson (1994). Long-term probabilistic forecasting of earthquakes, *J. Geophys. Res.* **99**, 13685–13700.
- Kagan, Y. Y. and D. D. Jackson (1999). Worldwide doublets of large shallow earthquakes, *Bull. Seismol. Soc. Am.* **89**, 1147–1155.
- Kaila, K. L., P. R. Reddy, D. M. Mall, N. Venkateswarlu, V. G. Krishna, and A. S. S. R. S. Prasad (1992). Crustal structure of the West Bengal basin, India, from deep seismic sounding investigations, *Geophys. J. Int.* **111**, 45–66.
- Kaila, K. L. and M. Rao (1979). Seismic zoning maps of the Indian subcontinents, *Geophys. Res. Bull.* **17**, 293–301.
- Kalkan, E., P. Gülkan, N. Yilmaz, and M. Çelebi (2009). Reassessment of probabilistic seismic hazard in the Marmara region, *Bull. Seismol. Soc. Am.* **99**, 2127–2146.
- Kalteziotis, N., N. Sabatakakis, and J. Vassiliou, (1992). Evaluation of dynamic characteristics of Greek soil formations, *Second Hellenic Conference on Geotechnical Engineering* **2**, 239–246 (in Greek).
- Kanai, K. (1966). Conf. on Cone Penetrometer The Ministry of Public Works and Settlement, Ankara, Turkey.
- Kanamori, H. and D. L. Anderson (1975). Theoretical basis of some empirical relations in seismology, *Bull. Seismol. Soc. Am.* **65**, 1073-1096.
- Kanamori, H. (1983). Magnitude scale and quantification of earthquakes, *Tectonophysics* **93**, 185–199.
- Kato, K., K. Aki, and M. Takemura (1995). Site amplification from coda waves: validation and application to S-wave site response, *Bull. Seismol. Soc. Am.* **85**(2), 467-477.

- Kayal, J. R., (1996a). Precursor seismicity, foreshocks and aftershocks of the Uttarkashi earthquake of October 20, 1991 at Garhwal Himalaya, *Tectonophysics* **263**, 339-345.
- Kayal, J. R., (1996b). Earthquake source process in northeast India: A review, *J. Himalayan Geol.* **17**, 53-69.
- Kayal, J. R., R. De, and P. Chakraborty (1993). Microearthquakes at the main boundary thrust in eastern Himalaya and the present-day tectonic model, *Tectonophysics* **218**(4), 375-381.
- Kayal, J. R., S. S. Arefiev, S. Baruah, D. Hazarika, N. Gogoi, A. Kumar, S. N. Chowdhury, and S. Kalita (2006). Shillong Plateau earthquakes in northeast India region: Complex tectonic model, *Curr. Sci.* **91**(1), 109-114.
- Kayal, J. R. (2008). Microearthquake seismology and seismotectonics of south Asia, 1st Edition, *Springer Verlag and Capital Publishing Company*, India, ISBN: 978-1-4020-8179-8.
- Kayabalia, K. and M. Akin (2003). Seismic hazard map of Turkey using the deterministic approach, *Eng. Geology* **69**, 127-137.
- Kendall, M. G. and A. Stuart (1979). The Advanced Theory of Statistics, Fourth Ed., Vol. 2, Griffin, London.
- Khan, M. S. H., S. M. M. Ameen, and E. Akon (1997). Petrographic study of some core samples from Precambrian basement, Maddhapara, Dinajpur District, Bangladesh, *Bangladesh J. Geol.* **16**, 55-64.
- Khan, A. A. and R. K. S. Chouhan (1996). The crustal dynamics and the tectonic trends in the Bengal Basin, *J. Geodynamics* **22**(3), 267-286.
- Khan, A. A. and B. N. P. Agarwal (1993). The crustal structure of western Bangladesh from gravity data, *Tectonophysics* **219**(4), 341-353.
- Khattari, K. N., A. M. Rogers, D. M. Perkins, and S. T. Algermissen (1984). A seismic hazard map of India and adjacent areas, *Tectonophysics* **108**, 93-134.
- Khattari, K. N. (1987). Great earthquakes, seismicity gaps and potential for earthquake disaster along the Himalaya plate boundary, *Tectonophysics* **138**, 79-92.
- Khattari, K. N. (1999). Probabilities of occurrence of great earthquakes in the Himalaya, *Proceedings of Indian Academy of Science (Earth Planetary Sciences)* **108**, 87-92.
- Kijko, A. (2004). Estimation of the Maximum Earthquake Magnitude, *Pure Appl. Geophys.* **161**, 1655-1681.
- Kijko, A. and G. Graham (1998). Parametric-historic procedure for probabilistic seismic hazard analysis: Part I - estimation of maximum regional magnitude m_{max} , *Pure Appl. Geophys.* **152**, 413-442.
- Kiku, H., N. Yoshida, S. Yasuda, T. Irisawa, H. Nakazawa, Y. Shimizu, A. Ansal, and A. Erkan (2001). In situ penetration tests and soil profiling in Adapazari, Turkey, Proceedings of the ICSMGE/TC4 satellite conference on lessons learned from recent strong earthquakes, 259-265.
- Kim, J. H. and S. K., Jung (1997). Shear modulus estimation by down-hole seismic survey in Seomyunsa, Pusan, Collected Papers on Institute of Construction, Dong-A Univ., **21**(1), 57-63.
- Kim, J. H. and C. V. Park (2002). Processing of Downhole S-wave Seismic Survey Data by Considering Direction of Polarization, *Geophysics* (in Korean) **5**(4), 321-328.
- Konno, K. and T. Ohmachi (1998). Ground-motion characteristics estimated from spectral ratio between horizontal and vertical components of Microtremor, *Bull. Seismol. Soc. Am.* **88**(1), 228-241.
- Kobayashi, K. (1980). A method for presuming deep ground soil structures by means of longer period microtremors, *Proc. Of the 7th WCEE*, Turkey **1**, 237-240.
- Kotoda, K., K. Wakamatsu, and S. Midorikawa (1988). Seismic Microzonation on Soil Liquefaction Potential Based On Geomorphological Land Classification, *Soils and Foundations* **28**(2), 127-143.
- Kramer, S. (1996). Geotechnical Earthquake Engineering, Prentice Hall, Upper Saddle River, NJ, USA.
- Kramer, S. L. (2008). Evaluation of liquefaction hazards in Washington State (No. WA-RD 668.1), Washington State Department of Transportation, Office of Research and Library Services.
- Krishna, J. (1959). Seismic zoning of India, *In earthquake engineering seminar*, Roorkee University, India, 32-38.

- Kudrass, H. R., V. Spiess, M. Michels, B. Kottke, and S. R. Khan (1999) Transport processes, accumulation rates and a sediment budget for the submarine delta of the Ganges – Brahmaputra and the Swatch of No Ground, Bangladesh, *International Seminar on the Quaternary Development and Coastal Hydrodynamics of the Ganges Delta in Bangladesh, Dhaka*, Geological Survey of Bangladesh.
- Kudo, K. (1995). Practical estimates of site response, State-of-the-art report, *In Proceedings of the fifth International Conference on Seismic Zonation*.
- Kulhawy, F. H. and P.W. Mayne (1990). Manual on estimating soil properties for foundation design, Report EL-6800, Electric Power Research Institute.
- Kundu A. K. and P. Aag (1996). Atlas of the City of Calcutta & its Environs, National Atlas and Thematic Mapping Organization, Ministry of Science and Technology, Government of India.
- Kundu, B. and V. K. Gahalaut (2013). Tectonic geodesy revealing geodynamic complexity of the Indo-Burmese arc region, North East India, *Curr. Sci.* **104**(7), 920-933.
- Kuwano, J., K. Ozaki, and S. Nakamura (1992). Simplified method of liquefaction hazard evaluation for subsurface layers, *Proceedings, 10th World Conf. on Earthquake Engineering*, Madrid, Balkema, Rotterdam **3**.
- Lachetl, C. and P. Y. Bard (1994). Numerical and Theoretical Investigations on the Possibilities and Limitations of Nakamura's Technique, *J. Phys. Earth* **42**(5), 377-397.
- Landis, J. R. and G. G. Koch (1977). The measurement of observer agreement for categorical data, *Biometrics* **33**, 159–174.
- Lang, D. H., S. Molina and C. D. Lindholm (2008). Towards near-real-time damage estimation using a CSM-based tool for seismic risk assessment, *J. Earthq. Eng.* **12** (S2), 199–210.
- Lang, D. H., Y. Singh and J. S. R. Prasad (2012). Comparing empirical and analytical estimates of earthquake loss assessment studies for the city of Dehradun, India, *Earthq. Spectra* **28** (2), 595–619, doi: 10.1193/1.4000004.
- Lapajne, J., B. S. Motnikar, and P. Zupančič (2003). Probabilistic seismic hazard assessment methodology for distributed seismicity, *Bull. Seismol. Soc. Am.* **93**, 2502–2515.
- Lee, S. H. H. (1990). Regression models of shear wave velocities, *J. Chinese Insti. Eng.* **13**, 519–532.
- Lee, D, C. Ku, and H. Yuan (2004). A study of the liquefaction risk potential at Yuanlin, Taiwan, *Eng. Geology* **71**(1-2), 97–117.
- Lee, S. H. H. (1992). Analysis of the multicollinearity of regression equations of shear wave velocities, *Soils and Foundations* **32**(1), 205-214.
- Lee, W.H.K., F.T. Wu, and C. Jackson (1976). A catalog of historical earthquakes in China, *Bull. Seismol. Soc. Am.* **66**, 2003–2016.
- Lee, T. T. and L. A. Lawver (1995). Cenozoic plate reconstruction of Southeast Asia, *Tectonophysics* **251**, 85–138.
- Lermo J. and F. J. Chilvez-Garcfa (1993). Site effect evaluation using spectral ratios with only one station, *Bull. Seismol. Soc. Am.* **83**, 1574-1594.
- Lermo, J. and F. J. Chávez-García (1994). Are microtremors useful in site response evaluation?, *Bull. Seismol. Soc. Am.* **84**(5), 1350-1364.
- Liao, S. S. C. and R. V. Whitman (1986). Overburden correction factors for SPT in sand, *J. Geotech. Eng.* **112**(3), 373-377.
- Lister, J. A. (1934). Report, Eastern Bengal railway, *Geol. Surv. India* **65**, 99-100, 104.
- Longley, P. and M. Batty (1997). Spatial Analysis: Modelling in a GIS Environment, *John Wiley & Sons Ltd.*, New York, USA, 392 pp.
- Lu, D. and Q. Weng (2005). Urban Classification using full spectral information of Landsat ETM Imagery in Marion County, Indiana, *Photogramm. Eng. Rem. S.* **71**, 1275–1284.

- Madansky, A. (1959). The fitting of straight lines when both variables are subject to error, *J. Am. Stat. Assoc.* **54**, 173–205.
- Mahadevan, T. M. (1994). Deep continental structure of India: A review, Memoir 28, Bangalore, *Geol. Soc. India*, ISBN 81 85867 06 2.
- Mahajan, A. K., V. C. Thakur, M. L. Sharma, and M. Chauhan (2010). Probabilistic seismic hazard map of NW Himalaya and its adjoining area, India, *Nat. Hazards* **53**, 443–457.
- Mahajan, A. K., V. Gupta, and V. C. Thakur (2012). Macroseismic field observations of 18 September 2011 Sikkim earthquake, *Nat. Hazards* **63**(2), 589–603.
- Maheswari, R. U., A. Boominathan, and G. R. Dodagoudar (2010). Use of surface waves in statistical correlations of shear wave velocity and penetration resistance of Chennai soils, *Geotech. Geol. Eng.* **28**(2), 119–137.
- Main, I. G. (1995). Earthquakes as critical phenomena (1995), Implications for probabilistic Seismic Hazard Analysis, *Bull. Seismol. Soc. Am.* **85**, 1299–1308.
- Maiti, S. K., S. K. Nath, M. D. Adhikari, N. Srivastava, P. Sengupta, and A. K. Gupta (2015). Probabilistic Seismic Hazard Model of West Bengal, India, *J. Earthq. Eng.*
- Mandal, P., B. K. Rastogi, and H. K. Gupta (2000). Recent Indian earthquakes, *Curr. Sci.* **79**(9), 1334–1347.
- Mandal, P., B. K. Rastogi, H.V.S. Satyanarayana, and M. Kousalya (2004). Results from Local Earthquake Velocity Tomography: Implications toward the Source Process Involved in Generating the 2001 Bhuj Earthquake in the Lower Crust beneath Kachchh (India), *Bull. Seismol. Soc. Am.* **94**, 633–649.
- Manglik, A., S. Thiagarajan, A. V. Mikhailova, and Y. Rebetsky (2008). Finite element modelling of elastic intraplate stresses due to heterogeneities in crustal density and mechanical properties for the Jabalpur earthquake region, central India. *J. Earth Sys. Sci.* **117**(2), 103–111.
- Mark, R. K. (1977). Application of linear statistical model of earthquake magnitude versus fault length in estimating maximum expectable earthquakes, *Geology* **5**, 464–466.
- Margaris, B. N. and C. B. Papazachos (1999). Moment-Magnitude Relations Based on Strong-Motion Records in Greece, *Bull. Seismol. Soc. Am.* **89**, 442–455.
- Margottini, C. (1992). On the uncertainties of historical data and their effects in seismic hazard assessment. *In Proceedings 7th World Conference Earthquake Engineering*, Madrid.
- Marin, S., J. P. Avouac, M. Nicolas, and A. Schlupp (2004). A probabilistic approach to seismic hazard in metropolitan France, *Bull. Seismol. Soc. Am.* **94**, 2137–2163.
- Martin, S. and W. Szeliga (2010). A catalog of felt intensity data for 570 earthquakes in India from 1636 to 2009, *Bull. Seismol. Soc. Am.* **100**, 562–569.
- Martin, S. S. and S. E. Hough (2015). The 21 May 2014 Mw 5.9 Bay of Bengal Earthquake: Macroseismic Data Suggest a High-Stress-Drop Event, *Seismol. Res. Lett.*
- Maurin, T. and C. Rangin (2009). Structure and kinematics of the Indo-Burmese Wedge: Recent and fast growth of the outer wedge, *Tectonics* **28**(2).
- McCann, W. E., S. P. Nishenko, L. R. Sykes, and J. Krause (1979). Seismic gaps and plate tectonics: seismic potential for major plate boundaries, *Pure Appl. Geophys.* **117**, 1082–1147.
- McGuire, R. K. (1976). FORTRAN Computer Program for Seismic Risk Analysis, US Geological Survey, 76–67.
- McGuire, R. K. (2004). Seismic hazard and risk analysis, *EERI Publication*, Risk Engineering, Inc. Boulder, Colorado, No MN0-10, ISBN: 0-943198-01-1.
- McMechan, G. A. and M. J. Yedlin (1981). Analysis of dispersive waves by wave field transformation, *Geophysics* **46**(6), 869–874.
- Menon, A., T. Ornthammarath, M. Corigliano, and C. G. Lai (2010). Probabilistic seismic hazard macrozonation of Tamil Nadu in Southern India, *Bull. Seismol. Soc. Am.* **100**, 1320–1341.
- Miao, Q. and C. A. Langston (2007). Empirical distance attenuation and the local magnitude scale for the central United States, *Bull. Seismol. Soc. Am.* **97**, 2137–2151.

- Middlemiss, C. S. (1908). Two Calcutta Earthquakes of 1906, *Records Geol. Surv. India* **36**(3), 214-232.
- Mithal, R. S. and L. S. Srivastava (1959). Geotectonic position and earthquakes of Ganga-Brahmaputra region, *Proceedings of Symposium on Earthquake Engineering*, Univ. Roorkee.
- Miller, R. D., J. Xia, C. B. Park, J. Ivanov, and E. Williams (1999). Using MASW to map bedrock in Olathe, Kansas, In *SEG Annual Meeting Expanded Technical Program with Biographies*, Houston, Texas, pp 433-436.
- Mitra S., S. N. Bhattacharya, and S. K. Nath (2008). Crustal Structure of the Western Bengal Basin from Joint Analysis of Teleseismic Receiver Functions and Rayleigh Wave Dispersion, *Bull. Seismol. Soc. Am.* **98**, 2715-2723.
- Mohanty, W. K., M. Y. Walling, S. K. Nath, and I. Pal (2007). First Order Seismic Microzonation of Delhi, India Using Geographic Information System (GIS), *Nat. Hazards* **40**, 245-260.
- Molina, S., D. H. Lang, and C. D. Lindholm (2010). SELENA-an open-source tool for seismic risk and loss assessment using a logic tree computation procedure, *Computers & Geosciences* **36**, 257-269.
- Molina, S. and C. Lindholm (2005). A logic tree extension of the capacity spectrum method developed to estimate seismic risk in Oslo, Norway, *J. Earthq. Eng.* **9**(6), 877-897.
- Moldoveanu, C. L., M. Radulian, Gh. Marmureanu, and G. F. Panza (2004). Microzonation of Bucharest: State-of-the-Art, *Pure Appl. Geophys.* **161** (5-6), 1125-1147.
- Morgan, J. P. and W. G. Mcintire (1959). Quaternary geology of the Bengal basin, East Pakistan and India, *Geol. Soc. Am. Bull.* **70**(3), 319-342.
- Monsur, M. H. (1995). An introduction to the Quaternary geology of Bangladesh, *International Geological Correlation Programme IGCP-347*. Rehana Akhter, Dhaka.
- Monsur, M. H., M. J. Tooley, G. S. Ghatak, P. R. Chandra, R. K. Roy, P. C. Adhikari, and S. H. Akhter (2001). A review and correlation of Quaternary deposits exposed in the Bengal Basin and its surrounding areas, *Bangladesh Journal of Geology* **20**, 33-54.
- Motazedian, D. and G. M. Atkinson (2005). Stochastic finite-fault modeling based on a dynamic corner frequency, *Bull. Seismol. Soc. Am.* **95**(3), 995-1010.
- Mroz, Z. (1967). On the description of anisotropic workhardening, *J. Mech. Phys. Solids* **15**(3), 163-175.
- Mucciarelli, M. and M. R. Gallipoli (2001). A critical review of 10 years of microtremor HVSR technique, *Boll. Geof. Teor. Appl.* **42**(3-4), 255-266.
- Mukhopadhyay, M. (1984). Seismotectonics of transverse lineaments in the eastern Himalaya and its foredeep, *Tectonophysics* **109**, 227-240.
- Mukhopadhyay, B., M. Fnais, M. Mukhopadhyay, and S. Dasgupta (2010). Seismic cluster analysis for the Burmese-Andaman and West Sunda Arc: insight into subduction kinematics and seismic potentiality, *Geomatics, Natural Hazards and Risk* **1**(4), 283-314.
- Mukhopadhyay, B., A. Acharyya, D. Bhattacharyya, S. Dasgupta, and P. Pande (2011). Seismotectonics at the terminal ends of the Himalayan Arc, *Geomatics, Natural Hazards and Risk*, **2**(2), 159-181.
- Mukul, M. (2000). The geometry and kinematics of the Main Boundary Thrust and related neotectonics in the Darjiling Himalayan fold-and-thrust belt, West Bengal, India, *J. Structural Geology* **22**(9), 1261-1283.
- Mukherjee, A. and S. Hazra (1997). Changing paradigm of petroleum exploration in Bengal Basin, *Indian J. Geology* **69**, 41-64.
- Mukherjea, A. and B. B. Neogi (1993). Status of Exploration in Bengal Basin, West Bengal, India, In: Biswas, S.K., Dave, A, Garg, P., Pandey, J, Maithani, A., Thomas, N. J. (editors), *Proceedings Second Seminar on Petroliferous Basins of India*, V. 1. Indian Petroleum Publishers, Dehra Dun, India, 93-119.
- Mulargia, F. and S. Tinti (1985). Seismic sample areas defined from incomplete catalogues: An application to the Italian territory, *Phys. Earth. Planet. Int.* **40**, 273-300.
- Nag, S. K. (2005). Application of lineament density and hydrogeomorphology to delineate groundwater potential zones of Baghmundi block in Purulia district, West Bengal, *J. Indian Soc. Remote Sens.* **33**(4), 521-529.

- Nakamura, Y. (1989). A Method for Dynamic Characteristics Estimations of Subsurface using Microtremors on the ground Surface, *QR RTRI* **30**, 25–33.
- Nakamura, Y. (2000). Clear identification of fundamental idea of Nakamura's technique and its applications, In *Proceedings of the 12th world conference on earthquake engineering*. New Zealand, Auckland.
- Nandy, D. R. (2001). Geodynamics of Northeastern India and the Adjoining Region, *ACB Publication*, Kolkata, 1–209.
- Nandy, D. R. (2007). Need for seismic microzonation of Kolkata megacity, In *Proceedings of workshop on microzonation*, Indian Institute of science, Bangalore, India, **2627**.
- Nath, S. K., P. Sengupta, and J. R. Kayal (2002). Determination of Site Response at Garhwal Himalaya from the aftershock sequence of 1999 Chamoli Earthquake, *Bull. Seismol. Soc. Am.* **92**, 1072–1081.
- Nath, S. K. (2004). Seismic Hazard Mapping and Microzonation in the Sikkim Himalaya through GIS Integration of Site Effects and Strong Ground Motion Attributes. *Nat. Hazards* **31**(2), 319–342.
- Nath, S. K. (2007). Seismic Microzonation Framework—Principles and Applications, In *Proceedings of Workshop on Microzonation*, Indian Institute of Science, Bangalore, pp. 9-35.
- Nath, S. K., K. K. S. Thingbaijam, A. Raj, K. Shukla, I. Pal, D. R. Nandy, M. K. Vadav, B. K. Bansal, S. Dasgupta, K. Majumdar, J. R. Kayal, A. K. Shukla, S. K. Deb, J. Pathak, P. J. Hazarika, and D. K. Pal (2007). Seismic Microzonation of Guwahati City, *International workshop on Earthquake Hazard and Mitigation, Guwahati*, India.
- Nath, S. K., D. Roy, and K. K. S. Thingbaijam (2008a). Disaster mitigation and management for West Bengal, India—An appraisal, *Curr. Sci.* **94**(7), 858.
- Nath, S. K., K. K. S. Thingbaijam, and A. Raj (2008b). Earthquake hazard in the northeast India – A seismic microzonation approach with typical case studies from Sikkim Himalaya and Guwahati city, *J. Earth. Sys. Sci.* **117**, 809–831.
- Nath, S. K. and K. K. S. Thingbaijam (2009). Seismic hazard assessment – A holistic microzonation approach, *Nat. Hazards. Earth Sys. Sci.* **9**, 1445–1459.
- Nath, S. K., A. Raj, K. K. S. Thingbaijam, and A. Kumar (2009). Ground motion synthesis and seismic scenario in Guwahati city—a stochastic approach. *Seismol. Res. Lett.* **80**(2), 233–242.
- Nath, S. K., K. K. S. Thingbaijam, J. C. Vyas, P. Sengupta, and S. M. S. P. Dev (2010). Macroseismic-driven site effects in the southern territory of West Bengal, India, *Seismol. Res. Lett.* **81**(3), 480–487.
- Nath, S. K. (2011). Seismic Microzonation Manual and Handbook, *Geoscience Division, Ministry of Earth Sciences*, Govt. of India, New Delhi.
- Nath, S. K. and K. K. S. Thingbaijam (2011a). Peak ground motion predictions in India: an appraisal for rock sites, *J. Seismol.* **15**, 295–315.
- Nath, S. K. and K. K. S. Thingbaijam (2011b). Assessment of seismic site conditions: a case study from Guwahati city, Northeast India, *Pure Appl. Geophys.* **168**(10), 1645–1668.
- Nath, S. K. and K. K. S. Thingbaijam (2012). Probabilistic seismic hazard assessment of India, *Seismol. Res. Lett.* **83**(1), 135–149.
- Nath, S. K., K. K. S. Thingbaijam, S. K. Maiti, and A. Nayak (2012). Ground-motion predictions in Shillong region, northeast India, *J. Seismol.* **16**, 475–488.
- Nath, S. K., M. D. Adhikari, S. K. Maiti, N. Devaraj, N. Srivastava, and L. D. Mohapatra (2014). Earthquake scenario in West Bengal with emphasis on seismic hazard microzonation of the city of Kolkata, India, *Nat. Hazards Earth Syst. Sci.* **14**, 2549–2575, doi:10.5194/nhess-14-2549-2014, 2014.
- Naqvi, S. M., (2005). Geology and Evolution of the Indian Plate: from Hadean to Holocene, *Capital Publishing Company*, New Delhi.
- Navarro, N. and C. S. Oliveiram (2006). Experimental techniques for assessment of dynamic behavior of buildings, *Assessing and managing earthquake risk: geo-scientific and engineering knowledge for earthquake risk mitigation: developments, tools, techniques*, Geotechnical and Earthquake Engineering, Oliveira, C. S., Roca, A., Goula, X. (Eds.), *Springer*.

- Ni, J. F. and M. Barazangi (1984). Seismotectonics of the Himalayan collision zone: Geometry of the under thrusting Indian Plate beneath the Himalaya, *J. Geophys. Res.* **89**, 1147-1163.
- NIBS (2002). HAZUS99- earthquake loss estimation methodology, technical manual, in Technical Manual, edited by: FEMA, Federal Emergency Management Agency, National Institute of Building Sciences (NIBS), Washington. DC., pp 325.
- Nishenko, S. P. and L.R. Sykes (1993). Comment on “Seismic gap hypothesis: ten years after” by Y. Y. Kagan and D. D. Jackson, *J. Geophys. Res.* **98**, 9909–9916.
- Nogoshi, M. and T. Igarashi (1971). On the amplitude characteristics of microtremor (Part 2), *J. Seismol. Soc. Japan* **24**, 26–40.
- Nunziata, C. (2004). Seismic Ground Motion in Napoli for the 1980 Irpinia Earthquake, *Pure Appl. Geophys.* **161** (5–6), 1239–1264.
- Nuttli, O. W. (1973). Seismic wave attenuation and magnitude relations for eastern North America, *J. Geophys. Res.* **84**, 233–249.
- Nyffenegger, P. and C. Frohlich (2000). Aftershock occurrence rate decay properties for intermediate and deep earthquake sequences, *Geophys. Res. Lett.* **27**, 1215–1218.
- Obermeier, S. F. (1996). Use of liquefaction-induced features for paleoseismic analysis—an overview of how seismic liquefaction features can be distinguished from other features and how their regional distribution and properties of source sediment can be used to infer the location and strength of Holocene paleo-earthquakes, *Eng. Geology* **44**(1), 1-76.
- Ogata, Y. and J. Zhuang (2006). Space-time ETAS models and an improved extension, *Tectonophysics* **413**, 13–23.
- Okamoto, T., T. Kokusho T, Y. Yoshida and K. Kusuonoki (1989). Comparison of surface versus subsurface wave source for P–S logging in sand layer, *Proc. 44th Ann. Conf. JSCE.* **3**, 996–997 (in Japanese).
- Ohba, S. and I. Toriuma (1970). Dynamic response characteristics of Osaka Plain, *Proceedings of the annual meeting AIJ.*
- Ohmachi, T., Y. Nakamura, and T. Toshinawa (1991). Ground Motion Characteristics in the San Francisco Bay Area detected by Microtremor Measurements, *Proc. 2nd. Int. Conf. on Recent Adv. In Geot. Earth. Eng. And Soil Dyn.*, 11-15 March, St. Louis, Missouri, pp 1643-1648.
- Ohsaki, Y. R. and R. Iwasaki (1973). On dynamic shear module and Poisson’s ratio of soil deposits, *Soils Foundations* **13**(4), 61–73.
- Ohta, T., A. Hara, M. Niwa, and T. Sakano (1972). Elastic shear moduli as estimated from N-value, *Proceedings 7th annual convention of Japan society of soil mechanics and foundation engineering*, 265–268.
- Ohta, Y. and N. Goto (1978). Empirical shear wave velocity equations in terms of characteristics soil indexes, *Earthq. Eng. Struct. Dyn.* **6**(2), 167–187, doi:10.1002/eqe.4290060205.
- Oldham, T. (1883). A catalogue of Indian earthquakes, *Mem. Geol. Surv. India* **19**, 163–215, Geol. Surv. India, Calcutta.
- Oldham, T. and R. D. Oldham (1882). The Cachar earthquake of 10th January 1869, R.D. Oldham (ed.), *Geol. Surv. India Mem.* **19**, 1-98.
- Oldham, R. D. (1899). Report of the great earthquake of 12th June, 1897, Geological Survey of India.
- O’Malley, J. (2007). U.S. Geological Survey ArcMap Sediment Classification Tool: Installation and User Guide, USGS, Open-File Report 2007-1186.
- Oppenheim, A. V., A. S. Willsky, and S. H. Nawab (1996). Signals & Systems, Prentice Hall, USA.
- Oya, M., Kotoda, K., Wakamatsu, K., and Kubo, S. (1982). Geomorphologic land classification map of the Shonai plain illustrating features of flooding and soil liquefaction, Sakata Construction Office, Ministry of Construction (JE).
- Owen, G. and M. Moretti (2011). Identifying triggers for liquefaction-induced soft-sediment deformation in sands, *Sedimentary Geology* **235**(3), 141-147.

- Pacheco, J. F. and L.R. Sykes (1992). Seismic moment catalog of large shallow earthquakes, 1900 to 1989, *Bull. Seismol. Soc. Am.* **82**, 1306–1349.
- Page, R. (1968). Aftershocks and micro aftershocks of the great Alaska earthquake of 1964, *Bull. Seismol. Soc. Am.* **58**(3), 1131-1168.
- Pahari, S., I.V.S.V. Prasad, A. Banerjee and M. Varshney (2008). Evaluation of petroleum source rocks of Bengal Basin, India, *Petroleum Geochemistry and Exploration in the Afro-Asian Region: Proceedings of the 6th AAPG International Conference, Beijing, China, 12-14 October 2004*, CRC Press.
- Pal, I., S. K. Nath, K. Shukla, D. K. Pal, A. Raj, K. K. S. Thingbaijam, and B. K. Bansal (2008). Earthquake Hazard Zonation of Sikkim Himalaya Using a GIS Platform, *Nat. Hazards* **45**(3), 333-377.
- Panahi, M., F. Rezaie, and S. A. Meshkani (2014). Seismic vulnerability assessment of school buildings in Tehran city based on AHP and GIS, *Nat. Hazards Earth Syst. Sci.*, **14**(4), 969-979.
- Pandey, M. R. and P. Molnar (1988). The distribution of intensity of the Bihar Nepal earthquake of 15th January, 1934 and bounds on the extent of the rupture zone, *J. Geol. Soc., Nepal* **5**, 22-44.
- Panza, G. F., A. G. Prozorov, and G. Pazzi. (1993). Extension of global creepex definition ($M_s - mb$) to local studies ($M_d - ML$): the case of the Italian region, *Terra Nova* **5**(2), 150–156.
- Panza, G. F., F. Romanelli, F. Vaccari, L. Decanini, and F. Mollaioli (2001). Contribution of the deterministic approach to the characterization of the seismic input, *OECD-NEA Workshop on Engineering characterization of Seismic Input*, BNL, Upton, New York, 15-17 November, 1999, NEA/CSNI/R(2000)2, 655–715.
- Papazachos, B. C., C. A. Papaioannou, B. N. Margaris, and N. P. Theodulidis, (1993). Regionalization of seismic hazard in Greece based on seismic sources. *Nat. Hazards* **8**(1), 1-18.
- Papazachos, B. C., A. A. Kiratzi, and B. G. Karacostas (1997). Toward a homogeneous moment-magnitude determination for earthquakes in Greece and the surrounding area, *Bull. Seismol. Soc. Am.* **87** 474-483.
- Park, C. B., R. D. Miller, and J. Xia (1998). Imaging dispersion curves of surface waves on multi-channel record, *In SEG Expanded Abstracts* **17**(1), 1377-1380.
- Park, C. B., R. D. Miller, and J. Xia (1999). Multichannel analysis of surface waves, *Geophysics* **64**(3), 800-808.
- Park, C. B., R. D. Miller, and J. Xia (2000). Detection Of Higher Mode Surface Waves Over Unconsolidated Sediments By The Mx4 W method, *In 13th EEGS Symposium on the Application of Geophysics to Engineering and Environmental Problems*.
- Park, C. B., R. D. Miller, and J. Xia (2001). Offset and resolution of dispersion curve in multichannel analysis of surface waves (MASW), *In Proceedings of the SAGEEP*.
- Park, C. B., R. D. Miller, and H. Miura (2002). Optimum field parameters of an MASW survey, *Exp. Abs.: SEG-J*, Tokyo.
- Parsons, T. (2008). Persistent earthquake clusters and gaps from slip on irregular faults, *Nature Geoscience* **1**, 59–63.
- Parvez, I. A. and A. Ram (1999). Probabilistic assessment of earthquake hazards in the Indian Subcontinent, *Pure. Appl. Geophys.* **154**, 23–40.
- Parvez, I. A., F. Vaccari, and G. F. Panza (2003). A deterministic seismic hazard map of India and adjacent areas, *Geophy. J. Int.* **155**, 489–508.
- Petersen, M. D., A. D. Frankel, S. C. Harmsen, C. S. Mueller, K. M. Haller, R. L. Wheeler, R. L. Wesson, Y. Zeng, O. S. Boyd, D. M. Perkins, N. Luco, E. H. Field, C. J. Wills, and K. S. Rukstales (2008). Documentation for the 2008 Update of the United States National Seismic Hazard Maps, U.S. Geological Survey Open-File Report 2008–1128.
- Phillips, C. and Y. M. Hashash (2009). Damping formulation for nonlinear 1D site response analyses, *Soil Dyn. Earthq. Eng.* **29**(7), 1143-1158.

- Phillips, W. S. and K. Aki (1986). Site amplification of coda waves from local earthquakes in central California, *Bull. Seismol. Soc. Am.* **76**(3), 627-648.
- Pirazzoli, P. A. (1991). World Atlas of Holocene Sea-level Changes, *Elsevier*, Amsterdam.
- Pitilakis, K. D., A. Anastasiadis, and D. Raptakis (1992). Field and laboratory determination of dynamic properties of natural soil deposits, *Proceedings of 10th World Conf. Earthquake Engineering, Rotterdam*, 1275–1280.
- Pitilakis, K., D. Raptakis, K. Lontzetidis, T. Tika-Vassilikou, and D. Jongmans (1999). Geotechnical and geophysical description of euro-seistest using field and laboratory tests and moderate strong ground motions, *J. Earthq. Eng.* **3**(3), 381–409.
- Poddar, B.C., C. Chakrabati, S. N. Banerjee, and P. Chakravarti (1993). Changing geography and climate of West Bengal since 18000 B. P., *Rec. Geol. Surv. India*. **121**, 47-53.
- Prozorov, A. G. and A. M. Dziewonski (1982). A method of studying variations in the clustering property of earthquakes: application to the analysis of global seismicity, *J. Geophys. Res.* **87**, 2829–2839.
- Quittmeyer, R. C. and K. H. Jacob (1979). Historical and modern seismicity of Pakistan, Afghanistan, northwestern India, and southeastern Iran, *Bull. Seismol. Soc. Am.* **69**, 773–823.
- Qunlin, J., P. Bai, and Q. Duan (2013). Risk assessment on Beijing urban infrastructure vulnerability, in: *Proceedings of the 2nd International Conference on Systems Engineering and Modeling (ICSEM-13)*, Atlantis Press, Paris, France.
- Radhakrishna, B. P. and S. M. Naqvi (1986). Precambrian continental crust of India and its evolution, *The Journal of Geology*, 145-166.
- RADIUS (2000). Risk Assessment Tools for Diagnosis of Urban Areas against Seismic Disasters, Geneva, Switzerland, *IDNDR Sec-retariat*, United Nations, 38 pp., available at www.eird.org/eng/revista/No2_2001/pagina21.htm.
- Raghukanth, S. T. G. and S. K. Dash (2010). Deterministic seismic scenarios for northeast India, *J. Seismol.* **14**, 143–167.
- Raghukanth, S. T. G. and R. N. Iyengar (2007). Estimation of seismic spectral acceleration in Peninsular India, *J. Earth Syst. Sci.* **116**, 199–214.
- Raj, A., S. K. Nath, and K. K. S. Thingbaijam (2008). A note on recent earthquakes in the Bengal basin, *Curr. Sci.* **95**(1), 127–129.
- Rajendran, C. P., K. Rajendran, and B. John (1996). The 1993 Killari (Latur), Central India, Earthquake: An Example of Fault Reactivation in the Precambrian Crust, *Geology* **24**, 651–654.
- Rajendran, C. P. (2000). Using geological data for earthquake studies: A perspective from peninsular India, *Curr. Sci.* **79**, 1251–1258.
- Rajendran, C. P. and K. Rajendran (2001). Characteristics of deformation and past seismicity associated with the 1819 Kutch earthquake, northwestern India, *Bull. Seismol. Soc. Am.* **91**, 407–426.
- Rajendran, C. P., K. Rajendran, B. P. Duarah, S. Baruah, and A. Earnest (2004). Interpreting the style of faulting and paleo-seismicity associated with the 1897 Shillong, northeast India, earthquake: Implications for regional tectonism, *Tectonics* **23**, TC4009.
- Rangin, C. (2012). Cenozoic Geodynamic Evolution of the Burma-Andaman Platelet, AAPG Search and Discovery Article 90155, *In AAPG International Conference and Exhibition*, Singapore.
- Rao, B. R. and P. S. Rao (1984). Historical seismicity of Peninsular India, *Bull. Seismol. Soc. Am.* **74**, 2519–2533.
- Rao, B. V. and B. S. Murty (1970). Earthquakes and tectonics in peninsular India, *J. Indian Geophys. Union*, **7**, 1-8.
- Rao, B. R. and V. K. Rao (2006). Influence of fluids on deep crustal Jabalpur earthquake of 21, May 1997: Geophysical evidences, *J. Seismol.* **10**(3), 301-314
- Rao, N. P. and Kalpana (2005). Deformation of the subducted Indian lithospheric slab in the Burmese arc, *Geophys. Res. Lett.* **32**, L05301, doi: 10.1029/2004GL022034.

- Rao, B. R. (2000). Historical seismicity and deformation rates in the Indian Peninsular Shield, *J. Seismol.* **4**, 247–258.
- Rashid, T. (2011). Holocene sea level change in Bangladesh, *In: Proceedings of the International Association for the Physical Sciences of Ocean (IAPSO)*, Australia.
- Rashid, T., S. Suzuki, H. Sato, M. H. Monsur, and S. K. Saha (2013). Relative sea-level changes during the Holocene in Bangladesh, *J. Asian Earth Sci.* **64**, 136–150.
- Raptakis, D. G., S. A. J. Anastasiadis, K. D. Pitilakis, and K. S. Lontzetidis (1995). Shear wave velocities and damping of Greek natural soils, *Proc. 10th European Conf. Earthquake Engg.*, Vienna, 477–482.
- Rastogi, B. K. (1992). Seismotectonics inferred from earthquakes and earthquake sequences in India during the 1980s, *Curr. Sci.* **62**(1-2), 101–108.
- Ravenscroft, P., W. G. Burgess, K. M. Ahmed, M. Burren, and J. Perrin (2005). Arsenic in groundwater of the Bengal Basin, Bangladesh: Distribution, field relations, and hydrogeological setting, *Hydrogeology Journal* **13** (5-6), 727–751.
- Ravenscroft, P. (2003). An overview of the hydrogeology of Bangladesh, *Groundwater resources and development in Bangladesh—Background to the arsenic crisis, agricultural potential and the environment*.
- Rau, J. L. (1994). Urban and environmental issues in East and Southeast Asian coastal lowlands, *Eng. Geology* **37**, 25–29.
- Real, C.R. and T. Teng (1973). Local Richter magnitude and total signal duration in Southern California, *Bull. Seismol. Soc. Am.* **63**, 1809–1827.
- Reamer, S. K. and Hinzen K. G. (2004). An Earthquake Catalog for the Northern Rhine Area, Central Europe (1975–2002), *Seismol. Res. Lett.* **75**, 713–725.
- Reasenber, P. A. (1985). Second-order moment of Central California seismicity, *J. Geophys. Res.* **90**, 5479–5495.
- Reveshty, M. A. and M. Gharakhlou (2009). Modeling of Urban Building Vulnerability in Earthquake against Using Analytical Hierarchy Process (AHP) and GIS, A case study on Zanjan City, Northwest of Iran, available at: http://www.mapasia.org/2009/proceeding/urban_regional/ma09Mohsen.pdf.
- Richter, C. F. (1935). An instrumental earthquake scale, *Bull. Seism. Soc. Am.* **25**, 1–32.
- Richter, C. F. (1958). Elementary Seismology, *W. H. Freeman*, San-Francisco.
- Rigsby, C., R.B. Herrmann, and H. Denz, (2014). An investigation of M_{blg} Vs M_w for eastern north America, *Seismol. Res. Lett.* **85**, 625–630.
- Ristau, J., G. C. Rogers, and J. F. Cassidy (2003). Moment magnitude– local magnitude calibration for earthquakes off Canada’s west coast, *Bull. Seismol. Soc. Am.* **93**, 2296–2300.
- Ristau, J., G. C. Rogers, and J. F. Cassidy (2005). Moment Magnitude–Local Magnitude Calibration for Earthquakes in Western Canada, *Bull. Seismol. Soc. Am.* **95**, 1994–2000.
- Ristau, J. (2009). Comparison of magnitude estimates for New Zealand earthquakes: Moment magnitude, local magnitude, and teleseismic body-wave magnitude, *Bull. Seismol. Soc. Am.* **99**, 1841–1852.
- Rix, G. J. and S. Romero-Hudock (2006). Liquefaction potential mapping in Memphis and Shelby County, Tennessee, *Eng. Geology* **27**.
- Robertson, P. K. and C. E. Wride (1998). Evaluating cyclic liquefaction potential using the cone penetration test, *Canadian Geotechnical Journal* **35**(3), 442–459.
- Roser, J. and A. N. D. R. E. J. Gosar (2010). Determination of V_s^{30} for seismic ground classification in the Ljubljana area, Slovenia, *Acta Geotechnica Slovenica* **1**, 61–76.
- Roy, R. K. and G. S. Chattopadhyay (1997). Quaternary geology of the environs of Ganga Delta, West Bengal and Bihar, *Indian J. Geol.* **69** (2), 177–209.
- Roy, P. K., G. Banerjee, A. Mazumdar, A. Kar, A. Majumder, and M. B. Roy (2012). A Study to ascertain the Optimum Yield from Groundwater Source in the Eastern Part of Kolkata Municipal Corporation Area in West Bengal, India, *European Journal of Sustainable Development* **1**(2), 97–112.
- Roy, A. B. and Chatterjee, A. (2015). Tectonic framework and evolutionary history of the Bengal Basin in the Indian subcontinent. *Curr. Sci.* **109**(2), 274–282.

- Roy Barman, A. (1983). Geology and hydrocarbon prospects of West Bengal, *Petroleum Asia J.* **6**(4), 51-56.
- Roy Barman, A. (1992). Geological history and hydrocarbon exploration in West Bengal basin, *Indian J. Geol.* **64**(3), 235-258.
- Rydén, N., P. Ulriksen, C. B. Park, R. D. Miller, J. Xia, and J. Ivanov (2001). High frequency MASW for non-destructive testing of pavements—Accelerometer approach, *In 14th EEGS Symposium on the Application of Geophysics to Engineering and Environmental Problems.*
- Saaty, T. L. (1980). *The Analytic Hierarchy Process*, McGraw-Hill International, New York, U.S.A.
- Saaty, T. L. (2000). *Models, Methods, Concepts and Application of the Analytical Hierarchy Process*, Boston: Kluwer Academic Publishers.
- Sander, P. (1998). Hard rock aquifers in arid and semi arid zones: Water Resources of Hard Rock Aquifers in Arid and (Semi-Arid) Zones – Studies and Reports in Hydrology, 58 (edited by J. W. Lloyd), *UNESCO Publishing*, Paris, France, 224 pp.
- Saragoni, G. R. and G. C. Hart (1974). Simulation of Artificial Earthquakes, *Earthq. Eng. Struc. Dyn.* **2**, 249–268.
- Sarkar, J. K., M. A. Ansary, M. R. Islam, and A. M. M. Safiullah (2010). Potential losses for Sylhet, Bangladesh in a repeat of the 1918 Srimangal earthquake.
- Sarris, A., C. Loupasakis, P. Soupios, V. Trigkas, and F. Vallianatos (2010). Earthquake vulnerability and seismic risk assessment of urban areas in high seismic regions: application to Chania City, Crete Island, Greece, *Nat. Hazards* **54**, 395–412.
- Satoh, T., H. Kawase, T. Iwata, S. Higashi, T. Sato, K. Irikura, and H. C. Huang (2001). S-wave velocity structure of the Taichung basin, Taiwan, estimated from array and single-station records of microtremors, *Bull. Seismol. Soc. Am.* **91**(5), 1267-1282.
- Schlee, J. S. (1973). Atlantic continental shelf and slope of the United States; sediment texture of the northeastern part. No. 529-L.
- Schorlemmer, D., G. Neri, S. Wiemer, and A. Mostaccio (2003). Stability and significance tests for b-value anomalies: Example from the Tyrrhenian Sea, *Geophys. Res. Lett.* **30**(16), 1835.
- Schorlemmer, D., S. Wiemer, and M. Wyss (2005). Variations in earthquake size distribution across different stress regimes, *Nature* **437**, 539-542.
- Scherbaum, F., E. Delavaud, and C. Riggelsen (2009). Model selection in seismic hazard analysis: an information-theoretic perspective, *Bull. Seismol. Soc. Am.* **99**, 3234-3247.
- Schnabel, B., J. Lysmer, and H. B. Seed (1972). SHAKE – A Computer Program for Earthquake Response Analysis of Horizontally Layered Sites, Report EERC, *University of California*, 72-12.
- Scordilis, E. M. (2006). Empirical global relations converting MS and mb to moment magnitude, *J. Seismol.* **10**(2), 225-236.
- Seeber, L., J. G. Armbruster, and R. Quittmeyer (1981). Seismicity and continental collision in the Himalayan arc, in Zagros, Hindu-Kush, Himalaya, Geodynamic Evolution, H. K. Gupta and F. M. Delany (Eds), Geodynamics Series, *Am. Geophys. Mono.* **3**, 215–242.
- Seed, H. B. and I. M. Idriss (1970). Soil Moduli and Damping Factors for Dynamic Response Analyses, Rep. No. EERC-70/10, *Earthquake Engineering Research Center, University of California*, Berkeley, California.
- Seed, H. B. and I. M. Idriss (1971). Simplified procedure for evaluating soil liquefaction potential, *J. Soil Mech. Found. Div. ASCE.* **97**(9), 1249-1273.
- Seed, H. B., C. Ugas, and J. Lysmer (1976). Site-dependent spectra for earthquake-resistant design, *Bull. Seismol. Soc. Am.* **66**(1), 221-243.
- Seed, H. B. and I. M. Idriss (1981). Evaluation of liquefaction potential sand deposits based on observation of performance in previous earthquakes, In ASCE National Convention, Missouri, v. 81544.
- Seed, H. B. and I. M. Idriss (1982). Ground motions and soil liquefaction during earthquakes, *Earthq. Eng. Res. Ins.* **5**.

- Seed, H. B., I. M. Idriss, and I. Arango (1983). Evaluation of liquefaction potential using field performance data, *J. Geotech. Eng. ASCE*, **109**, 458–482.
- Seed, H. B., K. Tokimatsu, L. F. Harder, and R. M. Chung (1985). Influence of SPT procedures in soil liquefaction resistance evaluations, *J. Geotech. Eng.* **111**(12), 1425-1445.
- Seed, R. B., S. E. Dickenson, and C. M. Mok, (1991). Seismic response analysis of soft and deep cohesive sites: A brief summary of recent findings. In *Proceedings of the CALTRANS First Annual Seismic Response Workshop*, pp. 3-4.
- Seyrek, E. and H. Tosun (2011). Deterministic approach to the seismic hazard of dam sites in Kizilirmak basin, Turkey, *Nat. Hazards* **59**, 787–800.
- Sinha, R. and N. Adarsh (1999). A postulated earthquake damage scenario for Mumbai, *ISSET J. Earthq. Tech.* **36** (2-4), 169–183.
- Shamsudduha, M. and A. Uddin (2007). Quaternary shoreline shifting and hydrogeologic influences on the distribution of groundwater arsenic in aquifers of the Bengal Basin, *J. Asian Earth Sci.* **31**(2), 177-194.
- Shamsuddin, A. H. M. and S. K. M. Abdullah (1997). Geologic evolution of the Bengal Basin and its implication in hydrocarbon exploration in Bangladesh, *Indian J. Geology* **69**, 93-121.
- Sharma, M. L., A. Sinvhal, Y. Singh, and B. K. Maheshwari (2013). Damage survey report for Sikkim earthquake of 18 September 2011, *Seismol. Res. Lett.* **84**(1), 49-56.
- Sharma, K. K. (1998). Geologic and tectonic evolution of the Himalaya before and after the India-Asia collision, *Proceedings of the Indian Academy of Sciences-Earth and Planetary Sciences*, **107**(4), 265-282.
- Sharma, M. L. and S. Malik (2006). Probabilistic seismic hazard analysis and estimation of spectral strong ground motion on bed rock in north east India, *4th International Conference on Earthquake Engineering*, Taipei, Taiwan, Paper No. 15.
- Sharma, M. L., J. Douglas, H. Bungum, and J. Kotadia (2009). Ground-Motion Prediction Equations Based on Data from the Himalayan and Zagros Regions, *J. Earthq. Eng.* **13**(8), 1191–1210.
- Shepard, F. P. (1954). Nomenclature based on sand-silt-clay ratios, *J. Sedimentary Res.* **24**(3).
- Shibata, T. (1970). Analysis of liquefaction of saturated sand during cyclic loading, disaster prevention, *Res Insti. Bull.* **13**, 563–570.
- Shiono, K., Y. Ohta, and K. Kudo (1979). Observation of 1 to 5 sec microtremors and their applications to earthquake engineering. Part VI: Existence of Rayleigh wave components, *J. Seismol. Soc. Japan* **32**, 115–124.
- Shukla, J. and D. Choudhury (2012). Estimation of seismic ground motions using deterministic approach for major cities of Gujarat, *Nat. Hazards Earth Syst. Sci.* **12**, 2019–2037.
- Singh, S. K., J. Lermo, T. Dominguez, M. Ordaz, J. M. Espinosa, E. Mena, and R. Quass (1988). The Mexico earthquake of September 19, 1985: a study of amplification of seismic waves in the valley of Mexico with respect to a hill zone site, *Earthq. Spectra* **4**, 653-673.
- Singh, D. D. and H. K. Gupta (1980). Source dynamics of two great earthquakes of the Indian Subcontinent: the Bihar-Nepal earthquake of January 15, 1934 and the Quetta earthquake of May 30, 1935, *Bull. Seismol. Soc. Am.* **70**, 757–773.
- Singh, L. P., B. Parkash, and A. K. Singhvi (1998). Evolution of the lower Gangetic Plain landforms and soils in West Bengal, India, *Catena* **33**(2), 75-104.
- Singh, S. K., M. Ordaz, R. S. Dattatrayam, and H. K. Gupta (1999). A spectral analysis of the 21 May 1997, Jabalpur, India, earthquake (Mw= 5.8) and estimation of ground motion from future earthquakes in the Indian shield region, *Bull. Seismol. Soc. Am.* **89**(6), 1620-1630.
- Sisman, H. (1995). The relation between seismic wave velocities and SPT, pressuremeter tests, MSc Thesis, Ankara University (in Turkish).
- Sitharam, M. V. D. and P. K. Borah (2007). Signal durations and local Richter magnitudes in northeast India: An empirical approach, *J. Geol. Soc. India.* **70**, 323–338.

- Sitharam, T. G. and S. Kolathayar (2013). Seismic hazard analysis of India using areal sources, *J. Asian Earth Sci.* **62**, 647-653.
- Sitharam, T. G., S. Kolathayar, and N. James (2014). Probabilistic assessment of surface level seismic hazard in India using topographic gradient as a proxy for site condition, *Geoscience Frontiers*, doi: 10.1016/j.gsf.2014.06.002.
- Skempton, A. W. (1986). Standard penetration test procedures and the effects in sands of overburden pressure, relative density, particle size, aging and over consolidation, *Géotechnique* **36**(3), 425.
- Sladen, J. A., R. D. D'hollander, and J. Krahn. (1985). The liquefaction of sands, a collapse surface approach, *Canadian Geotech. J.* **22**(4), 564-578.
- Slavov, S., I. Paskaleva, M. Kouteva, F. Vaccari, and G. F. Panza (2004). Deterministic Earthquake Scenarios for the City of Sofia, *Pure Appl. Geophys.* **161** (5–6), 1221–1237.
- Slemmons, D. B. and R. McKinney (1977). Definition of 'active fault', Miscellaneous Paper S-77-8, U.S. Army Engineer Waterways Experiment Station, Soils and Pavements Laboratory, pp. 23, Vicksburg, Missouri.
- Small, C. (2002). Multi-temporal analysis of urban reflectance, *Remote Sens. Environ.* **81**, 427–442.
- Smith, L. R. B. (1841). On the structure of the delta of the Ganges as exhibited by the boring operations in Fort Williams, AD 1836-40, *Calcutta J. Nat. History* **1**, 324-343.
- Sousa, M. L., A. Campos Costa, A. Carvalho and E. Coelho (2004). An Automatic Seismic Scenario Loss Methodology Integrated on a Geographic Information System, *Proceedings of the 13th World Conference on Earthquake Engineering*, Vancouver, Canada, 2526.
- Srivastava, H. N. and K. Ramachandran (1985). New catalogue of earthquakes for Peninsular India during 1839–1900, *Mausam* **36**, 351–358.
- Stanley, D. j. and A. K. Hait (2000). Holocene Depositional Patterns, Neotectonics and Sundarban Mangroves in the Western Ganges - Brahmaputra Delta, *J. Coastal Res.* **16** (1), 26-39.
- Stamopfli, G. M. and G. D. Borel (2002). A plate tectonic model for the Paleozoic and Mesozoic constrained by dynamic plate boundaries and restored synthetic oceanic isochrones, *Earth Planet. Sci. Lett.* **196** (1), 17-33.
- Star, S., K. C. McGwire, and J. E. Estes (1997). Integration of Geographic information Systems and Remote Sensing, *Cambridge University Press*, Cambridge, UK, p.248.
- Story, M. and G. R. Congalton (1986). Accuracy Assessment: A User's Perspective, *Photogramm. Eng. Rem. S.* **52**, 397-399.
- Stuart, M. (1926). The Srimangal earthquake of 8th July, 1918, *Geol. Surv. India Mem.* **46** (1), 1-70.
- Stepp, J. C. (1972). Analysis of the completeness of the earthquake sample in the Puget Sound area and its effect on statistical estimates of earthquake hazard, *Proc Inter Conf Microzonation for safer construct Res Appl*, Seattle, Washington, U.S.A. **64**, 1189–1207.
- Stirling, M., G. H. McVerry, and K. R. Berryman (2002). A new seismic hazard model for New Zealand, *Bull. Seismol. Soc. Am.* **92**, 1878–1903.
- Stromeyer, D., G. Grünthal, and R. Wahlström (2004). Chi-square regression for seismic strength parameter relation, and their uncertainties, with application to an m_w based earthquake catalogue for central, northern and northwestern Europe, *Jour. Seismol.* **8**, 143–153.
- Suckale, J. and G. Grünthal (2009). Probabilistic seismic hazard model for Vanuatu, *Bull. Seismol. Soc. Am.* **99**, 2108–2126.
- Su, F., K. Aki, T. Teng, Y. Zeng, S. Koyanagi, and K. Mayeda (1992). The relation between site amplification factor and surficial geology in central California, *Bull. Seismol. Soc. Am.* **82**(2), 580-602.
- Sun, C. G. (2004). Geotechnical Information System and Site Amplification Characteristics for Earthquake Ground Motions at Inland of the Korean Peninsula, Ph.D. Dissertation, Seoul National University, Korea.

- Sun, C. G., D. S. Kim, and C. K. Chung (2005). Geologic site conditions and site coefficients for estimating earthquake ground motions in the inland areas of Korea, *Eng. Geology* **81**(4), 446-469.
- Sun, C. G., S. H. Chun, T. G. Ha, C. K. Chung, and D. S. Kim (2008). Development and application of GIS-based tool for earthquake-induced hazard prediction, *Computers and Geotechnics* **35**(3), 436-449.
- Sun, C. G. (2009). Assessment of seismic site response at Hongseong in Korea based on two-dimensional basin modeling using spatial geotechnical information, *Geol. Eng. (in Korean)* **19**(1), 15-23.
- Sun, C. G., J. Shin, and H. C. Chi (2009). Regional Estimation of Site-specific Seismic Response by Spatial Zoning at an Inland Urban Area, Daegu, in Korea, *WSEAS Transactions on Environment and Development* **5**(2), 168-177.
- Sun, C. G. and J. S. Shin (2009). Implementation of Geo-knowledge Based Geographic Information System for Estimating Earthquake Hazard Potential at a Metropolitan Area, Gwangju, in Korea, *World Academy of Science, Engineering and Technology*.
- Sykes, L. R. (1971). Aftershock zones of great earthquakes, seismicity gaps, and earthquake prediction for Alaska and the Aleutians, *J. Geophys. Res.* **76**, 8021-8041.
- Sykes, L. R., B. E. Shaw, and C. H. Scholz (1999). Rethinking Earthquake Prediction, *Pure Appl. Geophys.* **155**, 207-232.
- Tamura., I. and F. Yamazaki (2002). Estimation of S-wave velocity based on geological survey data for K-NET and Yokohama seismometer network, *J. Struct. Mech. Earthq. Eng.* **1** 237-48 (in Japanese).
- Tandon, A. N. (1956). Zones of India liable to earthquake damage, *Indian J. Met. Geophys.* **10**, 137-146.
- Tandon, A. N. and H. N. Srivastava (1974). Earthquake occurrence in India: Earthquake engineering, 1-48, *Sarita Prakashan*, Meerut.
- Tandon, A. N. and H. N. Srivastava (1975). Focal mechanisms of some recent Himalayan earthquakes and regional plate tectonics, *Bull. Seismol. Soc. Am.* **65**, 963-969.
- Talukdar, D. and T. Talukdar (2012). Floral diversity and its indigenous use in old basin (Khari) of river Atreyee at Balurghat block of Dakshin Dinajpur district, West Bengal, *NeBIO 2012b* **3**, 26-32.
- Thakkar, S. K. and D. K. Paul (1992). Behavior of old historical buildings during August 21, 1988 Bihar-Nepal earthquake, Earthquake Engineering, *Tenth World Conference Q 1992 Balkema*, Rotterdam. ISBN 90 5410 060 5.
- Thenhaus, P. C. (1983). Summary of workshops concerning regional seismic source zones of parts of the Conterminous United States, Convened 1979-1980, Golden, Colorado, *U.S. Geol. Surv. Circular* 898.
- Thenhaus, P. C. (1986). Seismic source zones in probabilistic estimation of the earthquake ground motion hazard: a classification with key issues, *In Proc. Workshop on Probabilistic Earthquake Hazard Assessments*, 85-185.
- Thingbaijam, K. K. S. and S. K. Nath (2008). Estimation of maximum earthquakes in northeast India, *Pageoph.* **165**, 1-13.
- Thingbaijam, K. K. S., S. K. Nath, A. Yadav, A. Raj, M. Y. Walling, and W. K. Mohanty (2008). Recent seismicity in northeast India and its adjoining region, *J. Seismol.* **12**, 107-123.
- Thingbaijam, K.K.S, P. Chingtham, and S. K. Nath (2009). Seismicity in the northwest frontier province of Indian-Eurasian Plate Convergences, *Seismol. Res. Lett.* **80**, 599-608.
- Topal, T., V. Doyuran, N. Karahanoglu, V. Toprak, M. L. Suzen and E. Yesilnacar (2003). Microzonation for earthquake hazards: Yenisehir settlement, Bursa, Turkey, *Eng. Geology*, **70**(1), 93-108.
- Toprak, S. and T. L. Holzer (2003). Liquefaction potential index: field assessment, *J. Geotech. Geoenviron. Eng.* **129**(4), 315-322.
- Toro, G. R. (2002). Modification of the Toro et al. (1997) attenuation equations for large magnitudes and short distances, Risk Eng. Inc.

- Tsai, N. C. (1970). A note on the steady-state response of an elastic half-space, *Bull. Seismol. Soc. Am.* **60**(3), 795-808.
- Tsapanos, T. M. (2000). The depth distribution of seismicity parameters estimated for the South American area, *Earth Planet. Sci. Lett.* **180**, 103–115.
- Tsiambaos, G. and N. Sabatakakis (2011). Empirical Estimation of Shear Wave Velocity from In Situ Tests on Soil Formations in Greece, *Bull. Eng. Geol. Environ.* **70**, 291-297.
- Tsuchida, H. and Hayashi, S. (1971). Estimation of liquefaction potential of sandy soils, Proceedings of the Third Joint Meeting, US-Japan Panel on Wind and Seismic Effects, UJNR, Tokyo, 91-109.
- Tucker, B. E. (2004). Trends in global urban earthquake risk: a call to the international Earth Science and Earthquake Engineering communities, *Seismol. Res. Lett.* **75**(6), 695-700.
- Vaccari, F, M. Y. Walling, W. K. Mohanty, S. K. Nath, A. K. Verma, A. Sengupta and G.F. Panza (2011). Site-Specific Modeling of SH and P-SV Waves for Microzonation Study of Kolkata Metropolitan City, India, *Pure Appl. Geophys.* **168**(3-4),479-493.
- Van Rooy, J. L. and J. S. Stiff (2001). Guidelines for urban engineering geological investigations in South Africa, *Bull. Eng. Geol. Environ.* **59**, 285–295.
- Udwadia, F. E. and M. D. Trifunac (1973). Comparison of earthquake and microtremor ground motions in El Centro, California, *Bull. Seismol. Soc. Am.* **63**(4), 1227-1253.
- Uhrhammer, R. A. (1986). Characteristics of northern and central California seismicity, *Earthq. Notes.* **57**, p21.
- Ulomov, V. I., T. I. Danilova, N. S. Medvedeva, and T. P. Polyakova (2006). Seismo-geodynamics of lineament structures in the mountainous regions bordering the Scythian-Turan Plate, *Izvestiya. Phys. Solid. Earth.* **42**, 551–566.
- Umitsu, M. (1987). Late Quaternary sedimentary environment and landform evolution in the Bengal lowland, *Geographical review of Japan*, Series B, **60**(2), 164-178.
- Umitsu, M. (1993). Late Quaternary sedimentary environments and landforms in the Ganges Delta, *Sedimentary Geology* **83**(3), 177-186.
- Udike, R. G., J. A. Egan, Y. Moriwaki, I. M. Idriss, and T. L. Moses (1988). A model for earthquake-induced translatory landslides in Quaternary sediments, *Geol. Soc. Am. Bull.* **100**(5), 783-792.
- USGS-BGAT (2001). U.S. Geological Survey–PetroBangla Cooperative Assessment of Undiscovered Natural Gas Resources of Bangladesh, *U.S. Geol. Surv. Bull.* **2208-A**.
- USGS (2008). USGS Open File Report 2008-1150, ShakeOut Scenario Appendix C: Characteristics of Earthquake-Induced Permanent Ground Deformation and Examples from Past Earthquakes.
- Utsu, T. (1965). A method for determining the value of b in the formula $\log N = a - bM$ showing the magnitude–frequency relation for the earthquakes, *Geophys. Bull. Hokkaido Univ.* **13**, 99–103.
- Utsu, T. (2002). Statistical Features of Seismicity, International Handbook of Earthquake and Engineering Seismology, Part **B**, 719–732.
- Valdiya, K. S. (1976). Himalayan transverse faults and their parallelism with subsurface structures of north Indian plains, *Tectonophysics* **32**, 352–386.
- Vardoulkis, I. and C. Vrettos (1988). Dispersion law of rayleigh-type waves in a compressible gibson half-space, *Int. J. Numer. Anal. Met. Geomechanics* **12**(6), 639-655.
- Verma, R. K. (1991). Geodynamics of the Indian Peninsula and the Indian Plate Margin, *Oxford and IBH*, New Delhi, 278–321.
- Veneziano, D. and J. Van Dyke (1985). Seismic parameter estimation methods, in EPRI/SOG Seismic Hazard Methodology for Nuclear Facilities in the Eastern United States (Draft 85-1), **2**, Appendix A.
- Vere-Jones, D. (1992). Statistical methods for the description and display of earthquake catalogs, In Statistics in the Environmental and Earth Sciences, A. T. Walden and P. Guttorp (Eds.), 220–246, Arnold Publishers, London.

- Yilmaz, I. (2008). A case study for mapping of spatial distribution of free surface heave in alluvial soils (Yalova, Turkey) by using GIS software, *Computers & Geosciences* **34**(8), 993-1004.
- Yilmaz, I. and A. Bagci (2006). Soil liquefaction susceptibility and hazard mapping in the residential area of Ku^o tahya (Turkey), *Environ. Geology* **49**, 708–719.
- Vishnu-Mitre and H. P. Gupta (1970). Pollen analytical study of Quaternary deposits in Bengal Basin, *Palaeobotanist* **19**, 297-306.
- Wald, D.J. and T. I. Allen (2007). Topographic slope as a proxy for seismic site conditions and amplification. *Bull. Seismol. Soc. Am.* **97**(5), 1379-1395.
- Wallace, K., R. Bilham, F. Blum, V.K. Gaur, and V. Gahalaut (2005). Surface deformation in the region of the 1905 Kangra Mw = 7.8 Earthquake in the period 1846–2001, *Geophys. Res. Lett.* **32**, L15307, doi: 10.1029/2005GL022906.
- Wakamatsu, K. (1980). Geomorphological Consideration on Site Conditions of Soil Liquefaction Caused by Earthquake, *Asian Profile* **8**(3), 279-297.
- Wang, W. (1979). Some findings in soil liquefaction, Water Conservancy and Hydroelectric Power Scientific Research Institute, Beijing, China.
- Wells, D. L. and K. J. Coppersmith (1994). New empirical relationships among magnitude, rupture length, rupture width, rupture area, and surface displacement, *Bull. Seismol. Soc. Am.* **84**, 974–1002.
- Wentworth, C. K. (1922). A scale of grade and class terms for elastic sediments, *J. Geology*, 377-392.
- WHE-PAGER (2008). WHE-PAGER Phase 2, Development of Analytical Seismic Vulnerability Functions. EERI-WHE-US Geological Survey, available at <http://pager.world-housing.net/>.
- Whitman, R. V., T. Anagnos, C. A. Kircher, H. J. Lagorio, R. S. Lawson, and P. Schneider (1997). Development of a National Earthquake Loss Estimation Methodology, *Earthq. Spectra* **13**(4), 643-661.
- Willemann, R. J. and D. A. Storchak (2001). Data collection at the international seismological centre, *Seismol. Res. Lett.* **72**, 440–453.
- Wong, I., W. Silva, J. Bott, D. Wright, P. Thomas, N. Gregor, S. Li, M. Mabey, A. Sojourner, and Y. Wang (2000). Earthquake scenario and probabilistic ground shaking maps for the Portland, Oregon, Metropolitanarea, Interpretative Map Series IMS-16, Oregon Department of Geology and Mineral Industries.
- Woodside, P. R. (1983). The Petroleum Geology of Bangladesh, *Oil Gas J.* **81**, 149--155.
- Woo, G. (1996). Kernel estimation methods for seismic hazard area source modeling, *Bull. Seismol. Soc. Am.* **86**, 353–362.
- Wyss, M. and S. Wiemer (1999). How can one test the seismic gap hypothesis? The case of repeated ruptures in the Aleutians, *Pure Appl. Geophys.* **155**, 259–278.
- Wyss, M. (2005). Human losses expected in Himalayan earthquakes, *Nat. Hazards* **34**, 305–314.
- Xia, J., R. D. Miller, and C. B. Park (1999). Estimation of near-surface shear-wave velocity by inversion of Rayleigh waves, *Geophysics* **64**(3), 691-700.
- Xia, J., R. D. Miller, and C. B. Park (2000). Advantages of calculating shear-wave velocity from surface waves with higher modes, *In Proceedings of the 70th Annual International Meeting, SEG, Expanded Abstracts*, pp 1295-1298.
- Xia, J., R. D. Miller, C. B. Park, and G. Tian (2003). Inversion of high frequency surface waves with fundamental and higher modes, *J. Appl. Geophys.* **52**(1), 45-57.
- Yadav, R. B. S., P. Bormann, B. K. Rastogi, M.C. Das, and S. Chopra (2009). A homogeneous and complete earthquake catalog for northeast India and the adjoining region, *Seismol. Res. Lett.* **80**, 609–627.
- Yamamuro, J. and P. V. Hade (1999). Experiments and modeling of silty sands susceptible to static Liquefaction, *Mechanics of Cohesive-Frictional Materials, Mech. Cohesive-Frictional Material* **4**, 545-564.
- Yamanaka, H., M. Takemura, H. Ishida, and M. Niwa (1994). Characteristics of long-period microtremors and their applicability in exploration of deep sedimentary layers, *Bull. Seismol. Soc. Am.* **84**(6), 1831-1841.

- Yang, Y., F. B. Zhan, and L. Li (2011). Estimating seismic losses of schools using SELENA: The case of Wenchuan earthquake. In *Geoinformatics, 2011 19th International Conference on IEEE*, 1-6.
- Yasuda, S. (1985). Applicability of PL-value to mapping liquefaction potential, *Proc. 40th Annual Meeting, Japanese Society of Civil Eng.* **3**, 87-88 (in Japanese).
- Yilmaz, O. (1987). Seismic Data Processing: Society of Exploration Geophysicists.
- Yilmaz, I. and A. Bagci (2006). Soil liquefaction susceptibility and hazard mapping in the residential area of Kütahya (Turkey), *Environ. Geology* **49**(5), 708-719.
- Yilmaz, I. (2008). A case study for mapping of spatial distribution of free surface heave in alluvial soils (Yalova, Turkey) by using GIS software, *Computers & Geosciences*, **34**(8), 993-1004.
- Yilmaz, I. and D. Yavuzer (2005). Liquefaction potential and susceptibility mapping in the city of Yalova, Turkey, *Environ. Geology* **47**(2), 175-184.
- Youd, T. L. and S. N. Hoose (1977). Liquefaction susceptibility and geologic setting, *Proceedings of 6th World Conference on Earthquake Engineering* **6**, New Delhi, India.
- Youd, T. L. and D. M. Perkins (1978). Mapping liquefaction-induced ground failure potential, *J. Geotech. Eng. Div.* **104**, 433-446.
- Youd, T. L. (1991). Mapping of earthquake-induced liquefaction for seismic zonation, *Proceeding of The International Conference on Seismic Zonation*.
- Youd, T. L. (1993). Liquefaction, ground failure and consequent damage during the 22 April 1991 Costa Rica earthquake, Abridged from EERI Proceedings: U.S. Costa Rica Workshop, <http://nisee.berkeley.edu/costarica/>
- Youd, T. L. and S. K. Noble (1997). Magnitude scaling factors. *Proceedings, NCEER Workshop on Evaluation of Liquefaction Resistance of Soils, National Center for Earthquake Engineering Research.*, State University of New York, Buffalo, 149-165.
- Youd, T. L., I. M. Idriss, R. D. Andrus, I. Arango, G. Castro, J. T. Christian, R. Dobry, W. D. L. Finn, L. F. Harder Jr, M. E. Hynes, K. Ishihara, J. P. Koester, S. S. C. Liao, W. F. Marcuson-III, G. R. Martin, J. K. Mitchell, Y. Moriwaki, M. S. Power, P. K. Robertson, R. B. Seed, and K. H. Stokoe-II (2001). Liquefaction Resistance of Soils: Summary Report from the 1996 NCEER and 1998 NCEER/NSF Workshops on Evaluation of Liquefaction Resistance of Soils, *ASCE, J. Geotech. Geoenviron. Eng.* **127**, 817-833.
- Youngs, R. R., S. J. Chiou, W. J. Silva, and J. R. Humphrey (1997). Strong ground motion relationships for subduction zone earthquakes, *Seismol. Res. Lett.* **68**, 58-73.
- Zaher, M. A. and A. Rahman, (1980). Prospects and investigations for minerals in the northern part of Bangladesh, In *Petroleum and Mineral Resources of Bangladesh, Seminar and Exhibition*, Dhaka, 9-11.
- Zha, Y., J. Gao, and S. Ni (2003). Use of normalized difference built-up index in automatically mapping urban areas from TM imagery, *Int. J. Remote Sens.* **24**(3), 583-594.
- Zhang, Q., J. Wang, X. Peng, P. Gong, and P. Shi (2002). Urban built-up land change detection with road density and spectral information from multi-temporal Landsat TM data, *Int. J. Remote Sens.* **23**(15), 3057-3078.
- Zhuang, J., Y. Ogata, and D. Vere-Jones (2002). Stochastic declustering of space-time earthquake occurrences, *J. Am. Stat. Assoc.* **97**, 369-380.