

## DAFTAR PUSTAKA

- Aki, K., 1957, Space and Time Spectra of Stationary Stochastic Waves, with Special Reference to Microtremors, *Earthquake Research Institute Japan*, Vol 35, pp 415-456.
- Anonim, 2016, Sumatra, <http://www.earthobservatory.sg/project/sumatra>, diakses 18 Juni 2016.
- Arifin, A. S., Mulyatno, B. S., Marjiyono, dan Setianegara, R., 2013, Penentuan zona rawan guncangan bencana gempabumi berdasarkan analisis nilai amplifikasi HVSR mikrotremor dan analisis periode dominan daerah Liwa dan sekitarnya, *Jurnal Geofisika Eksplorasi Vol 2/No.1*.
- Asten, M.W., Trevor D.H.U. dan Nelson L.A.M., 2004, Optimized Array Design for Microtremor Array Studies Applied to Site Classification; Comparison of Results with Spt Logs. *13th World Conference on Earthquake Engineering*, Vancouver, Canada, No 2903.
- Bard, P.Y., SESAME-Team, 2004, Guidelines for the implementation for the H/V spectral ratio technique on ambient vibrations-measurements, processing and interpretations. *SESAME European Research Project*, EVG1-CT-2000-00026
- Beichel, R. R., 2000, Chapter 4, Part III Image Pre-processing: Local pre-processing, <http://user.engineering.uiowa.edu/~dip/LECTURE/PreProcessing3.html#edge>, diakses 09 Juni 2016.
- Bettig, B., P.Y. Bard, F. Scherbaum, J. Riepl, F. Cotton, C. Cornou dan D. Hatzfeld, 2001, Analysis of Dense Array Noise Measurements Using The Modified Spatial Auto-Correlation Method (SPAC): Application to The Genoble Area, *Bulletino Di Geofisica Teorica Ed Applicata*, 42, 3-4, 281-304.
- Billo, E.J., 2007, *Excel for Scientists and Engineers Numerical Methods*, John Wiley & Sons, Inc., Publication, Canada.
- Broptopuspito, K.S, Tiar P., dan Ferry M.W., 2006, Percepatan Getaran Tanah Maksimum Daerah Istimewa Yogyakarta 1943-2006, *J. Geofisika*, 2006/1.
- Carlson, D.H., Plummer, C.C., dan Hammersley, L., 2011, *Physical Geology: Earth Revealed (Ninth Edition)*, The McGraw-Hill Companies, Inc., New York

- Chumaeroh, D.A, 2015, Identifikasi Struktur Bawah Permukaan Berdasarkan Data Gayaberat Di Daerah Koto Tangah, Kota Padang, Sumatera Barat, *Physics Student Journal*, 2015
- Claudet, S. B., Cotton,F., and Bard, P., 2006, The nature of noise wavefield and its applications for site effects studies, a literature review, *Earth Science Reviews*, 79.
- Cole, R. D., 2013, The First and Second Derivatives, <https://math.dartmouth.edu/opencalc2/cole/lecture8.pdf>, diakses 29 April 2016.
- Crawford, M. J., 1998, *Physical Geology*, Cliff Notes, Inc, Lincoln, Nebraska
- Daryono, Sutikno, J. Sartohadi, Dulbahri, dan K. S. Brotopuspito, 2009, Efek Tapak Lokal (Local Site effect) di Graben Bantul Berdasarkan Pengukuran Mikrotremor, *International Conference Earth Science And Technology*, Yogyakarta 6-7 August 2009
- Daryono, 2011, Indeks Kerentanan Seismik Berdasarkan Mikrotremor Pada Setiap Satuan Bentuklahan di Zona Graben Bantul Daerah Istimewa Yogyakarta, *Disertasi*, Program Pascasarjana Fakultas Geografi, UGM, Yogyakarta.
- Edward, A., 2015, *Bahaya Gempa Bumi Zona Patahan Sumatera*, Tim Pusdalops PB BPBD Prov. Sumatera Barat. IAGI. Sumatera Barat.
- Edward, A. dan Agustin, Y., 2013, Peta Bahaya Gempa Bumi Zona Patahan Sumatera, Provinsi Sumatera Barat, <http://pusdalopspbsumbar.blogspot.co.id/2013/07/peta-bahaya-gempa-bumi-zona-patahan.html>, 10 Juli 2013, diakses 14 Januari 2016.
- Faruqi, A.L., 2016, Tanah Longsor Jalan Sumatera Barat Sumatera Utara putus, <https://m.tempo.co/read/news/2016/02/08/058743013/tanah-longsor-jalan-sumatera-barat-sumatera-utara-putus> diakses 18 Juni 2016 via Google.com
- Fukushima, Y., dan Tanaka, T., 1990, A New Attenuation Relation for Peak Horizontal Acceleration of Strong Earthquake Ground Motion in Japan, *Bull of the seismological society of America. Soc. Am.*, 80, 757-783.
- Grutas, R. N., 2012. Exploration of S-wave Velocity of Sedimentary Layers with Application to Seismic Microzonation in Metro Manila, the Philippines, *Doctoral Dissertation*, Department of Environmental Science and Technology, Tokyo Institute of Technology.

- Harlianto, B., 2013, Pemetaan Percepatan Getaran Tanah Maksimum, Indeks Kerentanan Seismik Tanah, *Ground shear strain*, dan Ketebalan Lapisan Sedimen Untuk Mitigasi Bencana Gempabumi Di Kabupaten Bengkulu Utara, *Tesis*. Program Studi S2 Ilmu Fisika, Jurusan Fisika, FMIPA, Universitas Gadjah Mada, Yogyakarta.
- Hartati, A., 2012, Identifikasi Struktur Patahan Berdasarkan Analisis Derivatif Metode Gaya Berat di Pulau Sulawesi, *Skripsi*, Program Studi Fisika, FMIPA, Universitas Indonesia.
- Ilyas, I., 2010, *Buku Putih Sanitasi Kota Solok*, Pemerintah Kota Solok.
- Isihara, K., 1982, Evaluation of Soil Properties for Use in Earthquake Response Analysis. *Proc. Int. Symp. On Numerical Model in Geomech*, 237-259.
- Konno, K., dan Ohmachi, T., 1998, Ground Motion Characteristics Estimated From Spectral Ratio Between Horizontal To Vertical Components Of Microtremor, *Bulletin of the Seismological of America*, 88, 1, 228-241.
- Kurniawan, L., Triutomo, S., Yunus, R., Amri, M. R., Hartyanto, A. A., 2014, *Indeks Resiko Bencana Indonesia*, BNPB, Jakarta.
- Marjiyono, 2010, Estimasi Karakteristik Dinamika Tanah Dari Data Mikrotremor Wilayah Bandung, *Tesis ITB*, Bandung.
- Marjiyono, Ratdomopurbo, Suharna, M.H.H Zajuli, dan R. Setianegara, 2014, Geologi Bawah Permukaan Dataran Klaten Berdasarkan Interpretasi Data Mikrotremor, *Jurnal Geologi dan Sumberdaya Mineral*, 15, 1, 3-9.
- Mulya, S.P., dan Suwarno, Y., 2013, Pemetaan Rawan Bencana Gempa Bumi Di Kabupaten Kepulauan Mentawai, *Jurnal Ilmiah Geomatika*, Volume 19 No. 2
- Murdiantoro, R.A., 2015, Pemetaan Daerah Rawan Kerusakan Akibat Gempabumi Kotamadya Denpasar dan Sekitarnya dengan Menggunakan Analisis Mikrotremor, Studi Kasus: Gempabumi Seririt 14 Juli 1976, *Tesis*, Program Studi S2 Ilmu Fisika, Jurusan Fisika, FMIPA, Universitas Gadjah Mada, Yogyakarta.
- Nakamura, Y., 1989, A Method for Dynamic Characteristic Estimation of Subsurface using Microtremor on the Ground Surface, *QR Railway Technical Research Institute*, 30, 1, 25-33.
- Nakamura, Y., 1997, Seismic Vulnerability Indices for Ground And Structures Using Microtremor, *World Congress on Railway Research, Florence*, Nov. 1997.

- Nakamura, Y., 2000, Clear Identification of Fundamental Idea of Nakamura's Technique and its Applications, *Proc XII World Conf. Earthquake Engineering*, New Zealand, 2656.
- Nakamura, Y., T. Sato, dan M. Nishinaga, 2000, Local Site Effect of Kobe Based on Microtremor Measurement. *Proceeding of the Sixth International Conference on Seismic Zonation EERI*, Palm Springs California.
- Natawidjaja, 2007, Gempabumi dan Tsunami di Sumatera dan Upaya Untuk Mengembangkan Lingkungan Hidup Yang Aman Dari Bencana Alam, <http://geospasial.menlh.go.id/assets/Analisis/DHNLaporanKLH2007finalv2sm.pdf>, diakses 22 Mei 2016.
- Noor, 2012, *Pengantar Geologi*, Program Studi Teknik Geologi Fakultas Teknik Universitas Pakuan, Bogor.
- Okada, H. 2003. The Microtremor Survey Method (Geophysical Monograph Series Number 12), *Society of Exploration Geophysicists*, Amerika.
- Okada, H., 2006, Theory of efficient array observations of microtremors with special reference to the SPAC method, *J. Exploration Geophysics*, 37, 73-85.
- Parolai, S., P.Bormann dan C. Milkereit, 2002, New Relationships between Vs, Thicknes of Sediments, and Resonance Frequency Calculated by the H/V Ratio of Seismic Noise for the Cologne Area (Germany), *Bull of Seismological Society of America*, 92, 6, 2521-2527.
- Picozzi, M., Strollo, A., Parolai Rix, S., Durukal, E., O zel, O., Karabulut, S.,Zschau,J., dan Erdik,M., 2009, Site characterization by seismic noise in Istanbul,Turkey, *Soil Dynamics and Earthquake Engineering* 29. 469– 482
- Pluijm, B. A. v. d. and Marshak, S., 2004, *Earth Structure, An Introduction to Structural Geology and Tectonics*, 2nd ed. London: W. W. Norton & Company.
- Prabowo, N., 2015, Pemetaan Daerah Rawan Rekahan Tanah Berdasarkan Analisis Mikrotremor di Kota Madya Denpasar dan Kabupaten Badung, Bali, *Tesis*, Program Studi S2 Ilmu Fisika, Jurusan Fisika, FMIPA, Universitas Gadjah Mada, Yogyakarta.
- Priezzhev, I. I., and Scollard, A., 2012, Faults and Fracture Detection based on Seismic Surface Orthogonal Decomposition, *EAGE Conference & Exhibition incorporating SPE EUROPEC*, 2012, Copenhagen, Denmark.

- Seht, M.I, dan Wohlenberg, J., 1999, Microtremor Used To Map Thickness of Soil, *Bulletin of the Seismological Society of America*, 89, 1, 250-259.
- Sieh, K. and Natawidjaja, D., 2000, Neotectonics of the Sumateran fault, Indonesia: *Journal of Geophysical Research* 105, 28,295-28,326.
- Silitonga, P.H dan Kastowo, 1995, *Peta Geologi Lembar Solok*, PPG, Bandung.
- Stratta, J.L., 1980, Earthquake in Campania-Basilicata Italy, *National Research Council and Earthquake Engineering Research Institute*, Berkeley, USA.
- Sunardi, B., Daryono, Arifin, J., Susilanto, P., Ngadmanto, D., Nurdiyanto, B., Sulastri, 2012, Kajian Potensi Bahaya Gempa Bumi Daerah Sumbawa Berdasarkan Efek Tapak Lokal, *Jurnal Meteorologi dan Geofisika*, Volume 13 No. 2
- Sungkono dan B.J. Santosa, 2011, Karakterisasi Kurva Horizontal to Vertical Spectral Ratio: Kajian Literatur dan Pemodelan. *Jurnal Neutrino*, 4, 1.
- Suryanto, 2016, Kerugian Materiil Akibat Gempa di Kota Solok Rp27,54 Miliar, <http://www.antaranews.com/berita/55533/kerugian-materiil-akibat-gempa-di-kota-solok-rp2754-miliar>, diakses 10 Mei 2016 via Google.com
- Syahrudin, M.H., Aswad, S., Palullungan, E. F., Maria, dan Syamsuddin, 2014, Penentuan Profil Ketebalan Sedimen Lintasan Kota Makassar Dengan Mikrotremor, *Jurnal Fisika Vol. 4 No. 1*, Mei 2014
- Thein, P.S., S. Pramumijoyo, K.S. Broptospito, W. Wilopo, J. Kiyono, and A. Setyanto, 2013, Estimation of sedimen Thickness by Using Microtremor Observation at Palu City, Indonesia, *Procciding of The 11th International Conference on Mining, Materials and Petroleum Engineering, The 7th International Conference on Earth Resources Tecnology*, Chiang Mai, Thailand, 116.
- Thein, P.S., S. Pramumijoyo, K.S. Broptospito, W. Wilopo, J. Kiyono, Furukawa, A., Putra, P.R, and A. Setyanto, 2015, Estimation of S-Wave Velocity Structure For Sedimentary Layered Media Using Microtremor Array Measurements In Palu City, Indonesia, *Procedia Environmental Sciences* 28, 595 – 605
- Triyono, R., 2009, Ancaman Gempabumi di Sumatera Tidak Hanya Bersumber dari Mentawai Megathrust, [http://www.bmkg.go.id/BMKG\\_Pusat/Publikasi/Artikel/Artikel\\_Detail.bmkg?id=ztib94418083bpzn5154](http://www.bmkg.go.id/BMKG_Pusat/Publikasi/Artikel/Artikel_Detail.bmkg?id=ztib94418083bpzn5154), 14 Agustus 2015, diakses tanggal 06 Maret 2016

- Triyono, R., 2015, Review Gempabumi Sumatera Barat 30 September 2009 Sebagai Upaya Mitigasi Bencana, [http://www.bmkg.go.id/BMKG\\_Pusat/Publikasi/Artikel/Artikel\\_Detail.bmkg?id=75hj1843810bmo7l5815](http://www.bmkg.go.id/BMKG_Pusat/Publikasi/Artikel/Artikel_Detail.bmkg?id=75hj1843810bmo7l5815), 30 September 2015, diakses tanggal 06 Maret 2016.
- Waluyo, 1996, *Seismologi*, Lab. Geofisika, Program Studi Teknik Geofisika, FMIPA, UGM, Yogyakarta.
- Waluyo, 2013, *Analisis Runtun Waktu*, Program Studi Teknik Geofisika, FMIPA, UGM, Yogyakarta.
- Wathelet, M., D. Jongmans, dan M. Ohrnberger, 2004, Surface-Wave Inversion Using a Direct Search Algorithm and Its Application to Ambient Vibration Measurements, *J. Near Surface Geophysics*, 211-221.
- Willige, B.T., 2010, Detection of local site conditions influencing earthquake shaking and secondary effects in Southwest-Haiti using remote sensing and GIS-methods. *Nat. Hazards Earth Syst. Sci.*, 10, 1183–1196.
- Yuliandri, 2015, *Kota Solok dalam Angka 2015*, Badan Pusat Statistik Kota Solok