



DAFTAR PUSTAKA

- Aji, J. R. K. N., 2020, Seismic hazard assessment dan pembuatan ground motion design terowongan dengan studi parametrik, Laporan studi kasus, Indonesia: UGM.
- American Concrete Institute 314R-16, 2016, Guide to simplified design for reinforced concrete buildings, America : ACI.
- Arshadnejad, S., & Nick, N., 2016, Empirical models to evaluate of “mi” as an intact rock constant in the Hoek-Brown rock failure criterion, 19th Southeast Asian Geotechnical ConFErence, 943–948.
- Asakura, T., Shiba, Y., Matsuoka, S., Oya, T., & Yashiro, K., 2000, Damage to mountain tunnels by earthquake and its mechanism, Doboku Gakkai Ronbunshu, 659.
- Aydan, Ö, Tokashiki, N., Genis, M., 2012, Some considerations on yield (failure) criteria in rock mechanics, Proceedings of the 46th US rock mechanics/geomechanics symposium, Chicago, 12-640.
- Barpi, F., Barbero, M., & Peila, D., 2011, Numerical modelling of ground-tunnel support interaction using bedded-beam-spring model with fuzzy parameters, Gospodarka Surowcami Mineralnymi / Mineral Resources Management, 71–87.
- Bery, A. A., & Saad, R., 2012, Correlation of Seismic P-Wave Velocities with Engineering Parameters (N Value and Rock Quality) for Tropical Environmental Study, International Journal of Geosciences, 749–757.
- Bieniawski, Z. T, 1989, Engineering rock mass classifications, John Wiley & Sons, New York, 251.
- Bolisetti, C., Whittaker, A. S., Mason, H. B., Almufti, I., and Willford, M., 2014, Equivalent linear and nonlinear site response analysis for design and risk assessment of saFETy-related nuclear structures, Nuclear Engineering and Design, 107-121.
- Cai, M., 2008, Influence of stress path on tunnel excavation response numerical tool selection and modeling strategy, Tunn Undergr Sp Technol, 618–628.
- Ceballos F., Olalla C., dan Jimenez R., 2014, Relationship between RMRb and GSI based on in situ data, ISRM European Regional Symposium, 375–380.
- Direktorat Jenderal Perkeretaapian, 2011, Dokumen pelelangan dan kontrak-Phase II : Kroya – Kutoarjo, Indonesia: Kementerian Perhubungan Indonesia.
- Dowding, C. H., and Rozen, A., 1978, Damage ro rock tunnels for earthquake shaking, Journal of the Geotechnical Engineering Division, American Society of Civil Engineers, 104.
- Du, D., 2019, Design of tunnels using the Hyperstatic Reaction Method, Thesis, Universite Grenoble Alpes.
- Fauzi, A., Fauzi, U. J., 2013, Deaggregation of New National Seismic Hazard Maps for Indonesia. Proceedings of 10CUEE Conference, Tokyo: 1-2 Maret 2013.
- Federal Highway Administration, 2009, Technical manual for design and construction of road tunnels-civil elements, FHWA-NHI-10-034, Washington, D.C.



GreiFEneder, E., 2003, Comparison of Cut-and-Cover Tunneling Method vs New Austrian Tunneling Method (NATM) for Urban Tunnels with Shallow Overburden, 134.

Golpasand, M. R. B., Alavi, S. G., & Rezaei, A., 2020, The efFEct of engineering geology on the rock load and squeezing potential in Lot2 of Imamzadeh-Hashem tunnel, Iranian Journal of Earth Sciences, 151–165.

Hashash, Y. M. A., Hook, J. J., Schmidt, B., & I-Chiang Yao, J., 2001, Seismic design and analysis of underground structures, Tunnelling and Underground Space Technology, 247–293.

Hoek, E., Carranza-Torres, C., and Corkum, B. Hoek- Brown Failure Criterion, 2002, Proceedings of the 5th North American Rock Mechanics Symposium and 17th Tunnel Association of Canada, 267-273

Hoek, E., Marinos, P., 2001, Estimating the geotechnical properties of heterogeneous rock masses such as flysch, Bulletin of Engineering Geology and the Environment.

Hoek, E., 2006, Practical Rock Engineering, Evert Hoek Consulting Engineer Inc, Canada.

Hsien-Jen, T., 1996, A Literature Study of the Arching EfFEct, Thesis, Massachusetts Institute Of Technology.

International Conference in commemoration of the 10th anniversary of the 1999 Chi-Chi earthquake, 2009, Chih-Chieh Lu and Jin-Hung Hwang, Taiwan.

ITA Working Group 2., 2019, Guidelines for the Design of Segmental Tunnel Linings, International Tunnelling and Underground Space Association.

Itasca Inc., 2015, Universal Distinct Element Code (UDEC v6.0), Itasca Consulting Group, MN.

Jackson, N., & Dhir, R. K., 1996, Foundation analysis and design, The McGraw-Hill Companies, New York.

Jaramilo, C. A, 2017, Impact of seismic design on tunnels in rock – Case histories, Underground Space, 2(2), 106–114.

Jeong, S. S., Han, Y. C., Kim, Y. M., & Kim, D. H., 2014, Evaluation of the NATM tunnel load on concrete lining using the ground lining interaction model, KSCE Journal of Civil Engineering, 672–682.

Jishnu, R.B., Ramanathan, A., Ahmed, S., Chayan, P., dan Ghosh, S., 2016, Performance of primary tunnel support systems under seismic loads in weak rock masses, Recent Advances in Rock Engineering, hal. 206.

Khani, S. dan Homami, P., 2012, Seismic performance of shallow underground subway stations in soft soil, Journal of Engineering Geology, Vol.8, No.1.

Lane, K. S., 2019, Tunnels and underground excavations, Encyclopedia Britannica, <https://www.britannica.com/technology/tunnel>.

Law, Hubert and Lam, Ignatius, 2003, Evaluation of Seismic Performance for Tunnel Retrofit Project, J Geotech Geoenviron Eng, no. 7.



- Liang, M., Mohamad, E. T., Khun, M. C., & Alel, M. N. A., 2015, Estimating uniaxial compressive strength of tropically weathered sedimentary rock using indirect tests, *Jurnal Teknologi*, 49–58.
- Lu, C. C., and Hwang, J. H., 2008, Seismic damage analysis of new sanyi railway tunnel using a nonlinear MCSRD method, 1.
- Lu, C. C., & Hwang, J. H., 2018, Damage analysis of the new Sanyi railway tunnel in the 1999 Chi-Chi earthquake: Necessity of second lining reinforcement, *Tunnelling and Underground Space Technology*, 48–59.
- Möller, S. C., 2006, Tunnel induced settlements and structural forces in linings, Thesis, Univ. Stuttgart, Inst. f. Geotechnik, Germany
- Naseem, A., Kashif, M., Iqbal, N., Schotte, ken., De Backer, Hans., 2020, Seismic behavior of triple tunnel complex in soft soil subjected to transverse shaking, *Appl. Sci.* 10, no. 1:334.
- National Coorperative Highway Research Program, 2008, Seismic Analysis and Design of Retaining Walls, Buried Structures, Slope, and Embankments, Transportation Research Board, Washington, D.C..
- National Coorperative Highway Research Program, 2008, Seismic Analysis and Design of Retaining Walls, Buried Structures, Slope, and Embankments. Washington, D.C.: Transportation Research Board.
- Perras, M. A., & Diederichs, M. S., 2014, A Review of the Tensile Strength of Rock: Concepts and Testing, *Geotechnical and Geological Engineering*, 525–546.
- PEER Ground Motion Database, “NGA-West2 Shallow Crustal Earthquakes in Active Testonic Regimes”, Diakses dari <https://ngawest2.berkeley.edu/>, 31 Desember 2020.
- Pusat Studi Gempa Nasional Pusat Litbang Perumahan dan Permukiman, 2017, Peta sumber dan bahaya gempa Indonesia tahun 2017, Bandung, Indonesia: Badan Penelitian dan Pengembangan Kementerian Pekerjaan Umum dan Perumahan Rakyat.
- Road Development Authority, 2018, Guideline for Design of Road Tunnel, JICA.
- Rocscience Inc., <https://www.rocscience.com/>, diakses pada 2019/12/10.
- Sharma, S., and Judd, W.R., 1991, Underground opening damage from earthquake, *Engineering Geology*, Vol.20.
- Sharma, P. K., & Singh, T. N, 2008, A correlation between P-wave velocity, impact strength index, slake durability index and uniaxial compressive strength, *Bulletin of Engineering Geology and the Environment*, 17–22.
- Sigh, B. dan Goel, R. K., 1999, Rock mass classification: A practical approach in civil engineering edisi 1, Inggris: Elsevier Science.
- Soli, C., 2018, Evaluation of damage induced by drill and blast excavation in tunnelling on existing structures, Mater Thesis, University of Bologna, 2017.
- Technical Assitance for Improvement of Capacity for Planning of Road Tunnels Japan-Sri Lanka, 2018, Guidline for design of road tunnel, Japan: Japan International Cooperation Agency.



Terzaghi, K. (1946). Introduction to tunnel geology. *Rock Tunneling with Steel Supports*, 271.

Thompson, K., Rohena, J., Bardow, A., Brecko, B., Khaleghi, B., Ruzzi, L., Salomon, M., Tonon, F., & Lou Ralls, M., 2011, Best Practices For Roadway Tunnel Design, Construction, Maintenance, Inspection, and Operations, Arora and Associates, P. C. New Jersey.

U. S. Army Corps Of Engineers, 1999, Approved for public release, U. S. Army Corps of Engineers.

Vlachopoulos, N., & Diederichs, M. S., 2014, Appropriate Uses and Practical Limitations of 2D Numerical Analysis of Tunnels and Tunnel Support Response, Geotechnical and Geological Engineering, 469–488.

Wang, J. N., 1993, Seismic design of tunnels: a state-of-the-art approach, monograph, Parsons Brinckerhoff Inc, New York.

Weifner, T., 2020, The selection of suitable boundary conditions for elemen hingga simulations of deep tunnel, Civil Engineering Research Journal, Vol.10, no.4.

Wieland, M., 2012, Seismic aspects of underground structures (internet), Water Power & DamConstruction,<<https://www.waterpowermagazine.com/FEatures/FEatureseismic-aspects-of-underground-structures/>> (diakses 9 Februari 2021).

Treyger, S., Jones, M., and Pourvahidi, S., 2006, Retrofit of yerba Buena island tunnel California USA, IABSE Symposium Report, Vol. 91, no.3.