



DAFTAR PUSTAKA

- Akira, I., Fernando S. F., and Hirokazu, I. K. F, 2009, Real-Time Hybrid Testing of Laminated Rubber Dampers for Seismic Retrofit of Bridges, pp. 1–10.
- Allen, D. E, and Pernica, G, 1998, Control of Floor Vibration, Construction Technology Update No. 22, *Published by Institute for Research in Construction.*
- Anonymous, 2012. Natural Rubber. http://en.wikipedia.org/wiki/Natural_rubber
- Abaqus analysis user's manual volume III: Materials, Version 6.4
- Bachmann, B. H., 1992, Case studies o f structures with man-induced vibrations, 118(3), pp. 631–647.
- Bachmann, H, and Ammann, W, 1987, Vibrations in Structures Induced by Man and Machines. Zurich, *International Association for Bridge and Structural Engineering.*
- Bachmann, H., 1995, Vibration Problems in Structures; *Practical Guidelines.* Berlin, *Birkhauser Verlag.*
- Balkanlou, V. S., Karimi, M. R. B., Azar, B. B, and Behravesh, A, 2013, Evaluating Effects of Viscous Dampers on optimizing Seismic Behavior of Structures, *International Journal of Current Engineering and Technology*, 3(4), pp. 1150–1157.
- Bandivadekar, T. P, and Jangid, R. S, 2012, Mass distribution of multiple tuned mass dampers for vibration control of structures. *International Journal of Civil and Structural Engineering*, 3(1), pp. 70–84. doi: 10.6088.
- Barmo, A., Mualla, I. H, and Hasan, H. T, 2015, The Behavior of Multi-Story Buildings Seismically Isolated System Hybrid Isolation (Friction , Rubber and with the Addition of Rotational Friction Dampers), (February), pp. 1–13.
- Ben, B. S., Ben, B. A, and Vikram, K. A, 2017, Damping measurement in composite materials using combined finite element and frequency response method. *International Journal of Engineering Science Invention (IJESI)* ISSN (Online), pp. 2319–6734.
- Brian P. Baillargeon., Senthil, S, and Jeffery, S. K., 2014, Utilizing ABAQUS to Analyze the Active Vibration Suppression of Structural Systems, *Abaqus user's conference*
- Blandon, C. A., 2004, Equivalent Viscous Damping Equations For Direct Displacement Based Design. *Università degli Studi di Pavia.*
- Brownjohn, J. M. W., 2001, Energy dissipation from vibrating floor slabs due to



human-structure interaction, *Shock and Vibration*, 8(6), pp. 315–323.

Chang, M., Lin, C., Ueng, J., Hsieh, K., and Wang, J, 2009, Experimental study on adjustable tuned mass damper to reduce floor vibration due to machinery, (December 2008).

Cesar, M. B, and de Barros, R. C, 2013, Passive Control Of Civil Engineering Structures, *Integrity, Reliability and Failure of Mechanical Systems, Paper Ref: 4756.*

Constantinou, M. C., 2010, Fluid Dampers For Applications Of Seismic Energy Dissipation And Seismic Isolation, *Civil Engineering State University of New York at Buffalo 132 Ketter Hall Buffalo, NY 14260.*

Constantinou, M. C, and Symans, M D, 1993, Experimental study of seismic response of buildings with supplemental fluid dampers. *The Structural Design of Tall Buildings Vol. 2, 93–132.*

Clarence W. de Silva., 2007, Vibration Damping, Control, and Design, *CRC Press, Taylor & Francis Group London.*

Chung, C. Fu., Gengwen Zhao., and Yunchao, F. Z, 2015, State Highway Administration Serviceability-Related Issues For Bridge Live Load Deflection And Construction Closure Pours University Of Maryland Final Report.

Esmailzadeh, E, and Jalili, N, 1998, Optimum Design of Vibration Absorber for Structurally Damped Timoshenko Beams, *Journal of Vibration and Acoustics, vol.120, p.833.*

EL-Desouky, A. R., Attia, A. N, and Gado, M. M, Damping Behavior of Composite Materials. *Production Eng. and Mechanical Design Department Faculty of Eng, Menofia Univ EGYPT, sem.org-IMAC-XIII-13th-13-8-7-Damping-Behavior-Composite Materials.*

Farghaly, A. A, and Ahmed, M. S, 2012, Optimum Design of TMD System for Tall Buildings. *Research Article, International Scholarly Research Network*

Fu, Y. and Kasai, K, 1998, Comparative Study of Frames Using Viscoelastic and Viscous Dampers, 124 May, pp. 513–522.

Gaunt, J. T., and Sutton, C. D, 1981, Highway Bridge Vibration Studies, pp. 102–116.

Ghinea, C. L. and Popescu, M. A, 2012, Response of flexible structures with tuned mass dampers acted by wind, *Bulletin of the Transilvania University of Brașov, 5(54)*, pp. 147–154.

Hanagan, L. M., 2003, Floor Vibration Serviceability: Tips and Tools for Negotiating a Successful Design. *Modern Steel Construction.*



Humes, B., 2006, Basic Vibration Analysis, *Retrieved on June 12-2013* (865).

Huo, L., Qu, C, and Li, H, 2014, TLCD parametric optimization for the vibration control of building structures based on linear matrix inequality, *Journal of Applied Mathematics*, 2014.

Himanshu, M., and Dipal, P, Experimental determination of structural damping of different. *12th International Conference on Vibration Problem, ICOVP*, (2015) pp. 110-115.

International Standard, Bases for Design of Structures-Serviceability of Buildings and Walkways Against Vibrations. *ISO*, 2007.

Igarashi, A., Flores, F.S., Iemura, H., Fujii, K, and Toyooka, A, 2009, Real-Time Hybrid Testing of Laminated Rubber Dampers for Seismic Retrofit of Bridges.

James L. Lamb., 2011, Using a Simple Cantilever Tuned-Mass Damper to Control Vibration in a Preexisting Composite Floor System, pp. 1–9.

Johnson, C., 2013 Design and Application of Vibration Suppression.

Julie, S., and Sajeeb, R, 2012, Performance of Base Isolators and Tuned Mass Dampers in Vibration Control of a Multistoried Building. *Journal of Mechanical and Civil Engineering*, 2(6), pp. 1–7.

Kareem, A., and Gurley, K, 1996, Damping in structures: its evaluation and treatment of uncertainty, *Journal of Wind Engineering and Industrial Aerodynamics*, 59(2–3), pp. 131–157.

Kim, J., and Bang, S, 2002, Optimum distribution of added viscoelastic dampers for mitigation of torsional responses of plan-wise asymmetric structures. *Journal of Elsevier, Engineering Structures* 24 (2002) 1257–1269.

Kareem, A., Kijewski, T, and Tamura, Y, 1999., Mitigation of Motions of Tall Buildings with Specific Examples of Recent Applications.

Kelly, T. E., 2001, In-Structure Damping and Energy Dissipation. *Design Guidelines*, Holmes Consulting Group.

Kumar, P, and Kumar, A, 2014, Human Induced Vibration In Structures. *National Conference on Recent Advances in Mechanical Engineering RAME*.

Komachi, Y., Abeshpour, M. R., Golafshani, A. A, and Mualla, I, 2011, Retrofit of Ressalat jacket platform (Persian Gulf) using friction damper device. *Journal of Zhejiang University-SCIENCE A (Applied Physics & Engineering)* ISSN 1673-565X (Print).

Lavan, O, and Levy, R, 2004, Optimal Design of Supplemental Viscous Dampers for Linear Framed Structures. *13rd World Conference on Earthquake Engineering, Vancouver, B.C., Canada, August 1-6, paper no.42.*



Lai, M. L., Lu. P., Lunsford. D. A., Kasai, K, and Chang. K. C, 1996, Viscoelastic damper: a damper with linear or nonlinear material. *Word Conference on Earthquake Engineering*.

Li, G, and Li, H, 2008, Earthquake-Resistant Design of RC Frame With Dual Functions Metallic Dampers. *The 14thWorld Conference on earthquake Engineering, Beijing, China*.

Lamb, J. L., 2011, Using a Simple Cantilever Tuned-Mass Damper to Control Vibration in a Preexisting Composite Floor System. *Structural Engenuity, Inc. 1 – 9*.

Liang, F., Tang, Y., Gou, J., Gu, H. C, and Song, G, 2010, Vibration Damping Enhancement of Polymer Composites Via Carbon Nanopaper Sheets With Different Fiber Reinforcements. *Earth and Space: Engineering, Science, Construction, and Operations in Challenging Environments* © ASCE.

Liang Dong, and Roderic Lakes, 2013, Advanced damper with high stiffness and high hysteresis damping based on negative structural stiffness. *J. Solid and Structure* 50, 2416-2423

Constantinou, M. C., 1993, Experimental Study of Seismic Response of Buildings with Supplemental Fluid Dampers. *The Structural Design of Tall Buildings*, 2(January), pp. 93–132.

Markou, A. A, and Manolis, G. D, 2016, Mechanical models for shear behavior in high damping rubber bearings, *Soil Dynamics and Earthquake Engineering*. Elsevier, 90, pp. 221–226. j.soildyn.2016.08.035.

Mishra, R., 2011, Application Of Tuned Mass Damper For Vibration Control Of Frame Structures Under Seismic Excitations. *Master Thesis of National Institute of Technology Rourkela*.

Matta, E., and de Stefano, A, 2009, Robust design of mass-uncertain rolling-pendulum TMDs for the seismic protection of buildings. *Mechanical Systems and Signal Processing*, 23(1), pp. 127–147. doi: 10.1016/j.ymssp.08.012.

Mevada, H, and Patel, D, 2016, Experimental Determination of Structural Damping of Different Materials. *Procedia Engineering*. 144, pp. 110–115. j.proeng.2016.05.013.

Miller, A, and Duschlbauer, D, 2013, Footfall Vibration and the Dynamic Response of Different Structures – A case study comparing predicted and measured results, pp. 1–6.

Mortezaei, V., Haghshenas, A., Khonsari, M. M, and Bollen, B, 2016, Fatigue analysis of metals using damping parameter. *International Journal of Fatigue*. Elsevier Ltd, 91, pp. 124–135. j.ijfatigue.2016.05.011.



Mualla, I. H, and Belev, B, 2002, Performance of steel frames with a new friction damper device under earthquake excitation. *Engineering Structures*, 24(3), pp. 365–371.

Murray, T. M., 2001, Tips for avoiding office building floor vibrations. *Modern Steel Construction*, 41(3), pp. 24–33.

Murray, T. M., Allen, D. E, and Ungar, E. E, 2003, Floor vibrations due to human activity. *Steel Design Guide Series 11*, D811(10M797).

Murray, Th. M., 2001, Tips for Avoiding Office Building Floor Vibration, *Modern Steel Construction*.

Nawrotzki, P., 2008, Tuned-mass systems for the dynamic upgrade. *Eleventh east asia-pacific conference on structural engineering & construction (EASEC-11)*, pp. 1–9.

Naeim Farzad., 1991, Design Practice to Prevent Floor Vibrations. *Steel Tips, Structural Steel Educational Council, Technical Information and Product Service*.

Nguyen, T. H., Gad, E. F, and Wilson, J. L., 2012, A New Damper System for Walking Induced Floor Vibration Control. *Proc. of the 1 d11 Inti. Cont. on Advances in Steel Concrete Composite and Hybrid Structures*.

Nguyen, T. H., Gad, E., Wilson, J., Lythgo, N, and Haritos, N, 2011, Evaluation of Footfall Induced Vibration in Building. *Australian Earthquake Engineering Society Conference, Barossa Valley, South Australia*.

Nikam, S. G., Waghlikar, S. K, and Patil, G. R, 2014, Seismic Energy Dissipation of a Building Using Friction Damper. *International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Volume-3, Issue-10*.

Nagarajaiah, S, and Sonmez, E, 2007, Structures with Semiactive Variable Stiffness Single/Multiple Tuned Mass Dampers, *Journal Of Structural Engineering © ASCE / January 2007 / 67*

Paimushin, V. N. et al., 2015, Theoretical-Experimental Method for Determining the Material Damping Properties Based on the Damped Flexural Vibrations of Test Samples. *Procedia Engineering*. Elsevier B.V., 106, pp. 231–239. doi: 10.1016/j.proeng.2015.06.029.

Paredes, M., Sartor, M, and Daidie, A, 2005, Advanced Assistance Tool for Optimal Compression Spring Design. *Engineering with Computers 21: 140–150, Springer-Verlag London*.

Paredes, M, and Rodriguez, E, 2009, Optimal Design of Conical Springs. *Engineering with Computers 25:147–154, Springer-Verlag London*.

Patil, G. R., 2015, Seismic Analysis Of Buildings With Viscoelastic Damper, 2(12),



pp. 4456–4461.

Picauly, F., Priyosulistyo, Hrc., Suhendro, B, and Triwiyono, A, 2014, Tuned Mass Damper On Reinforced Concrete Slab With Additional "X-Shaped Metal" Absorber. *2nd International Conference on Sustainable Civil Engineering Structures and Construction Materials (SCESCM 2014)*, Procedia Engineering 95, 204 – 212.

Picauly, F., Priyosulistyo, Hrc., Suhendro, B, and Triwiyono, A, 2014, Influences of Vibration of Human Activity Upon a Simple Supported Slab With Tuned Mass Damper (TMD) and Fibre Reinforced Rubber (FRR) Absorber. *International Conference on Sustainable Civil Engineering Structures and Construction Materials (SCESCM 2016)*, Procedia Engineering 171 (2017) 1186 - 1193

Priyosulistyo, Hrc., Picauly, F., Suhendro, B, and Triwiyono, A, 2014, The Damping Mechanism of Steel-Rubber Composite Beam under Flexural Dynamic Excitation, *International Conference on Science and Technology (ICST)*.

Picauly, F., Priyosulistyo, Hrc., dan Triwiyono, A, 2009, Identifikasi Frekuensi Alami Struktur kabel (Cable Stayed) dan Kaitannya pada Gaya-gaya Dalam (Model Laboratorium), Tesis Program Pascasarjana Universitas Gadjah Mada Yogyakarta.

Racic, V., Brownjohn, J. M. W, and Pavic, A, 2013, Dynamic Loading Factors of Individual Jogging Forces. in *4th ECCOMAS Thematic Conference on Computational Methods in Structural Dynamics and Earthquake Engineering*, pp. 12–14.

Ramu, M., Prabhu Raja, V, and Thyla, P. R, 2010, Development of Structural Similitude and Scaling Laws for Elastic Models. *International Journal of Manufacturing Engineering*, IX(3), pp. 67–69.

Ray W. Clough, J. P., 1995, Dynamics of structures. Third Edit. *Computers & Structures, Inc. 1995 University Ave. Berkeley, CA 94704 USA*.

Roeder, C. W., Virginia, W, and Bergman, A, 2002, Improved Live Load Deflection Criteria for Steel Bridges (NCHRP-W46), *NCHRP Web Document*, 46 (November).

Saidi, I., Mohammed, A D., Gad, E. F., Wilson, J. L, and Haritos, N, 2007, Optimum Design for Passive Tuned Mass Dampers Using Viscoelastic Materials. *Australian Earthquake Engineering Society 2007 Conference*, pp. 1–8.

Saidi, I., Haritos, N., Gad, E. F, and Wilson, J. L, 2006, Floor vibrations due to human excitation - damping perspective. *Journal Earthquake Engineering in Australia, Canberra* 24-26.

Setareh, M., Ritchey, J. K., Murray, T. M., Koo, J. H, and Ahmadian, M, 2007,



Semiactive Tuned Mass Damper for Floor Vibration Control. *Journal of Structural Engineering Asce*, 133(2), pp. 242–250. (ASCE) 0733-9445(2007)133:2(242).

Silva, C. W. D., 2007, Vibration Damping, Control, and Design, CRC Press, Taylor and Francis Group.

Soliman, I. M., Tait, M. J, and El Damatty, A. A, 2015, Development and Validation of Finite Element Structure Tuned Liquid Damper System Models. *Journal of Dynamic Systems, Measurement, and Control*, 137(11), p. 111001.

South, J. T., 2002, Mechanical properties and durability of natural rubber compounds and composites.

Stephens, H. L., 2001 Handbook of Elastomer Second Edition. Revised and Expanded.

Suhendro, B., 2000, Teori Model Struktur dan Teknik Eksperimental. ed. 1, Penerbit Beta Offset Yogyakarta

Suryawanshi, Y. R., Shitole, A, and Rahane, D. T, 2012, Study of Tuned Mass Dampers System as Vibration Controller in Multistoried buildings, pp. 280–284.

Taylor, D. P, and Taylor, D. P, 2010, Fluid Dampers for Applications of Seismic Energy Dissipation and Seismic Isolation Fluid Dampers for Applications of Seismic Energy Dissipation and Seismic Isolation.

Teruna, D. R., Majid, T. A, and Budiono, B, 2015, Experimental study of hysteretic steel damper for energy dissipation capacity, *Advances in Civil Engineering*,

Tubino, F, and Piccardo, G, 2013, Tuned Mass Damper optimization for human-induced footbridge vibrations. *Department of Civil, Chemical and Environmental Engineering*, pp. 809–824.

Uetani, K., Tsuji, M, and Takewaki, I, 2003, Application of an optimum design method to practical building frames with viscous dampers and hysteretic dampers. *Engineering Structures*, 25(5), pp. 579–592.

Valsange, P. S., 2012, Design Of Helical Coil Compression Spring A Review. *International Journal of Engineering Research and Applications (IJERA)*, Vol. 2, pp.513-522

Wang, Y, and Yang, N, 2013, Time Domain Analysis for Structure Dynamic Response Induced by Human. *Applied Mechanics and Materials* Vols, 351-352, 2013, pp 126-130

Wu, M. H, and Hsu, W. Y, 1998, Modelling the static and dynamic behavior of a conical spring by considering the coil close and damping effects. *Journal of*



Sound and Vibration, 214(1), pp. 17–28.

Xuewei, C., Xiaolei, H., Weiqiu, H, and Jing, J, 2008, The Research of Time-History Response Analysis of Floor Vibration Based on Simulation of Group Walking, pp. 1–6.

Yogesh, P., Suryawanshi, R., Amar, P, and Rahane, P. D. T, 2012, Study of Tuned Mass Dampers System as Vibration Controller in Multistoried buildings, (November 2012), pp. 280–284.

Zordan, T., Liu, T., Briseghella, B, and Zhang, Q, 2014, Improved equivalent viscous damping model for base-isolated structures with lead rubber bearings, *Engineering Structures*. Elsevier Ltd, 75, pp. 340–352. j.engstruct.2014.05.044.