

REFERENCES

- Aguilarespinosa, A. A., Fellows, N. A. & Durodola, J. F. 2013. Experimental Measurement of Crack Opening and Closure Loads for 6082-T6 Aluminium Subjected to Periodic Single and Block Overloads and Underloads. *International Journal of Fatigue* 47: 71-82.
- Akramin, M. R. M. 2008. Analisis Kegagalan Struktur Retak Menggunakan Kaedah Hibrid Unsur Terhingga Dan Monte Carlo. Master Thesis, Department of Mechanical & Materials Engineering, Universiti Kebangsaan Malaysia [in Malaysian].
- Anderson, T. L. 2005. *Fracture Mechanics: Fundamentals and Applications*. 3rd. Boca Raton: Taylor & Francis Group, CRC.
- Angioni, S. L., Visrolia, A. & Meo, M. 2012. Combining X-Fem and a Multilevel Mesh Superposition Method for the Analysis of Thick Composite Structures. *Composites Part B: Engineering* 43: 559-568.
- ASTM E740-03. 2008. *Standard Practice for Fracture Testing with Surface-Crack Tension Specimens*, Section 3. West Conshohocken, USA.
- Barker, V. M., Steven Johnson, W., Adair, B. S., Antolovich, S. D. & Staroselsky, A. 2013. Load and Temperature Interaction Modeling of Fatigue Crack Growth in a Ni-Base Superalloy. *International Journal of Fatigue* 52: 95-105.
- Beden, S. M. 2010. Assessment of Fatigue Crack Growth under Variable Amplitude Loading. PhD Thesis, Mechanical and Materials Department, Faculty of Engineering and Built Environment, Universiti Kebangsaan Malaysia.
- Beden, S. M., Abdullah, S. & Ariffin, A. K. 2009. Review of Fatigue Crack Propagation Models for Metallic Components. In. (edit.). *European Journal of Scientific Research*, 28. pp. 364-397. EuroJournals Publishing, Inc.
- Beer, M. & Liebscher, M. 2008. Designing Robust Structures – a Nonlinear Simulation Based Approach. *Computers & Structures* 86: 1102-1122.
- Berer, M. & Pinter, G. 2013. Determination of Crack Growth Kinetics in Non-Reinforced Semi-Crystalline Thermoplastics Using the Linear Elastic Fracture Mechanics (Lefm) Approach. *Polymer Testing* 32: 870-879.
- Brighenti, R. 2001. External Longitudinal Flaws in Pipes under Complex Loading. *Journal of Pressure Vessel Technology, Transactions of the ASME* 123: 139-145.
- Brighenti, R. & Carpinteri, A. 2013. Surface Cracks in Fatigued Structural Components: A Review. *Fatigue and Fracture of Engineering Materials and Structures* 36: 1209-1222.

- Broek, D. 1986. *Elementary Engineering Fracture Mechanics*. AD Dordrecht, The Netherlands: Kluwer Academic Publishers.
- Cai, T., Wang, S. & Xu, Q. 2015. Monte Carlo Optimization for Site Selection of New Chemical Plants. *Journal of Environmental Management* 163: 28-38.
- Cai, Y., Han, L., Tian, L. & Zhang, L. 2016. Meshless Method Based on Shepard Function and Partition of Unity for Two-Dimensional Crack Problems. *Engineering Analysis with Boundary Elements* 65: 126-135.
- Carpinteri, A. 1993. Shape Change of Surface Cracks in Round Bars under Cyclic Axial Loading. *International Journal of Fatigue* 15: 21-26.
- Carpinteri, A., Brighenti, R. & Vantadori, S. 2009. Notched Double-Curvature Shells with Cracks under Pulsating Internal Pressure. *International Journal of Pressure Vessels and Piping* 86: 443-453.
- Carpinteri, A., Ronchei, C. & Vantadori, S. 2013. Stress Intensity Factors and Fatigue Growth of Surface Cracks in Notched Shells and Round Bars: Two Decades of Research Work. *Fatigue and Fracture of Engineering Materials and Structures* 36: 1164-1177.
- Carpinteri, A. & Vantadori, S. 2009. Sickle-Shaped Cracks in Metallic Round Bars under Cyclic Eccentric Axial Loading. *International Journal of Fatigue* 31: 759-765.
- Carpinteri, A. & Vantadori, S. 2009. Sickle-Shaped Surface Crack in a Notched Round Bar under Cyclic Tension and Bending. *Fatigue and Fracture of Engineering Materials and Structures* 32: 223-232.
- Cendón, D. A., Torabi, A. R. & Elices, M. 2015. Fracture Assessment of Graphite V-Notched and U-Notched Specimens by Using the Cohesive Crack Model. *Fatigue and Fracture of Engineering Materials and Structures* 38: 563-573.
- Cetin, A., Härkegård, G. & Naess, A. 2013. The Fatigue Limit: An Analytical Solution to a Monte Carlo Problem. *International Journal of Fatigue* 55: 194-201.
- Choi, S., Grandhi, R. V. & Canfield, R. A. 2007. *Reliability-Based Structural Design*. 1st. London: Springer.
- Chowdhury, M. S., Song, C. & Gao, W. 2014. Probabilistic Fracture Mechanics with Uncertainty in Crack Size and Orientation Using the Scaled Boundary Finite Element Method. *Computers & Structures* 137: 93-103.
- Daud, R. 2012. Analysis of Elastic Interacting Cracks in Finite Body. PhD Thesis, Department of Mechanical & Materials Engineering, Universiti Kebangsaan Malaysia.

- De Matos, P. F. P. & Nowell, D. 2009. Experimental and Numerical Investigation of Thickness Effects in Plasticity-Induced Fatigue Crack Closure. *International Journal of Fatigue* 31: 1795-1804.
- Dong, Y., He, X., Xue, D. & Liu, W. 2015. Sif Solution for a Single Hole-Edge Crack in a Finite Plate with Clamped Ends. *Yingyong Lixue Xuebao/Chinese Journal of Applied Mechanics* 32: 187-191.
- Doshi, K. & Vhanmane, S. 2013. Probabilistic Fracture Mechanics Based Fatigue Evaluation of Ship Structural Details. *Ocean Engineering* 61: 26-38.
- Dowling, N. E. 1999. *Mechanical Behavior of Materials*. 2nd Edition. Prentice Hall.
- Dugdale, D. S. 1960. Yielding of Steel Sheets Containing Slits. *J. Mech. Phys. Solids* 8: 100.
- Duquesnay, D. L. & Underhill, P. R. 2010. Fatigue Life Scatter in 7xxx Series Aluminum Alloys. *International Journal of Fatigue* 32: 398-402.
- El-Zeghayar, M., Topper, T. H., Conle, F. A. & Bonnen, J. J. F. 2011. Modeling Crack Closure and Damage in Variable Amplitude Fatigue Using Smooth Specimen Fatigue Test Data. *International Journal of Fatigue* 33: 223-231.
- Elishakoff, I. & Ren, Y. 1999. The Bird's Eye View on Finite Element Method for Structures with Large Stochastic Variations. *Computer Methods in Applied Mechanics and Engineering* 168: 51-61.
- Emery, J. M., Hochhalter, J. D., Wawrzynek, P. A., Heber, G. & Ingraffea, A. R. 2009. Ddsim: A Hierarchical, Probabilistic, Multiscale Damage and Durability Simulation System – Part I: Methodology and Level I. *Engineering Fracture Mechanics* 76: 1500-1530.
- Estecahandy, M., Bordes, L., Collas, S. & Paroissin, C. 2015. Some Acceleration Methods for Monte Carlo Simulation of Rare Events. *Reliability Engineering & System Safety* 144: 296-310.
- Feng, Z., Mao, K., Zou, T. & Yang, Y. 2014. Discussion on Airworthiness Requirement of Widespread Fatigue Damage – Safe-Life Methodology or Damage-Tolerance Methodology. *Procedia Engineering* 80: 392-398.
- Fish, J. 1992. The S-Version of the Finite Element Method. *Computers & Structures* 43: 539-547.
- Forth, S. C., Everett, R. A. & Newman, J. A. 2002. A Novel Approach to Rotorcraft Damage Tolerance. *6th joint FAA/DoD/NASA aging aircraft conference*, pp. 1-18.

- Freedman, D. A. 2009. *Statistical Models: Theory and Practice*, Cambridge: Cambridge University Press.
- Gdoutos, E. E. 2005. *Fracture Mechanics: An Introduction*, Vol. 123. Dordrecht: Springer Netherlands.
- Grell, W. A. & Laz, P. J. 2010. Probabilistic Fatigue Life Prediction Using Afgrow and Accounting for Material Variability. *International Journal of Fatigue* 32: 1042-1049.
- Haldar, A. & Mahadevan, S. 2000. *Probability, Reliability, and Statistical Method in Engineering Design*. John Wiley & Sons, Inc.
- Hariharan, M., Yaacob, S. & Awang, S. A. 2011. Pathological Infant Cry Analysis Using Wavelet Packet Transform and Probabilistic Neural Network. *Expert Systems with Applications* 38: 15377-15382.
- Helton, J. C. & Davis, F. J. 2003. Latin Hypercube Sampling and the Propagation of Uncertainty in Analyses of Complex Systems. *Reliability Engineering & System Safety* 81: 23-69.
- Hou, C.-Y. 2011. Simulation of Surface Crack Shape Evolution Using the Finite Element Technique and Considering the Crack Closure Effects. *International Journal of Fatigue* 33: 719-726.
- Huang, W., Wang, T.-J., Garbatov, Y. & Guedes Soares, C. 2012. Fatigue Reliability Assessment of Riveted Lap Joint of Aircraft Structures. *International Journal of Fatigue* 43: 54-61.
- Iranpour, M., Taheri, F. & Vandiver, J. K. 2008. Structural Life Assessment of Oil and Gas Risers under Vortex-Induced Vibration. *Marine Structures* 21: 353-373.
- Irwin, G. R. 1957. Analysis of Stresses and Strains near the End of a Crack Traversing a Plate. *J. Appl. Mech.* 24: 361.
- Iyyer, N., Sarkar, S., Merrill, R. & Phan, N. 2007. Aircraft Life Management Using Crack Initiation and Crack Growth Models – P-3c Aircraft Experience. *International Journal of Fatigue* 29: 1584-1607.
- Janssen, H. 2013. Monte-Carlo Based Uncertainty Analysis: Sampling Efficiency and Sampling Convergence. *Reliability Engineering & System Safety* 109: 123-132.
- Johan Singh, P., Mukhopadhyay, C. K., Jayakumar, T., Mannan, S. L. & Raj, B. 2007. Understanding Fatigue Crack Propagation in Aisi 316 (N) Weld Using Elber's Crack Closure Concept: Experimental Results from Gcm0d and Acoustic Emission Techniques. *International Journal of Fatigue* 29: 2170-2179.

- Kaczor, G., Młynarski, S. & Szkoda, M. 2016. Verification of Safety Integrity Level with the Application of Monte Carlo Simulation and Reliability Block Diagrams. *Journal of Loss Prevention in the Process Industries* 41: 31-39.
- Kapoor, R., Rao, V. S. H., Mishra, R. S., Baumann, J. A. & Grant, G. 2011. Probabilistic Fatigue Life Prediction Model for Alloys with Defects: Applied to A206. *Acta Materialia* 59: 3447-3462.
- Khan, S. U., Alderliesten, R. C., Rans, C. D. & Benedictus, R. 2010. Application of a Modified Wheeler Model to Predict Fatigue Crack Growth in Fibre Metal Laminates under Variable Amplitude Loading. *Engineering Fracture Mechanics* 77: 1400-1416.
- Kikuchi, M., Maitireymu, M. & Sano, H. 2010. Study on Fatigue Crack Growth Criterion 1st Report, Paris' Law of a Surface Crack under Pure Mode I Loading. *Nihon Kikai Gakkai Ronbunshu, A Hen/Transactions of the Japan Society of Mechanical Engineers, Part A* 76: 516-522.
- Kikuchi, M., Wada, Y., Maitireyimu, M. & Sano, H. 2010. Closure Effect on Interaction of Two Surface Cracks under Cyclic Bending. *American Society of Mechanical Engineers, Pressure Vessels and Piping Division*, pp. 415-421.
- Kikuchi, M., Wada, Y., Shimizu, Y. & Li, Y. 2012. Crack Growth Analysis in a Weld-Heat-Affected Zone Using S-Version Fem. *International Journal of Pressure Vessels and Piping* 90-91: 2-8.
- Kikuchi, M., Wada, Y., Shimizu, Y. & Yulong, L. 2010. Crack Growth Analysis in Weld-Heat Affected Zone Using S-Version Fem. *American Society of Mechanical Engineers, Pressure Vessels and Piping Division*, pp. 401-406.
- Kikuchi, M., Wada, Y., Shintaku, Y., Suga, K. & Li, Y. 2014. Fatigue Crack Growth Simulation in Heterogeneous Material Using S-Version Fem. *International Journal of Fatigue* 58: 47-55.
- Kikuchi, M., Wada, Y., Shmizu, Y. & Li, Y. 2011. Stress Corrosion Cracking Analysis under Thermal Residual Stress Field Using S-Fem. *Key Engineering Materials* 462-463: 431-436.
- Kikuchi, M., Wada, Y. & Suga, K. 2011. Surface Crack Growth Simulation under Mixed Mode Cyclic Loading Condition. *Procedia Engineering* 10: 427-432.
- Kim, C.-Y., Choi, J.-M. & Song, J.-H. 2013. Fatigue Crack Growth and Closure Behavior under Random Loadings in 7475-T7351 Aluminum Alloy. *International Journal of Fatigue* 47: 196-204.
- Kim, J.-S., An, D.-H., Lee, S.-Y. & Lee, B.-Y. 2009. A Failure Analysis of Fillet Joint Cracking in an Oil Storage Tank. *Journal of Loss Prevention in the Process Industries* 22: 845-849.

- Kim, J., Zi, G., Van, S. N., Jeong, M., Kong, J. & Kim, M. 2011. Fatigue Life Prediction of Multiple Site Damage Based on Probabilistic Equivalent Initial Flaw Model. *Structural Engineering and Mechanics* 38: 443-457.
- Kim, W., Lee, H. C., Pyeon, C. H., Shin, H. C. & Lee, D. 2016. Monte Carlo Analysis of the Accelerator-Driven System at Kyoto University Research Reactor Institute. *Nuclear Engineering and Technology* 48: 304-317.
- Kimoto, K. & Ichikawa, Y. 2015. A Finite Difference Method for Elastic Wave Scattering by a Planar Crack with Contacting Faces. *Wave Motion* 52: 120-137.
- Larrosa, N. O., Navarro, A. & Chaves, V. 2015. Calculating Fatigue Limits of Notched Components of Arbitrary Size and Shape with Cracks Growing in Mode I. *International Journal of Fatigue* 74: 142-155.
- Leander, J., Aygül, M. & Norlin, B. 2013. Refined Fatigue Assessment of Joints with Welded in-Plane Attachments by Lefm. *International Journal of Fatigue* 56: 25-32.
- Leira, B. J., Næss, A. & Brandrud Næss, O. E. 2016. Reliability Analysis of Corroding Pipelines by Enhanced Monte Carlo Simulation. *International Journal of Pressure Vessels and Piping* 144: 11-17.
- Liu, R., Zhang, T., Wu, X. J. & Wang, C. H. 2006. Determination of Stress Intensity Factors for a Cracked Shell under Bending with Improved Shell Theories. *Journal of Aerospace Engineering* 19: 21-28.
- Liu, Y. & Mahadevan, S. 2009. Probabilistic Fatigue Life Prediction Using an Equivalent Initial Flaw Size Distribution. *International Journal of Fatigue* 31: 476-487.
- Mehrzadi, M. & Taheri, F. 2013. A Material Sensitive Modified Wheeler Model for Predicting the Retardation in Fatigue Response of Am60b Due to an Overload. *International Journal of Fatigue* 55: 220-229.
- Ming-Zhou, G., Guo-Ping, C. & Ying, N. 2016. Finite-Time Fault-Tolerant Control for Flutter of Wing. *Control Engineering Practice* 51: 26-47.
- Möller, B., Graf, W. & Beer, M. 2003. Safety Assessment of Structures in View of Fuzzy Randomness. *Computers & Structures* 81: 1567-1582.
- Mora-López, L. & Mora, J. 2015. An Adaptive Algorithm for Clustering Cumulative Probability Distribution Functions Using the Kolmogorov–Smirnov Two-Sample Test. *Expert Systems with Applications* 42: 4016-4021.
- Murakami, Y., Aoki, S., Hasebe, N., Itoh, Y., Miyata, H., Miyazaki, N. & Al., E. 1987. *Stress Intensity Factors Handbook*. Pergamon Press.

- Narayanan, G., Rezaei, K. & Nackenhorst, U. 2016. Fatigue Life Estimation of Aero Engine Mount Structure Using Monte Carlo Simulation. *International Journal of Fatigue* 83, Part 1: 53-58.
- Nejati, M., Paluszny, A. & Zimmerman, R. W. 2015. On the Use of Quarter-Point Tetrahedral Finite Elements in Linear Elastic Fracture Mechanics. *Engineering Fracture Mechanics* 144: 194-221.
- Newman, J. A., Baughman, J. M. & Wallace, T. A. 2010. Investigation of Cracks Found in Helicopter Longerons. *Engineering Failure Analysis* 17: 416-430.
- Newman Jr, J. C. & Raju, I. S. 1981. An Empirical Stress Intensity Factor Equation for the Surface Crack. *Engineering Fracture Mechanics* 15: 185-192.
- Newman Jr, J. C. & Ramakrishnan, R. 2016. Fatigue and Crack-Growth Analyses of Riveted Lap-Joints in a Retired Aircraft. *International Journal of Fatigue* 82, Part 2: 342-349.
- Ohdama, C. 2012. Effect of Kiii on Fatigue Crack Growth Behavior. Master Thesis, Department of Mechanical Engineering, Tokyo University of Science, Japan [in Japanese].
- Okada, H., Higashi, M., Kikuchi, M., Fukui, Y. & Kumazawa, N. 2005. Three Dimensional Virtual Crack Closure-Integral Method (Vccm) with Skewed and Non-Symmetric Mesh Arrangement at the Crack Front. *Engineering Fracture Mechanics* 72: 1717-1737.
- Olsson, A., Sandberg, G. & Dahlblom, O. 2003. On Latin Hypercube Sampling for Structural Reliability Analysis. *Structural Safety* 25: 47-68.
- Pang, J. H. L., Tsang, K. S. & Hoh, H. J. 2016. 3d Stress Intensity Factors for Weld Toe Semi-Elliptical Surface Cracks Using Xfem. *Marine Structures* 48: 1-14.
- Patelli, E., Murat Panayirci, H., Broggi, M., Goller, B., Beaurepaire, P., Pradlwarter, H. J. & Schuëller, G. I. 2012. General Purpose Software for Efficient Uncertainty Management of Large Finite Element Models. *Finite Elements in Analysis and Design* 51: 31-48.
- Paul, S. K. 2016. Numerical Models of Plastic Zones and Associated Deformations for a Stationary Crack in a C(T) Specimen Loaded at Different R-Ratios. *Theoretical and Applied Fracture Mechanics* (In Press).
- Paul, S. K. & Tarafder, S. 2013. Cyclic Plastic Deformation Response at Fatigue Crack Tips. *International Journal of Pressure Vessels and Piping* 101: 81-90.
- Pavlou, D. G. 2015. Chapter 1 - an Overview of the Finite Element Method. In. (edit.). *Essentials of the Finite Element Method*, pp. 1-18. Academic Press.

- Peng, C., Wu, W. & Zhang, B. 2015. Three-Dimensional Simulations of Tensile Cracks in Geomaterials by Coupling Meshless and Finite Element Method. *International Journal for Numerical and Analytical Methods in Geomechanics* 39: 135-154.
- Pook, L. P. 1982. Fracture and Fatigue: Thin Sheet and Micromechanism Problems. Edited By: J.C. Radon. *International Journal of Fatigue* 4: 48.
- Pook, L. P. 2000. *Linear Elastic Fracture Mechanics for Engineers: Theory and Application*. Southampton: WIT Press.
- Quaranta, G. 2011. Finite Element Analysis with Uncertain Probabilities. *Computer Methods in Applied Mechanics and Engineering* 200: 114-129.
- Rajabi, M. M., Ataie-Ashtiani, B. & Janssen, H. 2015. Efficiency Enhancement of Optimized Latin Hypercube Sampling Strategies: Application to Monte Carlo Uncertainty Analysis and Meta-Modeling. *Advances in Water Resources* 76: 127-139.
- Ramirez-Marquez, J. E. & Levitin, G. 2008. Algorithm for Estimating Reliability Confidence Bounds of Multi-State Systems. *Reliability Engineering & System Safety* 93: 1231-1243.
- Reh, S., Beley, J.-D., Mukherjee, S. & Khor, E. H. 2006. Probabilistic Finite Element Analysis Using Ansys. *Structural Safety* 28: 17-43.
- Rhymer, D. W., Johnson, W. S., Singh, R. & Pettit, R. 2008. Stress Intensity Solutions of Thermal Fatigue Induced Cracks in a Thin Plate Hot Spot Using Lefm and Finite Element Analysis. *Engineering Fracture Mechanics* 75: 2826-2841.
- Richard, H. A., Fulland, M. & Sander, M. 2005. Theoretical Crack Path Prediction. *Fatigue & Fracture of Engineering Materials & Structures* 28: 3-12.
- Rodríguez, J. A., Garcia, J. C., Alonso, E., El Hamzaoui, Y., Rodríguez, J. M. & Urquiza, G. 2015. Failure Probability Estimation of Steam Turbine Blades by Enhanced Monte Carlo Method. *Engineering Failure Analysis* 56: 80-88.
- Sain, T. & Chandra Kishen, J. M. 2008. Probabilistic Assessment of Fatigue Crack Growth in Concrete. *International Journal of Fatigue* 30: 2156-2164.
- Sallberry, C. J., Helton, J. C. & Hora, S. C. 2007. Extension of Latin Hypercube Samples with Correlated Variables. *Reliability Engineering and System Safety* 93: 1047-1059.
- Sanches, R. F., De Jesus, A. M. P., Correia, J. a. F. O., Da Silva, A. L. L. & Fernandes, A. A. 2015. A Probabilistic Fatigue Approach for Riveted Joints Using Monte Carlo Simulation. *Journal of Constructional Steel Research* 110: 149-162.

- Sankaran, K. K., Perez, R. & Jata, K. V. 2001. Effects of Pitting Corrosion on the Fatigue Behavior of Aluminum Alloy 7075-T6: Modeling and Experimental Studies. *Materials Science and Engineering: A* 297: 223-229.
- Sano, H. 2010. Fatigue Crack Growth Prediction in Consideration of a Plasticity Induced Closure Effect. Master Thesis, Department of Mechanical Engineering, Tokyo University of Science, Japan.
- Savaidis, G., Savaidis, A., Zerres, P. & Vormwald, M. 2010. Mode I Fatigue Crack Growth at Notches Considering Crack Closure. *International Journal of Fatigue* 32: 1543-1558.
- Schöllman, M., Richard, H. A., Kullmer, G. & Fulland, M. 2002. A New Criterion for the Prediction of Crack Development in Multiaxially Loaded Structures *International Journal of Fracture* 117: 129-141.
- Schuëller, G. I. & Pradlwarter, H. J. 2006. Computational Stochastic Structural Analysis (Cossan) – a Software Tool. *Structural Safety* 28: 68-82.
- Shi, K., Cai, L., Chen, L. & Bao, C. 2014. A Theoretical Model of Semi-Elliptical Surface Crack Growth. *Chinese Journal of Aeronautics* 27: 730-734.
- Shields, M. D., Teferra, K., Hapij, A. & Daddazio, R. P. 2015. Refined Stratified Sampling for Efficient Monte Carlo Based Uncertainty Quantification. *Reliability Engineering & System Safety* 142: 310-325.
- Sih, G. C. 1990. *Mechanics of Fracture Initiation and Propagation*. Dordrecht, Netherlands: Kluwer Academic Publishers.
- Śnieżek, L., Ślęzak, T., Grzelak, K. & Hutsaylyuk, V. 2016. An Experimental Investigation of Propagation the Semi-Elliptical Surface Cracks in an Austenitic Steel. *International Journal of Pressure Vessels and Piping*
- Song, P. S. & Shieh, Y. L. 2004. Crack Growth and Closure Behaviour of Surface Cracks. *International Journal of Fatigue* 26: 429-436.
- Stephens, R. I., Fatemi, A., Stephens, R. R. & Fuchs, H. O. 2001. *Metal Fatigue in Engineering*. 2nd. New York: John Wiley & Sons.
- Taylor, D. 2007. Chapter 1 - Introduction: Materials under Stress. In. Taylor, D. (edit.). *The Theory of Critical Distances*, pp. 1-19. Oxford: Elsevier Science Ltd.
- Thacker, B. H., Riha, D. S., Fitch, S. H. K., Huyse, L. J. & Fleming, J. B. 2006. Probabilistic Engineering Analysis Using the Nessus Software. *Structural Safety* 28: 83-107.

- Thomas, S. B., Mhaiskar, M. J. & Sethuraman, R. 2000. Stress Intensity Factors for Circular Hole and Inclusion Using Finite Element Alternating Method. *Theoretical and Applied Fracture Mechanics* 33: 73-81.
- Tian, L., Dong, L., Bhavanam, S., Phan, N. & Atluri, S. N. 2014. Mixed-Mode Fracture & Non-Planar Fatigue Analyses of Cracked I-Beams, Using a 3d Sgbem–Fem Alternating Method. *Theoretical and Applied Fracture Mechanics* 74: 188-199.
- Toribio, J., Matos, J. C., González, B. & Escudra, J. 2014. Numerical Modelling of Cracking Path in Round Bars Subjected to Cyclic Tension and Bending. *International Journal of Fatigue* 58: 20-27.
- Toribio, J., Matos, J. C., González, B. & Escudra, J. 2015. Evolution of Crack Paths and Compliance in Round Bars under Cyclic Tension and Bending. *Theoretical and Applied Fracture Mechanics*
- Tran, V.-X. & Geniaut, S. 2012. Development and Industrial Applications of X-Fem Axisymmetric Model for Fracture Mechanics. *Engineering Fracture Mechanics* 82: 135-157.
- Tvedt, L. 2006. Proban – Probabilistic Analysis. *Structural Safety* 28: 150-163.
- Underhill, P. R. & Duquesnay, D. L. 2008. The Effect of Dynamic Loading on the Fatigue Scatter Factor for Al 7050. *International Journal of Fatigue* 30: 614-622.
- Underhill, P. R. & Duquesnay, D. L. 2009. Effect of Small Cycles and Load Spectrum Truncation on the Fatigue Life Scatter in 7050 Al Alloy. *International Journal of Fatigue* 31: 538-543.
- Walz, G. & Riesch-Oppermann, H. 2006. Probabilistic Fracture Mechanics Assessment of Flaws in Turbine Disks Including Quality Assurance Procedures. *Structural Safety* 28: 273-288.
- Wang, C. Q., Xiong, J. J., Sheno, R. A., Liu, M. D. & Liu, J. Z. 2016. A Modified Model to Depict Corrosion Fatigue Crack Growth Behavior for Evaluating Residual Lives of Aluminum Alloys. *International Journal of Fatigue* 83, Part 2: 280-287.
- Wang, G. S. 1999. A Probabilistic Damage Accumulation Solution Based on Crack Closure Model. *International Journal of Fatigue* 21: 531-547.
- Wang, W., Liang, K., Wang, C. & Wang, Q. 2014. Comparative Analysis of Failure Probability for Ethylene Cracking Furnace Tube Using Monte Carlo and Api Rbi Technology. *Engineering Failure Analysis* 45: 278-282.
- Wang, Y.-B. & Sun, Y.-Z. 2005. A New Boundary Integral Equation Method for Cracked 2-D Anisotropic Bodies. *Engineering Fracture Mechanics* 72: 2128-2143.

- Wang, Y., Cui, W., Wu, X., Wang, F. & Huang, X. 2008. The Extended Mcevily Model for Fatigue Crack Growth Analysis of Metal Structures. *International Journal of Fatigue* 30: 1851-1860.
- Zhang, X., Boscolo, M., Figueroa-Gordon, D., Allegri, G. & Irving, P. E. 2009. Fail-Safe Design of Integral Metallic Aircraft Structures Reinforced by Bonded Crack Retarders. *Engineering Fracture Mechanics* 76: 114-133.
- Zhuang, Z., Liu, Z., Cheng, B. & Liao, J. 2014. Chapter 4 - Fundamental Concept and Formula of X-Fem. In. Zhuang, Z., Cheng, Z. L. & Liao, J. (edit.). *Extended Finite Element Method*, pp. 51-73. Oxford: Academic Press.

APPENDIX C

LIST OF PUBLICATIONS

Published Journal Papers with Ranking

1. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S., Beer, M. & Nikabdullah, N. 2016. Surface Crack Growth and Stress Intensity Factor under Cyclic Load Using S-version Finite Element Method and Embedded Latin Hypercube Sampling. *Journal of Zhejiang University: Science A* (In Press). (Journal Ranking: Q2)
2. **Akramin, M. R. M.**, Shaari, M. S., Ariffin, A. K., Kikuchi, M. & Abdullah, S. 2015. Surface Crack Analysis under Cyclic Loads Using Probabilistic S-Version Finite Element Model. *Journal of the Brazilian Society of Mechanical Sciences and Engineering* 37(6): (1851-1865). (Journal Ranking: Q4)
3. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M. & Abdullah, S. 2016. Sampling method in probabilistic S-version finite element analysis for initial flaw size. *Journal of the Brazilian Society of Mechanical Sciences and Engineering* (1-9). (Journal Ranking: Q4)

Published Journal Papers without Ranking

1. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Nikabdullah, N. 2014. Fatigue Crack Growth Analysis of Semielliptical Surface Crack. *Applied Mechanics and Materials* 471(293-298).
2. Zulkifli, A., Ariffin, A. K. & **Akramin, M. R. M.** 2014. Probabilistic Model of Surface Crack on the Lumbar Vertebra. *Applied Mechanics and Materials* 471(299-305).

Presented Papers in International and National Conference

1. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Shaari, M. S. 2015. Probabilistic Life Assessment of Semi-Elliptical Surface-Cracks under Cyclic Tension and Bending. *9th International Conference on Numerical Analysis in Engineering. Batam, Kepulauan Riau-Indonesia, 27th - 29th August 2015.*
2. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Nikabdullah, N. 2013. Coupled Reliability and S-Version Finite-Element Model for Probabilistic Distribution of Surface Crack Growth under Constant Amplitude Loading. *5th Asia Pacific Congress On Computational Mechanics & 4th International Symposium On Computational Mechanics, Singapore.*
3. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Nikabdullah, N. 2013. Probabilistic Distribution of Surface Crack Growth Analysis with Uncertain Parameters. *8th International Conference on Numerical Analysis in Engineering. Pekanbaru, Riau, Indonesia, 13 - 14 May 2013.*
4. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S., Nikabdullah, N. & Shaari, M. 2012. Probabilistic Analysis Based on S-Version Finite Element Method of Surface Crack Growth. *10th International Probabilistic Workshop, Germany.*
5. **Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Nikabdullah, N. 2012. Fatigue Crack Growth Analysis of Semielliptical Surface Crack. *4th International Conference on Noise, Vibration and Comfort (NVC). Kuala Lumpur, Malaysia, 26-29 November 2012.*

Award

1. **Best Paper Award: Akramin, M. R. M.**, Ariffin, A. K., Kikuchi, M., Abdullah, S. & Shaari, M. S. 2015. Probabilistic Life Assessment of Semi-Elliptical Surface-Cracks under Cyclic Tension and Bending. *9th International Conference on*

Numerical Analysis in Engineering. Batam, Kepulauan Riau-Indonesia, 27th - 29th August 2015.