

REFERENCES

- Achanga Coxwell. (2007). Development of an Impact Assessment Framework for Lean Manufacturing within SMEs. *PhD Thesis*.
- Adhikary, D. D., Bose, G. K., Bose, D., & Mitra, S. (2014). Multi criteria FMECA for coal-fired thermal power plants using COPRAS-G. *International Journal of Quality and Reliability Management*, 31(5), 601–614.
<http://doi.org/10.1108/IJQRM-04-2013-0068>
- Afsordegan, A. (2015). *A Contribution to Multi-Criteria Decision Making in Sustainable Energy Management based on Fuzzy and Qualitative Reasoning*.
- Agnes Olszewski. (1987). Evolution of New Product Development Theory and Practice in the United State's Post-War Economy. In *Proceedings Index "Marketing in Three Eras"- Quinnipiac University* (pp. 302–313).
<http://doi.org/faculty.quinnipiac.edu/charm/.../302%20olszewski.pdf>
- Aguarón-Joven, J., Escobar-Urmeneta, M. T., García-Alcaraz, J. L., Moreno-Jiménez, J. M., & Vega-Bonilla, A. (2015). A new synthesis procedure for TOPSIS based on AHP. *Dyna*, 82(191), 11–19. <http://doi.org/10.15446/dyna.v82n191.51140>
- Aikhuele, D. O., & Turan, F. B. M. (2016). An Improved Methodology for Multi-criteria Evaluations in the Shipping Industry. *Brodogradnja/Shipbuilding*, 67(3), 59–72.
- Aikhuele, D. O., & Turan, F. B. M. (2016). Intuitionistic fuzzy-based model for failure detection. *SpringerPlus*, 5(1), 1938. <http://doi.org/10.1186/s40064-016-3446-0>
- Aikhuele, D. O., Turan, F. M., Odofin, S. M., & Ansah, R. H. (2016). Interval-valued intuitionistic fuzzy TOPSIS-based model for troubleshooting marine diesel engine auxiliary system. *International Journal of Maritime Engineering-Part A*.
- Akay, D., Kulak, O., & Henson, B. (2011). Conceptual design evaluation using interval type-2 fuzzy information axiom. *Computers in Industry*, 62(2), 138–146.
<http://doi.org/10.1016/j.compind.2010.10.007>
- Alarcin, F., Balin, A., & Demirel, H. (2014). Fuzzy AHP and Fuzzy TOPSIS integrated hybrid method for auxiliary systems of ship main engines. *Journal of Marine Engineering & Technology*, 13(1), 3–11.
<http://doi.org/10.1080/20464177.2014.11020288>
- Andrew, T. (2012). Design for Reliability: Concepts, Causes and Identification.
<http://doi.org/10.1002/9781118310052>
- Arif-uz-zaman, K. (2012). *A Fuzzy TOPSIS Based Multi Criteria Performance Measurement Model for Lean Supply Chain*.
- Atanassov, K. T. (1986). Intuitionistic fuzzy sets. *Fuzzy Sets and Systems*, 20(1), 87–96.
[http://doi.org/10.1016/S0165-0114\(86\)80034-3](http://doi.org/10.1016/S0165-0114(86)80034-3)
- Ayağ, Z. (2014). *Concept Evaluation through MCDM Methods : A Review and New Approaches*.
- Ayağ, Z., & Özdemir, R. G. (2007). An analytic network process-based approach to concept evaluation in a new product development environment. *Journal of Engineering Design*, 18(3), 209–226. <http://doi.org/10.1080/09544820600752740>

- Bai, Z. (2013). An Interval-Valued Intuitionistic Fuzzy TOPSIS Method Based on an Improved Score Function. *The Scientific World Journal*, 2013, 1–9. <http://doi.org/10.1155/2013/879089>
- Balbontin, a., Yazdani, B. B., Cooper, R., & Souder, W. E. (2000). New product development practices in American and British firms. *Technovation*, 20(5), 257–274. [http://doi.org/10.1016/S0166-4972\(99\)00136-4](http://doi.org/10.1016/S0166-4972(99)00136-4)
- Baldwin, T. (2015). Decision Making and Creativity. *The McGraw-Hill Companies, Inc.*, 1–7.
- Bamrungsetthapong, W., & Pongpullponsak, A. (2014). Parameter interval estimation of system reliability for repairable multistate series-parallel system with fuzzy data. *Scientific World Journal*, 2014. <http://doi.org/10.1155/2014/275374>
- Baxter, P., & Jack, S. (2008). *Qualitative Case Study Meth odology: Study Design and Implementation for Novice Researchers. The Qualitative Report* (Vol. 13).
- Behzadian, M., Khanmohammadi Otaghsara, S., Yazdani, M., & Ignatius, J. (2012). A state-of the-art survey of TOPSIS applications. *Expert Systems with Applications*, 39(17), 13051–13069. <http://doi.org/10.1016/j.eswa.2012.05.056>
- Beliakov, G., Pradera, A., & Calvo, T. (2007). *Aggregation Functions: A Guide for Practitioners. Soft Computing* (Vol. 18). http://doi.org/10.1007/3-540-32367-8_3
- Berends, H., Reymen, I., Stultiëns, R. G. L., & Peutz, M. (2011). External designers in product design processes of small manufacturing firms. *Design Studies*, 32(1), 86–108. <http://doi.org/10.1016/j.destud.2010.06.001>
- Bergvall-Kåreborn, B., & Howcroft, D. (2013). Crowdsourcing and Open Innovation : A Study of Amazon Mechanical Turk and Apple iOS Debra Howcroft. *Ispim*, (December). Retrieved from http://www.ltu.se/cms_fs/1.115874!/file/Crowdsourcing and Open Innovation- A Study of Amazon Mechanical Turk and Apple iOS.pdf
- Bernstein, J. B. (2014). *Reliability Prediction from Burn-In Data Fit to Reliability Models. Academic Press Elsevier Inc., London*. <http://doi.org/10.1016/B978-0-12-800747-1.00005-9>
- Bian, T., Zheng, H., Yin, L., & Deng, Y. (2016). Failure mode and effects analysis based on D numbers and TOPSIS. *Knowledge-Based Systems, Preprint*, 1–36.
- Booz, Allen, & Hamilton. (1982). New Product Management for the 1980's. *New York: Booz, Allen & Hamilton, Inc*, 11–18.
- Bowles, J. B., & Pelaez, C. E. (1995). Fuzzy logic prioritization of failures in a system failure mode, effects and criticality analysis. *Reliability Engineering and System Safety*, 50(2), 203–213. [http://doi.org/10.1016/0951-8320\(95\)00068-D](http://doi.org/10.1016/0951-8320(95)00068-D)
- Braglia1, M., Frosolini, M., & Montanari, R. (2003). Fuzzy TOPSIS approach for failure mode, effects and criticality analysis. *Quality and Reliability Engineering International*, 19(5), 425–443.
- Buonanno, M., & Mavris, D. (2005). A Method for Aircraft Concept Selection Using Multicriteria Interactive Genetic Algorithms. *In Final Report for GSRP Grant NGT-1-02006. 2005, Aerospace Systems Design Laboratory (ASDL), Georgia Institute of Technology*, pp. 1–14.

- Cables, E., García-Cascales, M. S., & Lamata, M. T. (2012). The LTOPSIS: An alternative to TOPSIS decision-making approach for linguistic variables. *Expert Systems with Applications*, 39(2), 2119–2126.
<http://doi.org/10.1016/j.eswa.2011.07.119>
- Cai, T. (2011). A conceptual framework for value creation management in the lean product development process.
- Chang, K. H., & Cheng, C. H. (2011). Evaluating the risk of failure using the fuzzy OWA and DEMATEL method. *Journal of Intelligent Manufacturing*, 22(2), 113–129. <http://doi.org/10.1007/s10845-009-0266-x>
- Chen, S. M., & Chiou, C. H. (2015). A new method for multiattribute decision making based on interval-valued intuitionistic fuzzy sets, PSO techniques and evidential reasoning methodology. *Proceedings - International Conference on Machine Learning and Cybernetics*, 1(6), 403–409.
<http://doi.org/10.1109/ICMLC.2014.7009149>
- Chen, S.-M., & Tan, J.-M. (1994). Handling multicriteria fuzzy decision-making problems based on vague set theory. *Fuzzy Sets and Systems*, 67(2), 163–172.
- Chen, W., Wang, L., & Lin, M. (2014). A Hybrid MCDM Model for New Product Development : Applied on the Taiwanese LiFePO 4 Industry. *Mathematical Problems in Engineering*, 2015. <http://doi.org/10.1155/2015/462929>
- Chen, Y., & Li, B. (2011). Dynamic multi-attribute decision making model based on triangular intuitionistic fuzzy numbers. *Scientia Iranica*, 18(2 B), 268–274.
<http://doi.org/10.1016/j.scient.2011.03.022>
- Chin, K. S., Chan, A., & Yang, J. B. (2008). Development of a fuzzy FMEA based product design system. *International Journal of Advanced Manufacturing Technology*, 36(7-8), 633–649. <http://doi.org/10.1007/s00170-006-0898-3>
- Chin, K.-S., Yang, J.-B., Guo, M., & Lam, J. P.-K. (2009). An evidential-reasoning-interval-based method for new product design assessment. *IEEE Transactions on Engineering Management*, 56(1), 142–156.
<http://doi.org/10.1109/TEM.2008.2009792>
- Chwastyk, P., & Kołosowski, M. (2014). Estimating the cost of the new product in development process. *Procedia Engineering*, 69, 351–360.
<http://doi.org/10.1016/j.proeng.2014.02.243>
- Das, D. (2014). A Study on Ranking of Trapezoidal Intuitionistic Fuzzy Numbers. *International Journal of Computer Information Systems and Industrial Management Applications.*, 6, 437–444.
- Deschrijver, G., & Kerre, E. E. (2007). On the position of intuitionistic fuzzy set theory in the framework of theories modelling imprecision. *Information Sciences*, 177(8), 1860–1866. <http://doi.org/10.1016/j.ins.2006.11.005>
- Despi, I., Opris, D., & Yalcin, E. (2013). Generalised Atanassov Intuitionistic Fuzzy Sets. *eKNOW 2013, The Fifth International Conference on Information, Process, and Knowledge Management*, (c), 51–56.
- Despic, O., & Simonovic, S. P. (2000). Aggregation operators for soft decision making in water resources. *Fuzzy Sets and Systems*, 115(1), 11–33.
[http://doi.org/10.1016/S0165-0114\(99\)00030-5](http://doi.org/10.1016/S0165-0114(99)00030-5)

- Dietrich, C. (2010). Decision Making: Factors that Influence Decision Making, Heuristics Used, and Decision Outcomes. *Student Pulse*, 2(2010), 1/3. [http://doi.org/10.1037/a0012772.Sagi](http://doi.org/10.1037/a0012772)
- Dietrich, D. L. (2006). Reliability from Design Inception to Product Retirement. In *IEEE PROCEEDINGS of Annual RELIABILITY and MAINTAINABILITY Symposium, Newport Beach, California, USA, January 23-26, 2006* (p. Tutorial page 1–Tutorial page 33). Retrieved from [file:///d:/Doktorautza/artikuluak/bai/RAMS2006/2006rm Lessons Learned for Effective FMEAs.pdf](file:///d:/Doktorautza/artikuluak/bai/RAMS2006/2006rm%20Lessons%20Learned%20for%20Effective%20FMEAs.pdf)
- Dong, J., Yang, D. Y., & Wan, S. P. (2015). Trapezoidal intuitionistic fuzzy prioritized aggregation operators and application to multi-attribute decision making. *Iranian Journal of Fuzzy Systems*, 12(4), 1–32.
- Dubois, D., & Prade, H. (2004). On the use of aggregation operations in information fusion processes. *Fuzzy Sets and Systems*, 142(1), 143–161. <http://doi.org/10.1016/j.fss.2003.10.038>
- Fader, P. S., Hardie, B. G. S., Stevens, R., & Findley, J. (2003). *Forecasting New Product Sales in a Controlled Test Market Environment*.
- Fang, Y.-C., & Chyu, C.-C. (2014). Evaluation of New Product Development Alternatives Considering Interrelationships among Decision Criteria. *Journal of Multimedia*, 9(4), 611–617. <http://doi.org/10.4304/jmm.9.4.611-617>
- Fargnoli, M. (2009). Design Process Optimization for EcoDesign. *Int. J. of Automation Technology*, 3(1), 33–39.
- Fink, A. (1998). Conducting a Literature Review. *Sage Publishers, UK*, 1–280.
- Fox, M. S. (1986). Industrial Applications of Artificial Intelligence. *Robotics*, 2(4), 301–311. [http://doi.org/10.1016/0167-8493\(86\)90003-3](http://doi.org/10.1016/0167-8493(86)90003-3)
- Fuat Alarcin, Abit Balin & Hakan DemirelFuat Alarcin, A. B. & H. D. (2014). Fuzzy AHP and Fuzzy TOPSIS integrated hybrid method for auxiliary systems of ship main engines. *Journal of Marine Engineering & Technology*, 13(1), 3–11. <http://doi.org/10.1080/20464177.2014.11020288>
- Fumian, W. (2013). Hoisting machinery accident statistics analysis and prevention from 2006 to 2011. *China Speical Equipment Safety*, 29(2), 49–51.
- Ganga, G. M. D., & Carpinetti, L. C. R. (2011). A fuzzy logic approach to supply chain performance management. *International Journal of Production Economics*, 134, 177–187. <http://doi.org/10.1016/j.ijpe.2011.06.011>
- Garg, H. (2016a). Generalized intuitionistic fuzzy interactive geometric interaction operators using Einstein t-norm and t-conorm and their application to decision making. *Computers & Industrial Engineering*, 101, 53–69. <http://doi.org/10.1016/j.cie.2016.08.017>
- Garg, H. (2016b). Generalized Pythagorean fuzzy Geometric aggregation operators using Einstein t-norm and t-conorm for multicriteria decision-making process. *International Journal of Intelligent Systems*, 00, 1–34. <http://doi.org/doi:10.1002/int.21860>
- Garg, H. (2016c). Some series of intuitionistic fuzzy interactive averaging aggregation operators. *SpringerPlus*, 5(1), 999. <http://doi.org/10.1186/s40064-016-2591-9>

- Gargama, H. (IIT K., & Chaturvedi, S. K. (IIT K. (2011). Criticality Assessment Models for Failure Mode Effects and Criticality Analysis Using Fuzzy Logic. *IEEE Transactions on Reliability*, 60(1), 102–110. Retrieved from <http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=5688217>
- Geng, X., Chu, X., & Zhang, Z. (2010). A new integrated design concept evaluation approach based on vague sets. *Expert Systems with Applications*, 37(9), 6629–6638. <http://doi.org/10.1016/j.eswa.2010.03.058>
- Gerber, J., Arms, H., Wiecher, M., & Danner, C. (2014). *Make precise strategic decisions when the unexpected happens.*
- Geum, Y., Cho, Y., & Park, Y. (2011). A systematic approach for diagnosing service failure: Service-specific FMEA and grey relational analysis approach. *Mathematical and Computer Modelling*, 54(11-12), 3126–3142. <http://doi.org/10.1016/j.mcm.2011.07.042>
- Ghazanfari, M., Rouhani, S., & Jafari, M. (2014). A fuzzy TOPSIS model to evaluate the Business Intelligence competencies of Port Community Systems. *Polish Maritime Research*, 21(2), 86–96. <http://doi.org/10.2478/pomr-2014-0023>
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, 204, 291–295. <http://doi.org/10.1038/bdj.2008.192>
- Gopalakrishnan, B., & Pandiarajan, V. (1991). Materials and Manufacturing Processes Selection System for Product Designs in Concurrent Engineering. *Journal of Materials Processing Technology*, 28, 93–103.
- Group, W. M. (2007). *Failure Modes, Effects & Criticality Analysis*. University of Warwick, Coventry, CV4 7AL, UK (Vol. section 12).
- Hahn, K. (2016). Applications of Design Thinking in Enterprise Business Analytics.
- He, Y.-H., Wang, L.-B., He, Z.-Z., & Xie, M. (2015). A fuzzy TOPSIS and Rough Set based approach for mechanism analysis of product infant failure. *Engineering Applications of Artificial Intelligence*, 47, 1–13. <http://doi.org/10.1016/j.engappai.2015.06.002>
- Hemetsberger, A., & Godula, G. (2007). Integrating Expert Customers in New Product Development in Industrial Business – Virtual Routes To Success. *Innovative Marketing*, 3(3), 28–39.
- Herring, S. R., Jones, B. R., & Bailey, B. P. (2009). Idea generation techniques among creative professionals. In *Proceedings of the 42nd Annual Hawaii International Conference on System Sciences, HICSS* (pp. 1–10). <http://doi.org/10.1109/HICSS.2009.241>
- Holman, R., Kaas, H.-W., & Keeling, D. (2003). The future of product development. *McKinsey Quarterly*, 2(3), 28–39. <http://doi.org/10.1177/1534484308324984>
- Hong, D. H., & Choi, C.-H. (2000). Multi-criteria fuzzy decision making problems based on vague set theory. *Fuzzy Sets and Systems*, 114(1), 103–113. [http://doi.org/10.1016/S0165-0114\(98\)00271-1](http://doi.org/10.1016/S0165-0114(98)00271-1)
- Huang, Y.-S., Liu, L.-C., & Ho, J.-W. (2015). Decisions on new product development under uncertainties. *International Journal of Systems Science*, 46(6), 1010–1019. <http://doi.org/10.1080/00207721.2013.807382>

- Hung, C.-C., & Chen, L.-H. (2009). A Fuzzy TOPSIS Decision Making Model with Entropy Weight under Intuitionistic Fuzzy Environment. *Proceedings of the International MultiConference of Engineers and Computer Scientists IMECS 2009, Hong Kong, I*, 18–21.
- Hwang C. L., & Yoon K. (1981). *Multiple Attribute Decision Making Methods and Applications*. Berlin: Springer.
- Iskandar, I., & Gondokaryono, Y. S. (2016). Competing risk models in reliability systems, a gamma distribution model with bayesian analysis approach. *IOP Conference Series: Materials Science and Engineering*, 114, 012098. <http://doi.org/10.1088/1757-899X/114/1/012098>
- Jadidi, O., Hong, T., & Firouzi, F. (2008). TOPSIS and fuzzy multi-objective model integration for supplier selection problem. *Journal of Achievements in Materials and Manufacturing Engineering*, 31(2), 762–769. Retrieved from http://157.158.19.167/papers_vol31_2/31288.pdf
- Jahromi, M. K. (2012). Multiattribute decision making models and methods using intuitionistic fuzzy sets. *International Mathematical Forum*, 7(57), 2847–2851. <http://doi.org/10.1016/j.jcss.2004.06.002>
- Jang, J. S. R., & Sun, C. T. (1995). Neuro-fuzzy modeling and control. *Proceedings of the IEEE*, 83(3), 378–406. <http://doi.org/10.1109/5.364486>
- Jenab, K., Sarfaraz, A., & Ameli, M. T. (2013). A Fuzzy conceptual design selection model considering conflict resolution. *Journal of Engineering Design*, 24(4), 293–304. <http://doi.org/10.1080/09544828.2012.728203>
- Jeng, S.-L., Yang, C.-F., & Chieng, W.-H. (2010). Outrigger Force Measure for Mobile Crane Safety Based on Linear Programming Optimization. *Mechanics Based Design of Structures and Machines*, 38(2), 145–170. <http://doi.org/10.1080/15397730903482702>
- Johansson, C. (2013). *On system safety and reliability methods in early design phases*.
- Jose-M, M. L., & Montserrat, C. R. (2010). The Generalized Hybrid Averaging Operator and its Application in Decision Making. *REVISTA DE METODOS CUANTITATIVOS PARA LA ECONOMIA Y LA EMPRESA*, (9), 69–84.
- Jungpyo, H., Sukyoung, J., & Dongmin, C. (2007). Idea Generation Methodology for Creative Design Thinking. *International Association of Design Research*, 1–13.
- Junwu, D., Dongtao, Y., & Zhenqiang, B. (2012). Research on Capturing of Customer Requirements Based on Innovation Theory. *Physics Procedia*, 24, Part C(0), 1868–1880. <http://doi.org/http://dx.doi.org/10.1016/j.phpro.2012.02.275>
- Justel, D., Vidal, R., Arriaga, E., Franco, V., & Val-jauregi, E. (2007). Evaluation method for selecting innovative product concepts with greater potential marketing success. *International Conference on Engineering Design*, (August), 1–12.
- Kazmer, D., & Roser, C. (1999). Evaluation of Product and Process Design Robustness. *Research in Engineering Design*, 11(1), 20–30.
- Kiang, M. Y. (2003). A comparative assessment of classification methods. *Decision Support Systems*, 35(4), 441–454. [http://doi.org/10.1016/S0167-9236\(02\)00110-0](http://doi.org/10.1016/S0167-9236(02)00110-0)

- King, a. M., & Sivaloganathan, S. (1999). Development of a Methodology for Concept Selection in Flexible Design Strategies. *Journal of Engineering Design*, 10(4), 329–349. <http://doi.org/10.1080/095448299261236>
- Kostina, M. (2012). *Reliability management of manufacturing processes in machinery enterprises. Theses of Tallinn University of Technology. ISSN 1406-4766 ; 71.* Retrieved from http://linda.linneanet.fi/F/?func=direct&doc_number=006392022&local_base=fin01
- Kumar, K. A., Saravanakumar, M., Joseph, J., & Ramanathan, H. (2016). Generative Model for Conceptual Design of Defence Equipment. *Defence Science Journal*, 66(1), 81. <http://doi.org/10.14429/dsj.66.9105>
- Kumar, T., & Bajaj, R. K. (2014). Reliability Analysis of k -out-of- n : G System Using Triangular Intuitionistic Fuzzy Numbers. In *world academic of science, engineering and technology* (Vol. 8, pp. 373–379).
- Kutlu, A. C., & Ekmekcioğlu, M. (2012). Fuzzy failure modes and effects analysis by using fuzzy TOPSIS-based fuzzy AHP. *Expert Systems with Applications*, 39(1), 61–67. <http://doi.org/10.1016/j.eswa.2011.06.044>
- Kwapień, J., & Drożdż, S. (2012). Physical approach to complex systems. *Physics Reports*, 515(3-4), 115–226. <http://doi.org/10.1016/j.physrep.2012.01.007>
- Leonardi, G. (2016). A Fuzzy Model for a Railway-Planning Problem. *Applied Mathematical Sciences*, 10(27), 1333–1342.
- Li, D. F. (2008). A note on “using intuitionistic fuzzy sets for fault-tree analysis on printed circuit board assembly.” *Microelectronics Reliability*, 48(10), 1741. <http://doi.org/10.1016/j.microrel.2008.07.059>
- Li, D. F., Nan, J. X., & Zhang, M. J. (2010). A Ranking Method of Triangular Intuitionistic Fuzzy Numbers and Application to Decision Making. *International Journal of Computational Intelligence Systems*, 3(5), 522–530. <http://doi.org/10.1080/18756891.2010.9727719>
- Li, D.-F. (2005). Multiattribute decision making models and methods using intuitionistic fuzzy sets. *Journal of Computer and System Sciences*, 70(1), 73–85. <http://doi.org/10.1016/j.jcss.2004.06.002>
- Li, D.-F. (2010). A ratio ranking method of triangular intuitionistic fuzzy numbers and its application to MADM problems. *Computers & Mathematics with Applications*, 60(6), 1557–1570.
- Li, D.-F. (2014). Decision and Game Theory in Management With Intuitionistic Fuzzy Sets. *Studies in Fuzziness and Soft Computing*, 308, 1–462. <http://doi.org/10.1007/978-3-642-40712-3>
- Li, M., Hu, Y., Zhang, Q., & Deng, Y. (2016). A novel distance function of D numbers and its application in product engineering. *Engineering Applications of Artificial Intelligence*, 47, 61–67. <http://doi.org/10.1016/j.engappai.2015.06.004>
- Li, Y. L., Chin, K. S., & Luo, X. G. (2012). Determining the final priority ratings of customer requirements in product planning by MDBM and BSC. *Expert Systems with Applications*, 39(1), 1243–1255. <http://doi.org/10.1016/j.eswa.2011.07.133>

- Liang, C., Zhao, S., & Zhang, J. (2014). Aggregation Operators on Triangular Intuitionistic Fuzzy Numbers and Its Application To Multi-Criteria Decision Making Problems. *Foundations of Computing and Decision Sciences*, 3(2), 321–326. <http://doi.org/10.2478/fcds-2014-00>
- Lim, T. H., Kim, Y. S., Jong Hwan Choi, Hong Sun Lee, & Soon Yong Yang. (2004). Development of tipping-over rate computation system for hydraulic excavator having crane function. In *KORUS 2004, 8th Korea-Russia International Symposium on Science and Technology*, pp. 76-79, 2005 (pp. 110–112).
- Lin, L., Yuan, X. H., & Xia, Z. Q. (2007). Multicriteria fuzzy decision-making methods based on intuitionistic fuzzy sets. *Journal of Computer and System Sciences*, 73(1), 84–88. <http://doi.org/10.1016/j.jcss.2006.03.004>
- Lin, M. C., Wang, C. C., Chen, M. S., & Chang, C. A. (2008). Using AHP and TOPSIS approaches in customer-driven product design process. *Computers in Industry*, 59(1), 17–31. <http://doi.org/10.1016/j.compind.2007.05.013>
- Liu, H. C., Fan, X. J., Li, P., & Chen, Y. Z. (2014). Evaluating the risk of failure modes with extended MULTIMOORA method under fuzzy environment. *Engineering Applications of Artificial Intelligence*, 34, 168–177. <http://doi.org/10.1016/j.engappai.2014.04.011>
- Liu, H. T. (2011). Product design and selection using fuzzy QFD and fuzzy MCDM approaches. *Applied Mathematical Modelling*, 35(1), 482–496. <http://doi.org/10.1016/j.apm.2010.07.014>
- Liu, H.-C., Liu, L., & Li, P. (2014). Failure mode and effects analysis using intuitionistic fuzzy hybrid weighted Euclidean distance operator. *International Journal of Systems Science*, 45(10), 2012–2030. <http://doi.org/10.1080/00207721.2012.760669>
- Liu, H.-C., Liu, L., & Li, P. (2015). Failure mode and effects analysis using intuitionistic fuzzy hybrid TOPSIS approach. *Soft Comput*, 19, 1085–1098. <http://doi.org/10.1007/s00500-014-1321-x>
- Liu, H.-C., Liu, L., & Lin, Q.-L. (2013). Fuzzy Failure Mode and Effects Analysis Using Fuzzy Evidential Reasoning and Belief Rule-Based Methodology. *IEEE Transactions on Reliability*, 62(1), 23–36. <http://doi.org/10.1109/TR.2013.2241251>
- Liu, H.-C., Liu, L., & Liu, N. (2013). Risk evaluation approaches in failure mode and effects analysis: A literature review. *Expert Systems with Applications*, 40(2), 828–838. <http://doi.org/10.1016/j.eswa.2012.08.010>
- Liu, H.-C., Liu, L., Liu, N., & Mao, L.-X. (2012). Risk evaluation in failure mode and effects analysis with extended VIKOR method under fuzzy environment. *Expert Systems with Applications*, 39(17), 12926–12934. <http://doi.org/10.1016/j.eswa.2012.05.031>
- Liu, H.-C., You, J.-X., Chen, S., & Chen, Y.-Z. (2016). An integrated failure mode and effect analysis approach for accurate risk assessment under uncertainty. *IIE Transactions*, 8830(August), 1–16. <http://doi.org/10.1080/0740817X.2016.1172742>
- Liu, H.-C., You, J.-X., Ding, X.-F., & Su, Q. (2015). Improving risk evaluation in FMEA with a hybrid multiple criteria decision making method. *International Journal of Quality & Reliability Management*, 32(7), 763 – 782.

- Liu, H.-C., You, J.-X., Lin, Q.-L., & Li, H. (2014). Risk assessment in system FMEA combining fuzzy weighted average with fuzzy decision-making trial and evaluation laboratory. *International Journal of Computer Integrated Manufacturing*, 28(7), 701–714. <http://doi.org/10.1080/0951192X.2014.900865>
- Liu, M., & Ren, H. (2014). A New Intuitionistic Fuzzy Entropy and Application in Multi-Attribute Decision Making. *Information*, 5(4), 587–601. <http://doi.org/10.3390/info5040587>
- Liu, P., & Zhang, L. (2014). *The Extended VIKOR Method for Multiple Criteria Decision Making Problem Based on Neutrosophic Hesitant Fuzzy Set*.
- Lo, C. C., Wang, P., & Chao, K. M. (2006). A fuzzy group-preferences analysis method for new-product development. *Expert Systems with Applications*, 31(4), 826–834. <http://doi.org/10.1016/j.eswa.2006.01.005>
- Lugo, J. E. (2012). Pugh Method : How to decide between different designs ? *University of Notre Dame*, 3–9.
- Mahapatra, G. S., & Roy, T. K. (2009). Reliability Evaluation using Triangular Intuitionistic Fuzzy Numbers Arithmetic Operations. *International Journal of Computer, Electrical, Automation, Control and Information Engineering*, 3(2), 225–232.
- Majeske, K. D., Riches, M., & Annadi, H. (2003). *Ford's reliability improvement process: A case study on automotive wheel bearings*.
- Maoying, T., & Jing, L. (2013). Some Aggregation Operators with Interval-valued Intuitionistic Trapezoidal Fuzzy Numbers and Their Application in Multiple Attribute Decision Making. *Advanced Modeling and Optimization*, 15(2), 301–308.
- Marasini, D., Quatto, P., & Ripamonti, E. (2016). Intuitionistic fuzzy sets in questionnaire analysis. *Quality & Quantity*, 50(2), 767–790. <http://doi.org/10.1007/s11135-015-0175-3>
- Marini, C. D., Fatchurrohman, N., Azhari, A., & Suraya, S. (2016). Product Development using QFD, MCDM and the Combination of these Two Methods. *IOP Conference Series: Materials Science and Engineering*, 114, 012089. <http://doi.org/10.1088/1757-899X/114/1/012089>
- Marsh, S. M., & Fosbroke, D. E. (2015). Trends of occupational fatalities involving machines, United States, 1992-2010. *American Journal of Industrial Medicine*, 58(11), 1160–1173. <http://doi.org/10.1002/ajim.22532>
- Mayo, C. M. (2015). New product development. In D. Hausler (Ed.), *New Product Development strategy, organization, levels, system, manager, type, company, business, system, History* (Deborah Ha, pp. 1–5).
- Meeker, W. Q., & Hong, Y. L. (2014). Reliability Meets Big Data: Opportunities and Challenges. *Quality Engineering*, 26(1), 102–116. <http://doi.org/10.1080/08982112.2014.846119>
- Mihaela, L., Cornelius, N., & Alina, N. (2010). Current Trends in Product Development. In *Proceedings of the 4th conference on European computing conference Bucharest, Romania — April 20 - 22, 2010* (pp. 94–99).

- Mohammadi, A., & Tavakolan, M. (2013). Construction project risk assessment using combined fuzzy and FMEA. *IFSA World Congress and NAFIPS Annual Meeting (IFSA/NAFIPS), 2013 Joint*, 232–237. <http://doi.org/10.1109/IFSA-NAFIPS.2013.6608405>
- Murthy, D. N. P. (2007). Product reliability and warranty: an overview and future research. *Production*, 7(3), 426–434.
- Netto, T. A., Honorato, H. J., & Qassim, R. Y. (2013). Prioritization of failure risk in subsea flexible pipes via data envelopment analysis. *Marine Structures*, 34, 105–116. <http://doi.org/10.1016/j.marstruc.2013.08.001>
- Nielsen-company. (2015). *LOOKING TO ACHIEVE NEW PRODUCT SUCCESS ? Listen to your customers.*
- Nikander, J. B., Liikanen, L. A., & Laakso, M. (2014). The preference effect in design concept evaluation. *Design Studies*, 35(5), 473–499. <http://doi.org/10.1016/j.destud.2014.02.006>
- Nuseibeh, B., & Easterbrook, S. (2000). Requirements engineering: a roadmap. *Proceedings of the Conference on The Future of Software Engineering - ICSE '00*, 1, 35–46. <http://doi.org/10.1145/336512.336523>
- Pakpour, S., Olishevskaya, S. V., Prasher, S. O., Milani, A. S., & Chénier, M. R. (2013). DNA extraction method selection for agricultural soil using TOPSIS multiple criteria decision-making model. *American Journal of Molecular Biology, Published* (October), 215–228.
- Park, J. H., Gwak, M. G., & Kwun, Y. C. (2011). Linguistic harmonic mean operators and their applications to group decision making. *International Journal of Advanced Manufacturing Technology*, 57(1-4), 411–419. <http://doi.org/10.1007/s00170-011-3295-5>
- Park, J. H., Kwun, Y. C., & Koo, J. H. (2011). Dynamic uncertain linguistic weighted harmonic mean operators applied to decision making. In *Proceedings 2011 International Conference on System Science and Engineering, ICSSE 2011* (pp. 101–106). <http://doi.org/10.1109/ICSSE.2011.5961882>
- Pergler, M. (2008). *Incorporating risk and flexibility in manufacturing footprint decisions. McKinsey Working Papers on Risk*.
- Perzyk, M., & Meftah, O. K. (1998). Selection of manufacturing process in mechanical design. *Journal of Materials Processing Technology*, 76(May 1997), 198 – 202.
- Prashant Ranjan. (2017). Manufacturing System, Product design & development. In *Chatrapati Sahuji Maharaj Kanpur University, Kanpur* (pp. 1–28).
- Pugh, S. (1996). *Creating innovative products using total design: The living legacy of Stuart Pugh*. Reading, MA: Addison-Wesley.
- Qi, X. W., Liang, C. Y., & Zhang, J. (2013). Some generalized dependent aggregation operators with interval-valued intuitionistic fuzzy information and their application to exploitation investment evaluation. *Journal of Applied Mathematics*, 2013, 49–52. <http://doi.org/10.1155/2013/705159>
- Ren, Y.-T., & Yeo, K.-T. (2006). RESEARCH CHALLENGES ON COMPLEX PRODUCT SYSTEMS (CoPS) INNOVATION. *Journal of the Chinese Institute of Industrial Engineers*, 23(6), 519–529. <http://doi.org/10.1080/10170660609509348>

- Rentema, D., & Jansen, F. W. (2007). AI Techniques for Conceptual Design. In *Delft Science in Design 2: Conference Proceedings, 4 April 2007* (pp. 183 – 198).
- Robinson, J. P., & V. Poovarasan. (2015). A Robust MAGDM Method for Triangular Intuitionistic Fuzzy Sets. *International Journal of Pure and Applied Mathematics*, 101(5), 753–762.
- Robson, C. (2002). *Real world research*. Blackwell Publishing.
<http://doi.org/10.1016/j.jclinepi.2010.08.001>
- Romli, F., & Harmin, M. Y. (2015). Use of Monte Carlo method to estimate subsystem redesign risk for complex products: aircraft redesign case study. *Aircraft Engineering and Aerospace Technology*, 87(6), 563–570.
<http://doi.org/10.1108/AEAT-02-2015-0044>
- Roszkowska, E. (2013). Rank ordering criteria weighting methods – a comparative overview. *Optimum. Studia Ekonomiczne Nr*, 5(65), 14 – 33.
<http://doi.org/10.15290/ose.2013.05.65.02>
- Rowe, G., & Wright, G. (2001). Expert opinions in forecasting: The role of the Delphi technique. In *International Series in Operations Research & Management Science* (pp. 125–144). <http://doi.org/10.1016/j.accreview.2004.12.084>
- Rubera, G., Chandrasekaran, D., & Ordanini, A. (2016). Open innovation, product portfolio innovativeness and firm performance: the dual role of new product development capabilities. *Journal of the Academy of Marketing Science*, 44(2), 166–184. <http://doi.org/10.1007/s11747-014-0423-4>
- Runeson, P., & Höst, M. (2009). Guidelines for conducting and reporting case study research in software engineering. *Empirical Software Engineering*, 14, 131–164.
<http://doi.org/10.1007/s10664-008-9102-8>
- Sachdeva, A., Kumar, D., & Pradeep Kumar. (2009). Multi-factor failure mode critically analysis using TOPSIS. *Princessaliceadoptionhome.org*, 9(8), 1–9. Retrieved from <http://www.princessaliceadoptionhome.org/2013/08>
- Saeed, R., Lodhi, R. N., Munir, J., Riaz, S., Dustgeer, F., & Sami, A. (2013). The impact of voice of customer on new product development. *World Applied Sciences Journal*, 24(9), 1255–1260. <http://doi.org/10.5829/idosi.wasj.2013.24.09.1348>
- Safari, H., Faraji, Z., & Majidian, S. (2016). Identifying and evaluating enterprise architecture risks using FMEA and fuzzy VIKOR. *Journal of Intelligent Manufacturing*, 27, 475–486. <http://doi.org/10.1007/s10845-014-0880-0>
- Sanchez, L. M. (2014). *Reliability Information and Testing Integration for New Product Design*.
- Sanchez, L. M., & Pan, R. (2011). An Enhanced Parenting Process: Predicting Reliability in Product's Design Phase. *Quality Engineering*, 23(4), 378–387.
<http://doi.org/10.1080/08982112.2011.603110>
- Saurav Datta, Chitrasen Samantra, Siba Sankar Mahapatra, Goutam Mondal, Partha Sarathi Chakraborty, G. M. (2013). Selection of internet assessment vendor using TOPSIS method in fuzzy environment. *International Journal of Business Performance and Supply Chain Modelling*, 5(1), 1–27.
<http://doi.org/10.1504/IJBPCM.2013.051645>

- Seyed-Hosseini, S. M., Safaei, N., & Asgharpour, M. J. (2006). Reprioritization of failures in a system failure mode and effects analysis by decision making trial and evaluation laboratory technique. *Reliability Engineering and System Safety*, 91(8), 872–881. <http://doi.org/10.1016/j.ress.2005.09.005>
- Sharfman, M. P., & Dean, J. W. (1997). Flexibility in strategic decision making: informational and ideological perspectives. *Journal of Management Studies*, 34(2).
- Shu, M.-H., Cheng, C.-H., & Chang, J.-R. (2006). Using Intuitionistic Fuzzy Sets for Fault-Tree Analysis on Printed Circuit Board Assembly. *Microelectronics Reliability*, 46, 2139–2148. <http://doi.org/10.1016/j.microrel.2006.01.007>
- Singhose, W., Kim, D., & Kenison, M. (2008). Input Shaping Control of Double-Pendulum Bridge Crane Oscillations. *Journal of Dynamic Systems, Measurement, and Control*, 130(3), 034504. <http://doi.org/10.1115/1.2907363>
- Smith, S., Smith, G., & Shen, Y. T. (2012). Redesign for product innovation. *Design Studies*, 33(2), 160–184. <http://doi.org/10.1016/j.destud.2011.08.003>
- Song, W., Ming, X., Wu, Z., & Zhu, B. (2013). Failure modes and effects analysis using integrated weight-based fuzzy TOPSIS. *International Journal of Computer Integrated Manufacturing*, 26(12), 1172–1186. <http://doi.org/10.1080/0951192X.2013.785027>
- Tan, C. (2011). Generalized intuitionistic fuzzy geometric aggregation operator and its application to multi-criteria group decision making. *Soft Computing*, 15(5), 867–876. <http://doi.org/10.1007/s00500-010-0554-6>
- Tang, M. X. (1998). An Artificial Intelligence Approach to Industrial Design Support. In *Proceedings of the 1998 Milan First International Conference of Generative Art '98*. Rome: Librerie Dedalo. (pp. 113–126).
- Tauhid, S., & Okudan, G. (2007). Fuzzy information axiom approach for design concept evaluation. In *International Conference on Engineering Design, ICED'07 28 - 31 August 2007, Cite Des Sciences Et De L'industrie, Paris, France*. (pp. 1–12). Retrieved from http://m.designsociety.org/download-publication/25341/fuzzy_information_axiom_approach_for_design_concept_evaluation
- Tay, K. M., Jong, C. H., & Lim, C. P. (2015). A clustering-based failure mode and effect analysis model and its application to the edible bird nest industry. *Neural Computing and Applications*, 26(3), 551–560. <http://doi.org/10.1007/s00521-014-1647-4>
- Thurston, D. L., & Tian, Y. Q. (1986). A Method for Integrating Utility Analysis into an Expert System for Design Evaluation under Uncertainty. *Journal of Mechanical Design*, 398–405.
- Tideman, M. (2008). *Scenario based product design*.
- Torra, V. (2000). The WOWA operator and the interpolation function W^* : Chen and Otto's interpolation method revisited. *Fuzzy Sets and Systems*, 113(3), 389–396. [http://doi.org/10.1016/S0165-0114\(98\)00040-2](http://doi.org/10.1016/S0165-0114(98)00040-2)
- Turan, F. B. M. (2013). A three-stage methodology for design evaluation in product development. *PhD Thesis*, (December).

- Turner, B. T. (1985). Managing design in the new product development methods for company executives. *Design Studies*, 6(1), 51–56.
- Tyagi, S. K. (2014). Reliability Analysis of a Powerloom Plant Using Interval Valued Intuitionistic Fuzzy Sets. *Applied Mathematics*, 5, 2008–2015.
- Ulrich, K. T., & Eppinger, S. D. (2000). *Product design and development*. New York: McGraw-Hill. <http://doi.org/10.1063/1.4707639>
- Vahdani, B., Salimi, M., & Charkhchian, M. (2015). A new FMEA method by integrating fuzzy belief structure and TOPSIS to improve risk evaluation process. *International Journal of Advanced Manufacturing Technology*, 77(1-4), 357–368. <http://doi.org/10.1007/s00170-014-6466-3>
- Varadarajan, K. (2013). *Should-cost analysis a key tool for sourcing and product designers*.
- Wan, S., Lin, L.-L., & Dong, J. (2016). MAGDM based on triangular Atanassov's intuitionistic fuzzy information aggregation. *Neural Computing and Applications*, (February). <http://doi.org/10.1007/s00521-016-2196-9>
- Wan, S. P., Wang, Q. Y., & Dong, J. Y. (2013). The extended VIKOR method for multi-attribute group decision making with triangular intuitionistic fuzzy numbers. *Knowledge-Based Systems*, 52, 65–77. <http://doi.org/10.1016/j.knosys.2013.06.019>
- Wang, J. (2002). Improved engineering design concept selection using fuzzy sets. *International Journal of Computer Integrated Manufacturing*, 15(1), 18–27. <http://doi.org/10.1080/09511920110034996>
- Wang, J. qiang, Zhou, P., Li, K. jian, Zhang, H. yu, & Chen, X. hong. (2014). Multi-criteria decision-making method based on normal intuitionistic fuzzy-induced generalized aggregation operator. *Top*, 1–20. <http://doi.org/10.1007/s11750-014-0314-3>
- Wang, Y.-M., Chin, K.-S., Poon, G. K. K., & Yang, J.-B. (2009). Risk evaluation in failure mode and effects analysis using fuzzy weighted geometric mean. *Journal Expert Systems with Applications*, 36(2), 1195–1207. <http://doi.org/10.1016/j.eswa.2007.11.028>
- Wu, J. (2015). Consistency in MCGDM Problems with Intuitionistic Fuzzy Preference Relations Based on an Exponential Score Function. *Group Decision and Negotiation*, 25(2), 399–420. <http://doi.org/10.1007/s10726-015-9447-5>
- Wu, J., & Liu, Y. (2013). An approach for multiple attribute group decision making problems with interval-valued intuitionistic trapezoidal fuzzy numbers. *Computers and Industrial Engineering*, 66(2), 311–324. <http://doi.org/10.1016/j.cie.2013.07.001>
- Xiao, A. (2014). Multidisciplinary Decision Making Methods in an Information Driven Product Development Framework. In *ASME 2014 International Mechanical Engineering Congress and Exposition Volume 11: Systems, Design, and Complexity Montreal, Quebec, Canada, November 14–20, 2014* (pp. 1–9).
- Xie, L. (2013). A new method for failure modes and effects analysis and its application in a hydrokinetic turbine system. *ProQuest Dissertations and Theses*, 89. Retrieved from <https://vpn.utm.my/docview/1449163083?accountid=41678>

- Xu, Z. (2007). Intuitionistic preference relations and their application in group decision making. *Information Sciences*, 177(11), 2363–2379.
<http://doi.org/10.1016/j.ins.2006.12.019>
- Xu, Z. (2014). Intuitionistic preference modeling and interactive decision making. In *Studies in Fuzziness and Soft Computing* (pp. 195–223).
<http://doi.org/10.1007/978-3-642-28403-8>
- Xu, Z. S., & Da, Q. L. (2002). The ordered weighted geometric averaging operators. *International Journal of Intelligent Systems*, 17(7), 709–716.
<http://doi.org/10.1002/int.10045>
- Xu, Z., & Yager, R. R. (2006). Some geometric aggregation operators based on intuitionistic fuzzy sets. *International Journal of General Systems*, 35(4), 417–433.
<http://doi.org/10.1080/03081070600574353>
- Yager, R. R. (1988). On ordered weighted averaging aggregation operators in multi criteria decision making. *IEEE Trans. Syst. Man Cybern.*, 18(1), 183–190.
<http://doi.org/10.1109/21.87068>
- Yager, R. R., & Xu, Z. (2006). The continuous ordered weighted geometric operator and its application to decision making. *Fuzzy Sets and Systems*, 157(10), 1393–1402. <http://doi.org/10.1016/j.fss.2005.12.001>
- Yan Chan, K., Fung Yuen, K. K., Palade, V., & Yue, Y. (2016). Artificial intelligence techniques in product engineering. *Engineering Applications of Artificial Intelligence*, 47, 1–2. <http://doi.org/10.1016/j.engappai.2015.11.003>
- Yan, W., Chen, C. H., & Shieh, M. D. (2006). Product concept generation and selection using sorting technique and fuzzy c-means algorithm. *Computers and Industrial Engineering*, 50(3), 273–285. <http://doi.org/10.1016/j.cie.2006.05.003>
- Yang, C., & Wu, Q. (2008). Decision Model for Product Design Based on Fuzzy TOPSIS Method. *2008 International Symposium on Computational Intelligence and Design*, 342–345. <http://doi.org/10.1109/ISCID.2008.220>
- Yang, Q., Yu, S., & Sekhari, A. (2011). A modular eco-design method for life cycle engineering based on redesign risk control. *International Journal of Advanced Manufacturing Technology*, 56(9-12), 1215–1233. <http://doi.org/10.1007/s00170-011-3246-1>
- Yazdankhah, A., & Fathalipourbonab, M. (2014). Optimizing New Product Concept Selection Decisions Considering Life Cycle Design Attributes. *International Journal of Modeling and Optimization*, 4(2), 146–151.
<http://doi.org/10.7763/IJMO.2014.V4.363>
- Ye, F., & Li, Y. (2014). An extended TOPSIS model based on the Possibility theory under fuzzy environment. *Knowledge-Based Systems*, 67, 263–269.
<http://doi.org/10.1016/j.knosys.2014.04.046>
- Ye, J. (2010). Fuzzy decision-making method based on the weighted correlation coefficient under intuitionistic fuzzy environment. *European Journal of Operational Research*, 205(1), 202–204. <http://doi.org/10.1016/j.ejor.2010.01.019>
- Yontay, P., Sanchez, L. M., & Pan, R. (2015). Bayesian Network for Reliability Prediction in Functional Design Stage. In *61st Annual Reliability and Maintainability Symposium, RAMS 2015 - Palm Harbor, United States* (pp. 1–6).

- Yue, Z. (2011). An extended TOPSIS for determining weights of decision makers with interval numbers. *Knowledge-Based Systems*, 24(1), 146–153.
<http://doi.org/10.1016/j.knosys.2010.07.014>
- Zadeh, L. A. (1965). Fuzzy sets. *Information and Control*, 8, 338–353.
[http://doi.org/10.1016/S0019-9958\(65\)90241-X](http://doi.org/10.1016/S0019-9958(65)90241-X)
- Zeiler, W., Savanovic, P., & Quanjel, E. (2007). Design decision support for the conceptual phase of the design process. In *International Assoc. of Societies of Design Research* (pp. 1–15).
- Zhai, L. Y., Khoo, L. P., & Zhong, Z. W. (2009). Design concept evaluation in product development using rough sets and grey relation analysis. *Expert Systems with Applications*, 36(3 PART 2), 7072–7079.
<http://doi.org/10.1016/j.eswa.2008.08.068>
- Zhang, M. J., & Nan, J. X. (2013). A compromise ratio ranking method of triangular intuitionistic fuzzy numbers and its application to MADM problems. *Iranian Journal of Fuzzy Systems*, 10(6), 21–37.
<http://doi.org/10.1016/j.camwa.2010.06.039>
- Zhang, X., & Liu, P. (2010). Method for aggregating triangular fuzzy intuitionistic fuzzy information and its application to decision making. *Technological and Economic Development of Economy*, 16(2), 280–290.
<http://doi.org/10.3846/tede.2010.18>
- Zhao, H., You, J.-X., & Liu, H.-C. (2016). Failure mode and effect analysis using MULTIMOORA method with continuous weighted entropy under interval-valued intuitionistic fuzzy environment. *Soft Computing*. <http://doi.org/10.1007/s00500-016-2118-x>
- Zhou, L., & Chen, H. (2014). Generalized Ordered Weighted Proportional Averaging Operator and Its Application to Group Decision Making. *Informatica*, 25(2), 327–360.
- Zhu, X., Wang, F., Liang, C., Li, J., & Sun, X. (2012). Quality credit evaluation based on TOPSIS: Evidence from air-conditioning market in China. *Procedia Computer Science*, 9(10), 1256–1262. <http://doi.org/10.1016/j.procs.2012.04.137>