Last update: May 28, 2021

References

Abbasbandy, S. and Amirfakhrian, M. (2006). The nearest trapezoidal form of a generalized left right fuzzy number. *International Journal of Approximate Reasoning*, **43**(2), 166–178.

Abbasbandy, S. and Hajjari, T. (2010). Weighted trapezoidal approximation – Preserving cores of a fuzzy number. *Computers & Mathematics with Applications*, **59**(9), 3066–3077.

Abellanas, M., Claverol, M., and Hurtado, F. (2007). Point set stratification and Delaunay depth. *Computational Statistics & Data Analysis*, **51**, 2513–2530.

Abelson, H., Sussman, G., and Sussman, J. (2002). *Struktura i interpretacja programów komputerowych*. WNT, Warszawa.

Abraham, C., Biau, G., and Cadre, B. (2003). Simple estimation of the mode of a multivariate density. *The Canadian Journal of Statistics / La Revue Canadienne de Statistique*, **31**(1), 23–34.

Abramovitz, M. and Stegun, I. A. (1972). *Handbook of Mathematical Functions with Formulas, Graphs, and Mathematical Tables*. National Bureau of Standards Applied Mathematics Series.

Abramowitz, M. and Stegun, I. A. (1972). *Handbook of mathematical functions*. Dover, New York. URL `http://www.iopb.res.in/~somen/abramowitz_and_stegun/`.

Abreu, J. and Rico-Juan, J. (2014). A new iterative algorithm for computing a quality approximate median of strings based on edit operations. *Pattern Recognition Letters*, **36**, 74–80.

Achiezer, N. (1957). *Teoria aproksymacji*. PWN, Warszawa.

Aczel, A. (1996). *Complete Business Statistics*. Irvin.

Aczél, J. (1948). On mean values. *Bulletin of the American Mathematical Society*, **54**(4), 392–400.

Afsari, B. (2011). Riemannian l^p center of mass: Existence, uniqueness, and convexity. *Proceedings of the American Mathematical Society*, **139**, 655–673.

Afsari, B., Tron, R., and Vidal, R. (2013). On the convergence of gradient descent for finding the Riemannian center of mass. *SIAM Journal of Control and Optimization*, **51**(3), 2230–2260.

Aftab, K., Hartley, R., and Trumpf, J. (2015). Generalized Weiszfeld algorithms for Lq optimization. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **37**(4), 728–745.

Aggarwal, C. C., Hinneburg, A., and Keim, D. A. (2001a). On the surprising behavior of distance metrics in high dimensional space. *Lecture Notes in Computer Science*, **1973**, 420–434.

Aggarwal, C. C., Hinneburg, A., and Keimn, D. A. (2001b). On the surprising behavior of distance metric in high-dimensional space. *Lecture Notes in Computer Science*, **1973**, 420–434.

Ahn, B. S. (2008). Preference relation approach for obtaining OWA operators weights. *International Journal of Approximate Reasoning*, **47**(2), 166–178.

Ahn, B. S. (2010). Parameterized OWA operator weights: An extreme point approach. *International Journal of Approximate Reasoning*, **51**(7), 820–831.

Aho, A., Garey, M., and Ullman, J. (1972). The transitive reduction of a directed graph. *SIAM Journal on Computing*, **1**(2), 131–137.

Aho, A., Sethi, R., and Ullman, J. (2002). *Kompilatory. Reguły, metody i narzędzia*. WNT, Warszawa.

Alatalo, R. (1981). Problems in the measurement of evenness in ecology. *Oikos*, **37**, 199–204.

Alonso, J. M., Castiello, C., and Mencar, C. (2015). Interpretability of fuzzy systems: Current research trends and prospects. In Kacprzyk, J. and Pedrycz, W., editors, *Springer Handbook of Computational Intelligence*, pages 219–237. Springer, Berlin, Heidelberg.

Alonso, S., Cabrerizo, F. J., Herrera-Viedma, E., and Herrera, F. (2009). h-index: A review focused on its variants, computation and standardization for different scientific fields. *Journal of Informetrics*, **3**, 273–289.

Alonso, S., Cabrerizo, F. J., Herrera-Viedma, E., and Herrera, F. (2010). *hg*-index: A new index to characterize the scientific output of researchers based on the *h*- and *g*-indices. *Scientometrics*, **82**(2), 391–400.

Aloupis, G. (2006). Geometric measures of data depth. In *DIMACS Series in Discrete Mathematics and Theoretical Computer Science*, pages 147–158.

Aloupis, G. and McLeish, E. (2005). A lower bound for computing Oja depth. *Information Processing Letters*, **96**, 151–153.

Aloupis, G., Cortés, C., Gómez, F., Soss, M., and Toussaint, G. (2002). Lower bounds for computing statistical depth. *Computational Statistics & Data Analysis*, **40**, 223–229.

Aloupis, G., Langerman, S., Soss, M., and Toussaint, G. (2003). Algorithms for bivariate medians and a Fermat-Torricelli problem for lines. *Computational Geometry: Theory and Applications*, **26**(1), 69–79.

Altman, A. (2007). *The axiomatic approach to ranking systems*. PhD thesis, Israel Institute of Technology, Haifa, Izrael.

Altman, A. and Tennenholtz, M. (2005). Ranking systems: The PageRank axioms. In *Proc. 6th ACM Conf. on Electronic Commerce*.

Anderson, D., Keller, J., and Havens, T. (2010). Learning fuzzy-valued fuzzy measures for the fuzzy-valued Sugeno fuzzy integral. *Lecture Notes in Artificial Intelligence*, **6178**, 502–511.

Anderson, E. et al. (1999). *LAPACK Users' Guide*. SIAM. Available on-line at http://www.netlib.org/lapack/lug/lapack_lug.html.

Anderson, T. R., Hankin, R. K. S., and Killworth, P. D. (2008). Beyond the Durfee square: Enhancing the *h*-index to score total publication output. *Scientometrics*, **69**(3), 577–588.

Angelov, P. and Yager, R. R. (2013a). Density-based averaging – A new operator for data fusion. *Information Sciences*, **222**, 163–174.

Angelov, P. and Yager, R. (2013b). Density-based averaging: A new operator for data fusion. *Information Sciences*, **222**(Supplement C), 163–174.

Aristondo, O., García-Lapresta, J., Lasso de la Vega, C., and Marques Pereira, R. (2013). Classical inequality indices, welfare and illfare functions, and the dual decomposition. *Fuzzy Sets and Systems*, **228**, 114–136.

Arnold, B. C. (2008). Pareto and generalized pareto distributions. In *Economic Studies in Equality, Social Exclusion and Well-Being*, pages 119–145. Springer.

Arrow, K. J. (1950). A difficulty in the concept of social welfare. *Journal of Political Economy*, **58**(4), 328–346.

Arrow, K. J. (1963). *Social Choice and Individual Values*. Yale University Press, New Haven.

Arunachalam, S. (1998). Citation analysis: Do we need a thoeory? *Scientometrics*, **43**(1), 141–142.

Atanassov, K. T. (1986). Intuitionistic fuzzy sets. *Fuzzy Sets and Systems*, **20**, 87–96.

Atanassov, K. (1999). *Intuitionistic Fuzzy Sets*. Physica-Verlag, Heidelberg, New York.

Auda, G. and Kamel, M. (1999). Modular neural networks: A survey. *International Journal of Neural Systems*, **9**(2), 129–151.

Bååth, R. (2012). The state of naming conventions in R. *The R Journal*, **4**(2), 74–75.

Baczyński, M. and Jayaram, B. (2008). *Fuzzy implications*. Springer-Verlag, Berlin.

Baczyński, M. and Jayaram, B. (2008). (S, N)- and R-implications: A state-of-the-art survey. *Fuzzy Sets and Systems*, **159**(14), 1836–1859.

Bahlmann, C. (2006). Directional features in online handwriting recognition. *Pattern Recognition*, **39**(1), 115–125.

Baldi, P. and Brunak, S. (2001). *Bioinformatics: The Machine Learning Approach*. MIT Press.

Ball, P. (2005). Index aims for fair ranking of scientists. *Nature*, **436**, 900.

Ban, A., Brândaş, A., Coroianu, L., Negruţiu, C., and Nica, O. (2011a). Approximations of fuzzy numbers by trapezoidal fuzzy numbers preserving the ambiguity and value. *Computers & Mathematics with Applications*, **61**(5), 1379–1401.

Ban, A. I. (2008). Approximation of fuzzy numbers by trapezoidal fuzzy numbers preserving the expected interval. *Fuzzy Sets and Systems*, **159**, 1327–1344.

Ban, A. I. (2009a). Triangular and parametric approximations of fuzzy numbers – Inadvertences and corrections. *Fuzzy Sets and Systems*, **160**(21), 3048–3058.

Ban, A. I. (2009b). On the nearest parametric approximation of a fuzzy number – revisited. *Fuzzy Sets and Systems*, **160**, 3027–3047.

Ban, A. I. and Ban, O. I. (2012). Optimization and extensions of a fuzzy multicriteria decision making method and applications to selection of touristic destinations. *Expert Systems with Applications*, **39**(8), 7216–7225.

Ban, A. I. and Coroianu, L. (2012). Nearest interval, triangular and trapezoidal approximation of a fuzzy number preserving ambiguity. *International Journal of Approximate Reasoning*, **53**(5), 805–836.

Ban, A. I. and Coroianu, L. (2015). Simplifying the search for effective ranking of fuzzy numbers. *IEEE Transactions on Fuzzy Systems*, **23**, 327–339.

Ban, A. I., Coroianu, L., and Grzegorzewski, P. (2011b). Trapezoidal approximation and aggregation. *Fuzzy Sets and Systems*, **177**(1), 45–59.

Ban, A. I., Coroianu, L., and Grzegorzewski, P. (2013). A fixed-shape fuzzy median of a fuzzy sample. In *Proc. EUSFLAT'13*, pages 215–222. Atlantis Press.

Ban, A. I., Coroianu, L., and Khastan, A. (2016). Conditioned weighted L–R approximations of fuzzy numbers. *Fuzzy Sets and Systems*, **283**, 56–82.

Baneyx, A. (2008). *Publish or Perish* as citation metrics used to analyze scientific output in the humanities: International case studies in economics, geography, social sciences, philosophy, and history. *Archivum Immunologiae et Therapia Experimentalis*, **56**, 363–371.

Banks, M. G. (2006). An extension of the Hirsch index: Indexing scientific topics and compounds. *Scientometrics*, **69**(1), 161–168.

Bar-Ilan, J. (2006). H-index for price medalists revisited. *ISSI Newsletter*, **2**(1), 3–5.

Bar-Ilan, J. (2008). Informetrics at the beginning of the 21st century — A review. *Journal of Informetrics*, **2**, 1–52.

Barabási, A., Newman, M., and Watts, D. (2006). *The Structure and Dynamics of Networks*. Princeton University Press.

Barcza, K. and Telcs, A. (2009). Paretian publication patterns imply Paretian Hirsch index. *Scientometrics*, **81**(2), 513–519.

Bargiela, A. and Pedrycz, W. (2003). *Granular Computing: An Introduction*. Kluwer Academic Publishers, Boston, MA.

Barnett, G. A., Fink, E. L., and Debus, M. B. (1989). Mathematical model of academic citation age. *Communication research*, **4**(16), 510–531.

Barra, J. (1982). *Matematyczne podstawy statystyki*. PWN, Warszawa.

Barrow, J. D., Bhavsar, S. P., and Sonoda, D. H. (1985). Minimal spanning trees, filaments and galaxy clustering. *Monthly Notices of the Royal Astronomical Society*, **216**(1), 17–35.

Bartłomiejczyk, L. and Drewniak, J. (2004). A characterization of sets and operations invariant under bijections. *Æquationes Mathematicæ*, **68**, 1–9.

Bartneck, C. and Kokkelmans, S. (2011). Detecting h-index manipulation through self-citation analysis. *Scientometrics*, **87**, 85–98.

Bartoszuk, M. and Gagolewski, M. (2014). A fuzzy R code similarity detection algorithm. In Laurent, A. et al., editors, *Information Processing and Management of Uncertainty in Knowledge-Based Systems, Part III*, volume 444 of *Communications in Computer and Information Science*, pages 21–30. Springer. doi:10.1007/978-3-319-08852-5_3.

Bartoszuk, M. and Gagolewski, M. (2015). Detecting similarity of R functions via a fusion of multiple heuristic methods. In Alonso, J., Bustince, H., and Reformat, M., editors, *Proc. IFSA/EUSFLAT'15*, pages 419–426. Atlantis Press. doi:10.2991/ifsa-eusflat-15.2015.61.

Bartoszuk, M. and Gagolewski, M. (2017). Binary aggregation functions in software plagiarism detection. In *Proc. FUZZ-IEEE'17*. IEEE. doi:10.1109/FUZZ-IEEE.2017.8015582. no. 8015582.

Bartoszuk, M. and Gagolewski, M. (2020a). SimilaR: R code clone and plagiarism detection. *R Journal*, **12**(1), 367–385. doi:10.32614/RJ-2020-017.

Bartoszuk, M. and Gagolewski, M. (2020b). *SimilaR: R Source Code Similarity Evaluation*. R package; `http://cran.r-project.org/package=SimilaR`.

Bartoszuk, M., Beliakov, G., Gagolewski, M., and James, S. (2016a). Fitting aggregation functions to data: Part I – Linearization and regularization. In Carvalho, J. et al., editors, *Information Processing and Management of Uncertainty in Knowledge-Based Systems, Part II*, volume 611 of *Communications in Computer and Information Science*, pages 767–779. Springer. doi:10.1007/978-3-319-40581-0_62.

Bartoszuk, M., Beliakov, G., Gagolewski, M., and James, S. (2016b). Fitting aggregation functions to data: Part II – Idempotization. In Carvalho, J. et al., editors, *Information Processing and Management of Uncertainty in Knowledge-Based Systems, Part II*, volume 611 of *Communications in Computer and Information Science*, pages 780–789. Springer. doi:10.1007/978-3-319-40581-0_63.

Bassett, Jr., G. W. (1991). Equivariant, monotonic, 50% breakdown estimators. *The American Statistician*, **45** (2), 135–137.

Basu, A. (2007). A note on the connection between the Hirsch index and the Random Hierarchical model. *ISSI Newsletter*, **3**(2), 24–27.

Batista, P. D., Campiteli, M. G., Kinouchi, O., and Martinez, A. S. (2006). Is it possible to compare researchers with different scientific interests? *Scientometrics*, **68**(1), 179–189.

Becker, R., Chambers, J., and Wilks, A. (1998). *The New S Language*. Chapman & Hall.

Beckman, R. and Cook, R. (1983). Outlier.....s. *Technometrics*, **25**(2), 119–149.

Bedall, F. K. and Zimmermann, H. (1979). Algorithm AS 143: The Mediancentre. *Journal of the Royal Statistical Society. Series C (Applied Statistics)*, **28**(3), 325–328.

Bednarek, A. (1968). An extension of Light's associativity test. *American Mathematical Monthly*, **75**(5), 531–532.

Beirlant, J., Glänzel, W., Carbonez, A., and Leemans, H. (2007). Scoring research output using statistical quantile plotting. *Journal of Informetrics*, **1**, 185–192.

Beliakov, G., James, S., and Li, G. (2011). Learning Choquet-integral-based metrics for semisupervised clustering. *IEEE Transactions on Fuzzy Systems*, **19**(3), 562–574.

Beliakov, G. (2000). Shape preserving approximation using least squares splines. *Approximation Theory and its Applications*, **16**(4), 80–98.

Beliakov, G. (2002). Monotone approximation of aggregation operators using least squares splines. *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems*, **10**, 659–676.

Beliakov, G. (2003). How to build aggregation operators from data. *International Journal of Intelligent Systems*, **18**, 903–923.

Beliakov, G. (2005a). Learning weights in the generalized OWA operators. *Fuzzy Optimization and Decision Making*, **4**, 119–130.

Beliakov, G. (2005b). Monotonicity preserving approximation of multivariate scattered data. *BIT Numerical Mathematics*, **45**, 653–677.

Beliakov, G. (2007). Construction of aggregation operators for automated decision making via optimal interpolation and global optimization. *Journal of Industrial and Management Optimization*, **3**(2), 193–208.

Beliakov, G. (2009). Construction of aggregation functions from data using linear programming. *Fuzzy Sets and Systems*, **160**, 65–75.

Beliakov, G. (2011). Fast computation of trimmed means. *Journal of Statistical Software*, **39**, Code snippet 2.

Beliakov, G. and James, S. (2008). Using Choquet integrals for kNN approximation and classification. In *Proc. FUZZ-IEEE'08*, pages 1311–1317.

Beliakov, G. and James, S. (2011). Citation-based journal ranks: The use of fuzzy measures. *Fuzzy Sets and Systems*, **167**, 101–119.

Beliakov, G. and James, S. (2012). Using linear programming for weights identification of generalized Bonferroni means in R. *Lecture Notes in Computer Science*, **7647**, 35–44.

Beliakov, G. and James, S. (2013). Stability of weighted penalty-based aggregation functions. *Fuzzy Sets and Systems*, **226**(1), 1–18.

Beliakov, G. and James, S. (2014). A penalty-based aggregation operator for non-convex intervals. *Knowledge-Based Systems*, **70**, 335–344.

Beliakov, G. and James, S. (2015). Unifying approaches to consensus across different preference representations. *Applied Soft Computing*, **35**, 888–897.

Beliakov, G. and Warren, J. (2001). Appropriate choice of aggregation operators in fuzzy decision support systems. *IEEE Transactions on fuzzy systems*, **9**(6), 773–784.

Beliakov, G. and Wilkin, T. (2014). On some properties of weighted averaging with variable weights. *Information Sciences*, **281**, 1–7.

Beliakov, G., Pradera, A., and Calvo, T. (2007). *Aggregation functions: A guide for practitioners*. Springer-Verlag.

Beliakov, G., Bustince, H., James, S., Calvo, T., and Fernandez, J. (2011a). Aggregation for Atanassov's intuitionistic and interval valued fuzzy sets: The median operator. *IEEE Transactions on Fuzzy Systems*, **20**, 487–498.

Beliakov, G., Calvo, T., and James, S. (2011b). On penalty-based aggregation functions and consensus. In Herrera-Viedma, E. et al., editors, *Consensual Processes, STUDFUZZ 267*, pages 23–40.

Beliakov, G., Calvo, T., and James, S. (2013). Aggregating fuzzy implications to measure group consensus. In *Proc. Joint IFSA World Congress and NAFIPS Annual Meeting'13*, pages 1016–1021. Edmonton, Canada.

Beliakov, G., Calvo, T., and James, S. (2014a). Consensus measures constructed from aggregation functions and fuzzy implications. *Knowledge-Based Systems*, **55**, 1–8.

Beliakov, G., Calvo, T., and Wilkin, T. (2014b). Three types of monotonicity of averaging functions. *Knowledge-Based Systems*, **72**, 114–122.

Beliakov, G., James, S., and Nimmo, D. (2014c). Can indices of ecological evenness be used to measure consensus? In *Proc. IEEE Intl. Conf. Fuzzy Systems'15*, pages 1–8. Beijing, China.

Beliakov, G., James, S., and Smith, L. (2014d). Single-preference consensus measures based on models of ecological evenness. *Lecture Notes in Artificial Intelligence*, **8825**, 50–59.

Beliakov, G., Calvo, T., and Wilkin, T. (2015a). On the weak monotonicity of Gini means and other mixture functions. *Information Sciences*, **300**, 70–84.

Beliakov, G., James, S., and Nimmo, D. (2015b). Using aggregation functions to model human judgments of species diversity. *Information Sciences*, **306**, 21–33.

Beliakov, G., Bustince, H., and Calvo, T. (2016a). *A Practical Guide to Averaging Functions*. Springer.

Beliakov, G., Gagolewski, M., and James, S. (2016b). Penalty-based and other representations of economic inequality. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, **24(Suppl.1)**, 1–23. doi:10.1142/S0218488516400018.

Beliakov, G., Gagolewski, M., and James, S. (2018). Least median of squares (LMS) and least trimmed squares (LTS) fitting for the weighted arithmetic mean. In Medina, J. et al., editors, *Information Processing and Management of Uncertainty in Knowledge-Based Systems. Theory and Foundations*, pages 367–378. Springer. doi:10.1007/978-3-319-91476-3_31.

Beliakov, G., Gagolewski, M., and James, S. (2019a). Aggregation on ordinal scales with the Sugeno integral for biomedical applications. *Information Sciences*, **501**, 377–387. doi:10.1016/j.ins.2019.06.023.

Beliakov, G., Gagolewski, M., James, S., Pace, S., Pastorello, N., Thilliez, E., and Vasa, R. (2019b). Measuring traffic congestion: An approach based on learning weighted inequality, spread and aggregation indices from comparison data. *Applied Soft Computing*, **67**, 910–919. doi:10.1016/j.asoc.2017.07.014.

Beliakov, G., Gagolewski, M., and James, S. (2020a). Robust fitting for the Sugeno integral with respect to general fuzzy measures. *Information Sciences*, **514**, 449–461. doi:10.1016/j.ins.2019.11.024.

Beliakov, G., Gagolewski, M., and James, S. (2020b). DC optimization for constructing discrete Sugeno integrals and learning nonadditive measures. *Optimization*, **69**(12), 2515–2534. doi:10.1080/02331934.2019.1705300.

Beliakov, G., Gagolewski, M., and James, S. (2021). Hierarchical data fusion processes involving the Möbius representation of capacities. *Fuzzy Sets and Systems*. doi:10.1016/j.fss.2021.02.006. in press.

Bellosta, C. J. G. (2009). *`ADGofTest`: Anderson-Darling GoF test*. URL `http://CRAN.R-project.org/package=ADGofTest`. `R` package version 0.1.

Benjamini, Y. and Hochberg, Y. (1995). Controlling False Discovery Rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society. Series B*, **57**(1), 289–300.

Bermudez, P. Z. and Kotz, S. (2010). Parameter estimation of the Generalized Pareto Distribution. Part II. *Journal of Statistical Planning and Inference*, **140**(6), 1374–1388.

Bernasconi, M., Choirat, C., and Seri, R. (2014). Empirical properties of group preference aggregation methods employed in AHP: Theory and evidence. *European Journal of Operational Research*, **232**, 584–592.

Berntsen, J., Espelid, T., and Genz, A. (1991). An adaptive algorithm for the approximate calculation of multiple integrals. *ACM Transactions on Mathematical Software*, **17**(4), 437–451.

Berson, T. A. (1993). Differential cryptanalysis mod 2^{32} with applications to MD5. *Lecture Notes in Computer Science*, **658**, 71–80.

Bertoluzza, C., Corral, N., and Salas, A. (1995). On a new class of distances between fuzzy numbers. *Mathware and Soft Computing*, **2**, 71–84.

Beyer, K., Goldstein, J., Ramakrishnan, R., and Shaft, U. (1998). When is nearest neighbor meaningful? In Beeri, C. and Buneman, P., editors, *Proc. ICDT*, pages 217–235. Springer-Verlag.

Bezdek, J. C. (1981). *Pattern Recognition with Fuzzy Objective Function Algorithms*. Springer.

Bezdek, J. C., Spillman, B., and Spillman, R. (1979). Fuzzy relation spaces for group decision theory: An application. *Fuzzy Sets and Systems*, **2**, 5–14.

Bezdek, J. C., Ehrlich, R., and Full, W. (1984). FCM: The fuzzy c-means clustering algorithm. *Computer and Geosciences*, **10**(2–3), 191–203.

Bickel, P. and Doksum, K. (1977). *Mathematical Statistics: Basic Ideas and Selected Topics*. Holden-Day.

Bickel, P. and Lehmann, E. (1975a). Descriptive statistics for nonparametric models. I. Introduction. II. Location. *The Annals of Statistics*, **3**, 1039–1069.

Bickel, P. and Lehmann, E. (1975b). Descriptive statistics for nonparametric models. III. Dispersion. *The Annals of Statistics*, **4**(6), 1139–1158.

Bickel, P. and Lehmann, E. (1975c). Descriptive statistics for nonparametric models. IV. Spread. In Jureckova, A., editor, *Contributions to Statistics*, pages 33–40. Academia, Prague.

Biecek, P. (2011). *Przewodnik po pakiecie R*. GiS, Wrocław.

Biecek, P. (2012). *Analiza danych z programem R. Modele liniowe z efektami stałymi, losowymi i mieszanymi*. PWN, Warszawa.

Bilenko, M., Mooney, R., Cohen, W., Ravikumar, P., and Fienberg, S. (2003). Adaptive name matching in information integration. *IEEE Intelligent Systems*, **18**(5), 16–23.

Billard, L. and Diday, E. (2003). From the statistics of data to the statistics of knowledge: Symbolic data analysis. *Journal of the American Statistical Association*, **98**(462), 470–486.

Bille, P. (2005). A survey on tree edit distance and related problems. *Theoretical Computer Science*, **337**(1–3), 217–239.

Billingsley, P. (1979). *Probability and Measure*. Wiley.

Billingsley, P. (2009). *Prawdopodobieństwo i miara*. PWN, Warszawa.

Birkhoff, G. (1967). *Lattice Theory*. American Mathematical Society, Providence, RI.

Bisschop, J. et al. (2012). *AIMMS Optimization Modeling*. Paragon Decision Technology.

B.J. Oommen, R. L. (1997). Pattern recognition of strings with substitutions, insertions, deletions and generalized transpositions. *Pattern Recognition*, **30**, 789–800.

Blizard, W. D. (1989). Multiset theory. *Notre Dame Journal of Formal Logic*, **30**(1), 36–66.

Bloch, I. (1996). Information combination operators for data fusion: A comparative review with classification. *IEEE Transactions on Systems, Man, and Cybernetics – Part A: Systems and Humans*, **26**(1), 52–67.

Bloomfield, P. and Steiger, W. L. (1983). *Least Absolute Deviations. Theory, applications, and algorithms*. Birkhäuser, Boston, Basel, Stuttgart.

Blum, M., Floyd, R. W., Pratt, V., Rives, R. L., and Tarjan, R. E. (1973). Time bounds for selection. *Journal of Computer and System Sciences*, **7**(4), 448–460.

Bock, H.-H. (2008). Origins and extensions of the k-means algorithm in cluster analysis. *Electronic Journ@l for History of Probability and Statistics*, **4**(2), 1–18.

Bock, H.-H. and Diday, E. (2000). *Analysis of Symbolic Data*. Springer.

Bodenhofer, U., de Baets, B., and Fodor, J. (2007). A compendium of fuzzy weak orders: Representations and constructions. *Fuzzy Sets and Systems*, **158**, 811–829.

Bodenhofer, U. (1999). *A similarity-based generalization of fuzzy orderings*. PhD thesis, Jonannes Kepler University, Linz, Austria.

Bodjanova, S. (2005). Median value and median interval of a fuzzy number. *Information Sciences*, **172**, 73–89.

Boell, S. K. and Wilson, C. S. (2010). Journal Impact Factors for evaluation scientific performance: Use of h-like indicators. *Scientometrics*, **82**, 613–626.

Bollen, J., Rodriguez, M. A., and van de Sompel, H. (2006). Journal status. *Scientometrics*, **69**(3), 669–687.

Bonferroni, C. (1930). *Elementi di statistica generale*. Libreria Seber, Firenze.

Bonitz, M. (2005). Ten years of Matthew effect for countries. *Scientometrics*, **64**(3), 375–379.

Bonnett, X., Shine, R., and Lourdais, O. (2002). Taxonomic chauvinism. *TRENDS in Ecology and Evolution*, **21**(4), 1–3.

Bookstein, A. (2001). Implications of ambiguity for scientometric measurement. *Journal of the American Society for Information Science and Technology*, **52**(1), 74–79.

Boomsma, W., Mardia, K., Taylor, C., Ferkinghoff-Borg, J., Krogh, A., and Hamelryck, T. (2008). A generative, probabilistic model of local protein structure. *Proceedings of the National Academy of Sciences*, **105**(26), 8932–8937.

Bornmann, L. and Daniel, H.-D. (2007a). Convergent validation of peer review decisions using the h index. Extent of and reasons for type I and type II errors. *Journal of Informetrics*, **1**, 204–213.

Bornmann, L. and Daniel, H.-D. (2007b). What do we know about the h index? *Journal of the American Society for Information Science and Technology*, **58**(9), 1381–1385.

Bornmann, L. and Daniel, H.-D. (2008). What do citation counts measure? A review of studies on citing behavior. *Journal of Documentation*, **64**(1), 45–80.

Bornmann, L. and Daniel, H.-D. (2009). The state of h index research. *EMBO Reports*, **10**(1), 2–5.

Bornmann, L., Mutz, R., and Daniel, H.-D. (2007). The b index as a measure of scientific excellence. A promising supplement to the h index. *Cybermetrics*, **11**(1).

Bornmann, L., Mutz, R., and Daniel, H.-D. (2008). Latent Markov modeling applied to grant peer review. *Journal of Informetrics*, **2**(3), 217–228.

Borovskikh, Y. V. (1981). Nonuniform estimation of rate of convergence for L-statistics. *Ukrainian Mathematical Journal*, **33**(2), 127–132.

Borovskikh, Y. V. and Weber, N. C. (2010). Asymptotic distributions for a class of generalized L-statistics. *Bernoulli*, **16**(4), 1177–1190.

Borůvka, O. (1926a). O jistém problému minimálním. *Práce Moravské Přírodovědecké Společnosti v Brně*, **3**, 37–58.

Borůvka, O. (1926b). Příspěvek k řešení otázky ekonomické stavby elektrovodních sítí. *Elektronický Obzor*, **15**, 153–154.

Borsik, J. and Doboš, J. (1981). On a product of metric spaces. *Mathematica Slovaca*, **31**, 193–205.

Bortot, S. and Marques Pereira, R. A. (2014). The binomial Gini inequality indices and the binomial decomposition of welfare functions. *Fuzzy Sets and Systems*, **255**, 92–114.

Bortot, S. and Marques Pereira, R. (2015). On a new poverty measure constructed from the exponential mean. In *Proc. IFSA/EUSFLAT'15*, pages 333–340. Atlantis Press.

Bottema, O. (1981). Het begrip "merkwaardig" met betrekking tot punten in de driehoeksmeetkunde. *Nieuw Tijdschr. Wisk.*, **69**, 2–7.

Boucher, C. and Ma, B. (2011). Closest string with outliers. *BMC Bioinformatics*, **12**, S55.

Boussou, D. and Perny, P. (1992). Ranking methods for valued preference relations: A characterization of a method based on leaving and entering flows. *European Journal of Operational Research*, **61**(1–2), 186–194.

Bouyssou, D. (1992). Ranking methods based on valued preference relations: A characterization of the net flow method. *European Journal of Operational Research*, **60**(1), 61–67.

Bouyssou, D. and Marchant, T. (2010). Consistent bibliometric rankings of authors and of journals. *Journal of Informetrics*, **4**, 365–378.

Bouyssou, D. and Marchant, T. (2011a). Bibliometric rankings of journals based on Impact Factors: An axiomatic approach. *Journal of Informetrics*, **5**, 75–86.

Bouyssou, D. and Marchant, T. (2011b). Ranking scientists and departments in a consistent manner. *Journal of the American Society for Information Science and Technology*, **62**(9), 1761–1769.

Boyack, K. W., Klavans, R., and Börner, K. (2005). Mapping the backbone of science. *Scientometrics*, **64**(3), 351–374.

Boyd, S. and Vandenberghe, L. (2009). *Convex Optimization*. Cambridge University Press.

Boytsov, L. (2011). Indexing methods for approximate dictionary searching: Comparative analyses. *ACM Journal of Experimental Algorithmics*, **16**, 1–86.

Bras-Amorós, M., Domingo-Ferrer, J., and Torra, V. (2011). A bibliometric index based on the collaboration distance between cited and citing authors. *Journal of Informetrics*, **5**(2), 248–264.

Braun, T., Glänzel, W., and Schubert, A. (2006). A Hirsch-type index for journals. *Scientometrics*, **69**(1), 169–173.

Bravington, M. (2003). Debugging without (too many) tears. *R News*, **3**(3), 29–32.

Breiman, L. (2001). Random forests. *Machine Learning*, **45**, 5–32.

Breiman, L., Friedman, J. H., Olshen, R. A., and Stone, C. J. (1984). *Classification and Regression Trees*. Brooks/Cole Publishing, Monterey.

Bremner, D., Chen, D., Iacono, J., Langerman, S., and Morin, P. (2008). Output-sensitive algorithms for Tukey depth and related problems. *Statistics and Computing*, **18**(3), 259–266.

Brent, R. (1973). *Algorithms for minimization without derivatives*. Prentice-Hall.

Brezis, H. (2010). *Functional analysis, Sobolev spaces and partial differential equations*. Springer.

Brimberg, J. (1995). The Fermat-Weber location problem revisited. *Mathematical Programming*, **71**, 71–76.

Brimberg, J. and Love, R. F. (1993). Global convergence of a generalized iterative procedure for the minisum location problem with l_p distances. *Operations Research*, **41**(6), 1153–1163.

Brin, S. (1995a). Near neighbor search in large metric spaces. In *Proc. Intl. Conf. Very Large Data Bases*, pages 574–584. Morgan Kaufmann.

Brin, S. (1995b). Near neighbor search in large metric spaces. In *In Proceedings of the 21th International Conference on Very Large Data Bases*, pages 574–584. Morgan Kaufmann Publishers.

Broadus, R. N. (1987). Early approaches to bibliometrics. *Journal of the American Society for Information Science*, **38**(2), 127–129.

Brönnimann, H., Melquiond, G., and Pionc, S. (2006). The design of the Boost interval arithmetic library. *Theoretical Computer Science*, **351**(1), 111–118.

Bronselaer, A. and De Tré, G. (2010). Aspects of object merging. In *Proc. NAFIPS'10*, pages 1–6. IEEE, Toronto, ON.

Bronselaer, A., Szymczak, M., Zadrożny, S., and De Tré, G. (2016). Dynamical order construction in data fusion. *Information Fusion*, **27**, 1–18.

Brown, B. (1983). Statistical uses of the spatial median. *Journal of the Royal Statistical Society. Series B (Methodological)*, **45**(1), 25–30.

Brumback, R. A. (2009). Impact Factor Wars: Episode V — The Empire strikes back. *Journal of Child Neurology*, **24**(3), 260–262.

Brunelli, M. and Mezei, J. (2013). How different are ranking methods for fuzzy numbers? a numerical study. *International Journal of Approximate Reasoning*, **54**, 627–639.

Buchholz, K. (1995). Criteria for the analysis of scientific quality. *Scientometrics*, **32**(2), 195–218.

Buitinck, L., Louppe, G., Blondel, M., Pedregosa, F., Mueller, A., Grisel, O., Niculae, V., Prettenhofer, P., Gramfort, A., Grobler, J., Layton, R., VanderPlas, J., Joly, A., Holt, B., and Varoquaux, G. (2013). API design for machine learning software: experiences from the scikit-learn project. In *ECML PKDD Workshop: Languages for Data Mining and Machine Learning*, pages 108–122.

Bulla, L. (1994). An index of evenness and its associated diversity measure. *Oikos*, **70**, 167–171.

Bullen, P. (2003). *Handbook of Means and Their Inequalities*. Springer Science+Business Media, Dordrecht.

Bunke, H. (1997). On a relation between graph edit distance and maximum common subgraph. *Pattern Recognition Letters*, **18**(8), 689–694.

Bunke, H. and Riesen, K. (2011). Recent advances in graph-based pattern recognition with applications in document analysis. *Pattern Recognition*, **44**(5), 1057–1067.

Bunke, H. and Shearer, K. (1998). A graph distance metric based on the maximal common subgraph. *Pattern Recognition Letters*, **19**(3–4), 255–259.

Burrell, Q. L. (1992). A simple linear model for linked informetric processes. *Information Processing & Management*, **28**(5), 637–645.

Burrell, Q. L. (1994). The Kolmogorov-Smirnov test and rank-frequancy distributions. *Journal of the American Society for Information Science*, **45**(1), 59.

Burrell, Q. L. (2001). Stochastic modelling of the first-citation distribution. *Scientometrics*, **52**(1), 3–12.

Burrell, Q. L. (2003). Predicting future citation behavior. *Journal of the American Society for Information Science and Technology*, **54**(5), 372–378.

Burrell, Q. L. (2005). Are "sleeping beauties" to be expected? *Scientometrics*, **65**(3), 381–389.

Burrell, Q. L. (2006). The use of Lotka functions and systematic sampling. *Scientometrics*, **67**(2), 323–325.

Burrell, Q. L. (2007a). Hirsch index of Hirsch rate? Some thoughts arising from Liang's data. *Scientometrics*, **73**(1), 19–28.

Burrell, Q. L. (2007b). Hirsch's h-index: A stochastic model. *Journal of Informetrics*, **1**, 16–25.

Burrell, Q. L. (2007c). On the h-index, the size of the Hirsch core and Jin's A-index. *Journal of Informetrics*, **1**, 170–177.

Burrell, Q. L. (2008a). The publication/citation process at the micro level: A case study. In Kretschmer, H. and Havemann, F., editors, *Proc. WIS 2008, 4th Intl. Conf. Webometrics, Informetrics and Scientometrics & 9th COLLNET Meeting*, Berlin, 2008a.

Burrell, Q. L. (2008b). Some comments on "The estimation of lost multi-copy documents: A new type of informetrics theory" by Egghe and Proot. *Journal of Informetrics*, **2**, 101–105.

Burrell, Q. L. (2008c). Extending Lotkaian informetrics. *Information Processing & Management*, **44**, 1794–1807.

Burrell, Q. L. (2009). On Hirsch's h, Egghe's g and Kosmulski's $h(2)$. *Scientometrics*, **79**(1), 323–325.

Bustince, H., Barrenechea, E., and Pagola, M. (2008). Relationship between restricted dissimilarity functions, restricted equivalence functions and normal e_N-functions: Image thresholding invariant. *Pattern Recognition Letters*, **29**(4), 525–536.

Bustince, H., Fernandez, J., Mesiar, R., Pradera, A., and Beliakov, G. (2011). Restricted dissimilarity functions and penalty functions. In Galichet, S. et al., editors, *Proc. Eusflat/LFA'11*, pages 79–85.

Bustince, H., Barrenechea, E., Calvo, T., James, S., and Beliakov, G. (2014a). Consensus in multi-expert decision making problems using penalty functions defined over a cartesian product of lattices. *Information Fusion*, **17**, 56–64.

Bustince, H., Fernandez, J., Kolesárová, A., and Mesiar, R. (2014b). Fusion functions and directional monotonicity. *Communications in Computer and Information Science*, **444**, 262–268.

Bustince, H., Fernandez, J., Kolesárová, A., and Mesiar, R. (2015). Directional monotonicity of fusion functions. *European Journal of Operational Research*, **244**(1), 300–308.

Bustince, H., Beliakov, G., Dimuro, G. P., Bedregal, B., and Mesiar, R. (2017). On the definition of penalty functions in data aggregation. *Fuzzy Sets and Systems*, **323**, 1–18.

Byrd, R. H., Nocedal, J., and Schnabel, R. B. (1994). Representations of quasi-Newton matrices and their use in limited memory methods. *Mathematical Programming*, **63**(4), 129–156.

Byrd, R., Lu, P., and Nocedal, J. (1995). A limited memory algorithm for bound constrained optimization. *SIAM Journal on Scientific and Statistical Computing*, **16**, 1190–1208.

Báez-Sánchez, A., Moretti, A., and Rojas-Medar, M. (2012). On polygonal fuzzy sets and numbers. *Fuzzy Sets and Systems*, **209**, 54–65.

Cabrerizo, F., Alonso, S., I.J.Pérez, and Herrera-Viedma, E. (2008). On consensus measures in fuzzy group decision making. *Lecture Notes in Artificial Intelligence*, **5285**, 86–97.

Calvo, T. and Beliakov, G. (2010). Aggregation functions based on penalties. *Fuzzy Sets and Systems*, **161**, 1420–1436.

Calvo, T. and Mayor, G. (1999). Remarks on two types of extended aggregation functions. *Tatra Mountains Mathematical Publications*, **16**, 235–253.

Calvo, T., Mayor, G., Torrens, J., Suner, J., Mas, M., and Carbonell, M. (2000). Generation of weighting triangles associated with aggregation functions. *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems*, **8**(4), 417–451.

Calvo, T., Kolesárová, A., Komorníková, M., and Mesiar, R. (2002a). Aggregation operators: Properties, classes and construction methods. In Calvo et al. (2002b), pages 3–104.

Calvo, T., Mayor, G., and Mesiar, R., editors (2002b). *Aggregation operators. New trends and applications*, volume 97 of *Studies in Fuzziness and Soft Computing*. Physica-Verlag, New York.

Calvo, T., Mesiar, R., and Yager, R. R. (2004). Quantitative weights and aggregation. *IEEE Transactions on Fuzzy Systems*, **12**(1), 62–69.

Camargo, J. (1993). Must dominance increase with the number of subordinate species in competitive interactions? *Journal of Theoretical Biology*, **161**(4), 537–542.

Campello, R. J. G. B., Moulavi, D., Zimek, A., and Sander, J. (2015). Hierarchical density estimates for data clustering, visualization, and outlier detection. *ACM Transactions on Knowledge Discovery from Data*, **10** (1), 5:1–5:51. doi:10.1145/2733381.

Carbonell, M., Mas, M., and Mayor, G. (1997). On a class of monotonic extended owa operators. In *Proc. 6th IEEE International Conference on Fuzzy Systems (FUZZ-IEEE'97)*, volume 3, pages 1695–1700. IEEE, Barcelona, Spain.

Cardin, M. (2011). Aggregation functionals on complete lattices. In Galichet, S. et al., editors, *Proc. Eusflat/LFA'11*, pages 86–89.

Cardin, M. and Couceiro, M. (2011). Invariant functionals on completely distributive lattices. *Fuzzy Sets and Systems*, **167**(1), 45–56.

Carlsson, C. and Fullér, R. (2001). On possibilistic mean value and variance of fuzzy numbers. *Fuzzy Sets and Systems*, **122**, 315–326.

Carlsson, C., Fulléer, R., and Majlender, P. (2004). Additions of completely correlated fuzzy numbers. In *Proc. FUZZ-IEEE'04*, pages 535–539, Budapest, Hungary, 2004. IEEE.

Caruana, R. et al. (2015). Intelligible models for HealthCare: Predicting pneumonia risk and hospital 30-day readmission. In *Proc. KDD'15*, pages 1721–1730. ACM, Sydney, Australia.

Castagnoli, G., Bräuer, S., and Herrmann, M. (1993). Optimization of cyclic redundancy-check codes with 24 and 32 parity bits. *IEEE Transactions on Communications*, **41**(6), 883–892.

Cena, A. and Gagolewski, M. (2013a). OM3: Ordered maxitive, minitive, and modular aggregation operators – Part I: Axiomatic analysis under arity-dependence. In Bustince, H. et al., editors, *Aggregation Functions in Theory and in Practise*, volume 228 of *Advances in Intelligent Systems and Computing*, pages 93–103. Springer. doi:10.1007/978-3-642-39165-1_13.

Cena, A. and Gagolewski, M. (2013b). OM3: Ordered maxitive, minitive, and modular aggregation operators – Part II: A simulation study. In Bustince, H. et al., editors, *Aggregation Functions in Theory and in Practise*, volume 228 of *Advances in Intelligent Systems and Computing*, pages 105–115. Springer. doi:10.1007/978-3-642-39165-1_14.

Cena, A. and Gagolewski, M. (2015a). Clustering and aggregation of informetric data sets. In *Computational methods in data analysis (Proc. ITRIA'15 vol. 1)*, pages 5–26. Institute of Computer Science, Polish Academy of Sciences.

Cena, A. and Gagolewski, M. (2015b). Aggregation and soft clustering of informetric data. In Baczynski, M., De Baets, B., and Mesiar, R., editors, *Proc. 8th International Summer School on Aggregation Operators (AGOP 2015)*, pages 79–84, Katowice, Poland, 2015b. University of Silesia. ISBN 978-83-8012-519-3.

Cena, A. and Gagolewski, M. (2015c). A K-means-like algorithm for informetric data clustering. In Alonso, J., Bustince, H., and Reformat, M., editors, *Proc. IFSA/EUSFLAT'15*, pages 536–543. Atlantis Press. doi:10.2991/ifsa-eusflat-15.2015.77.

Cena, A. and Gagolewski, M. (2015d). OM3: Ordered maxitive, minitive, and modular aggregation operators – Axiomatic and probabilistic properties in an arity-monotonic setting. *Fuzzy Sets and Systems*, **264**, 138–159. doi:10.1016/j.fss.2014.04.001.

Cena, A. and Gagolewski, M. (2016). Fuzzy k-minpen clustering and k-nearest-minpen classification procedures incorporating generic distance-based penalty minimizers. In Carvalho, J. et al., editors, *Information Processing and Management of Uncertainty in Knowledge-Based Systems, Part II*, volume 611 of *Communications in Computer and Information Science*, pages 445–456. Springer. doi:10.1007/978-3-319-40581-0_36.

Cena, A. and Gagolewski, M. (2017). OWA-based linkage and the Genie correction for hierarchical clustering. In *Proc. FUZZ-IEEE'17*. IEEE. doi:10.1109/FUZZ-IEEE.2017.8015652. no. 8015652.

Cena, A. and Gagolewski, M. (2020). Genie+OWA: Robustifying hierarchical clustering with OWA-based linkages. *Information Sciences*, **520**, 324–336. doi:10.1016/j.ins.2020.02.025.

Cena, A., Gagolewski, M., and Mesiar, R. (2015). Problems and challenges of information resources producers' clustering. *Journal of Informetrics*, **9**(2). doi:10.1016/j.joi.2015.02.005.

Cena, A., Gagolewski, M., Żogała-Siudem, B., Kosiński, M., and Potocka, N. (2020). *TurtleGraphics*. R package; `http://cran.r-project.org/package=TurtleGraphics`.

Cervone, D. P. et al. (2012). Voting with rubber bands, weights, and strings. *Mathematical Social Sciences*, **64**, 11–27.

Chakerian, G. and Ghandehari, M. (1985). The Fermat problem in Minkowski spaces. *Geometriæ Dedicata*, **17**, 227–238.

Chakraborty, B. and Chaudhuri, P. (1996). On a transformation and re-transformation technique for constructing an affine equivariant multivariate median. *Proceedings of the American Mathematical Society*, **124**(8), 2539–2547.

Chakravarty, S. (1990). *Ethical Social Index Numbers*. Springer-Verlag, New York.

Chambers, J. (1998). *Programming with Data*. Springer-Verlag.

Chambers, J. (2008). *Software for Data Analysis. Programming with R*. Springer-Verlag.

Chambers, J. and Hastie, T. (1992). *Statistical Models in S*. Chapman & Hall.

Chan, T. M. (1996). Optimal output-sensitive convex hull algorithms in two and three dimensions. *Discrete and Computational Geometry*, **16**, 361–368.

Chan, T. M. (2004). An optimal randomized algorithm for maximum Tukey depth. In *Proc. 15th ACM-SIAM Symp. Discrete Algorithms (SODA)*, pages 430–436.

Chanas, S. (2001). On the interval approximation of a fuzzy number. *Fuzzy Sets and Systems*, **122**, 353–356.

Chandrasekaran, R. and Tamir, A. (1989). Open questions concerning Weiszfeld's algorithm for the Fermat-Weber location problem. *Mathematical Programming*, **44**, 293–295.

Chandrashekar, G. and Sahin, F. (2014). A survey on feature selection methods. *Computers & Electrical Engineering*, **40**(1), 16–28.

Chang, H. and Yeung, D. (2008). Robust path-based spectral clustering. *Pattern Recognition*, **41**(1), 191–203.

Chaudhuri, P. and Sengupta, D. (1993). Sign tests in multidimension: Inference based on the geometry of the data cloud. *Journal of the American Statistical Association*, **88**(424), 1363–1370.

Chavent, M. and Saracco, J. (2008). Central tendency and dispersion measures for intervals and hypercubes. *Communications in Statistics – Theory and methods*, **37**, 1471–1482.

Chavez, E., Navarro, G., Baeza-Yates, R., and Marroquin, J. L. (2001). Searching in metric spaces. *ACM Computing Surveys*, **33**(3), 273–321.

Chazelle, B. (1993). An optimal convex hull algorithm in any fixed dimension. *Discrete and Computational Geometry*, **10**(1), 377–409.

Chen, C.-T. (2000). Extensions of the TOPSIS for group decision-making under fuzzy environment. *Fuzzy Sets and Systems*, **114**(1), 1–9.

Chen, S.-J. and Hwang, C.-L. (1992). *Fuzzy Multiple Attribute Decision Making: Methods and Applications*. Springer, Berlin, Heidelberg.

Chen, Y.-S. and Leimkuhler, F. F. (1986). A relationship between Lotka's law, Bradford's law, and Zipf's law. *Journal of the American Society for Information Science*, **37**(5), 307–314.

Chen, Y.-L. and Cheng, L.-C. (2009). Mining maximum consensus sequences from group ranking data. *European Journal of Operational Research*, **198**, 241–251.

Chen, Z.-Z. and Wang, L. (2011). Fast exact algorithms for the closest string and substring problems with application to the planted (l, d) motif model. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, **8**(5), 1400–1410.

Cheney, E. (1966). *Introduction to Approximation Theory*. McGraw-Hill.

Cheng, Y. and Liu, N. C. (2006). A first approach to the classification of the top 500 world universities by their disciplinary characteristics using scientometrics. *Scientometrics*, **68**(1), 135–150.

Chenouri, S. and Small, C. G. (2012). A nonparametric multivariate multisample test based on data depth. *Electronic Journal of Statistics*, **6**, 760–782.

Chiclana, F., Tapia García, J., del Moral, M., and Herrera-Viedma, E. (2013). A statistical comparative study of different similarity measures of consensus in group decision making. *Information Sciences*, **221**, 110–123.

Chimani, M., Woste, M., and Böcker, S. (2011). A closer look at the closest string and closest substring problem. In *Proc. 13th Workshop Algorithm Engineering and Experiments (ALENEX'2011)*, pages 13–24.

Chin, F. Y., Deng, X., Fang, Q., and Zhu, S. (2004). Approximate and dynamic rank aggregation. *Theoretical Computer Science*, **325**(3), 409–424.

Choquet, G. (1954). Theory of capacities. *Annales de l'institut Fourier*, **5**, 131–295.

Choulakian, V. and Stephens, M. A. (2001). Goodness-of-fit tests for the Generalized Pareto Distribution. *Technometrics*, **43**(4), 478–484.

Chwałkowski, R. (2001). *Typografia typowej książki*. Helion, Gliwice.

Clarkson, J. A. (1936). Uniformly convex spaces. *Transactions of the American Mathematical Society*, **40**, 396–414.

Clopper, C. and Pearson, E. (1934). The use of confidence or fiducial limits illustrated in the case of the binomial. *Biometrika*, **26**, 404–413.

Colomer, J. M., editor (2004). *Handbook of Electoral System Choice*. Palgrave Macmillan, London.

Contini, S., Steinfeld, R., Pieprzyk, J., , and Matusiewicz, K. (2007). A critical look at cryptographic hash function literature. In *ECRYPT Hash Workshop, 2007*.

Conway, J. H. and Sloane, N. J. A. (1998). *Sphere Packings, Lattices and Groups*. Springer-Verlag, New York.

Coppersmith, D., Fleischer, L., and Rudra, A. (2006). Ordering by weighted number of wins gives a good ranking for weighted tournaments. In *Proc. 17th Annual ACM-SIAM Symp. Discrete Algorithms (SODA'06)*, pages 776–782.

Coroianu, L. (2011). Best Lipschitz constant of the trapezoidal approximation operator preserving the expected interval. *Fuzzy Sets and Systems*, **165**(1), 81–97.

Coroianu, L. (2012). Lipschitz functions and fuzzy number approximations. *Fuzzy Sets and Systems*, **200**, 116–135.

Coroianu, L. (2013). *Fuzzy Approximation Operators*. PhD thesis, Babeș-Bolyai University, Cluj-Napoca, Romania.

Coroianu, L. (2016). Necessary and sufficient conditions for the equality of the interactive and non-interactive sums of two fuzzy numbers. *Fuzzy Sets and Systems*, **283**, 40–55.

Coroianu, L. and Fullér, R. (2013). On multiplication of interactive fuzzy numbers. In *Proc. IEEE Intl. Symp. Intelligent Systems and Informatics (SISY'13)*, pages 181–185.

Coroianu, L. and Gagolewski, M. (2019). Penalty-based data aggregation in real normed vector spaces. In Halas, R. et al., editors, *New Trends in Aggregation Theory*, volume 981 of *Advances in Intelligent Systems and Computing*, pages 160–171. Springer. doi:10.1007/978-3-030-19494-9_15.

Coroianu, L., Gagolewski, M., and Grzegorzewski, P. (2013). Nearest piecewise linear approximation of fuzzy numbers. *Fuzzy Sets and Systems*, **233**, 26–51. doi:10.1016/j.fss.2013.02.005.

Coroianu, L., Gagolewski, M., Grzegorzewski, P., Adabitabar Firozja, M., and Houlari, T. (2014a). Piecewise linear approximation of fuzzy numbers preserving the support and core. In Laurent, A. et al., editors, *Information Processing and Management of Uncertainty in Knowledge-Based Systems, Part II*, volume 443 of *Communications in Computer and Information Science*, pages 244–254. Springer. doi:10.1007/978-3-319-08855-6_25.

Coroianu, L., Gal, S. G., and Bede, B. (2014b). Approximation of fuzzy numbers by max-product Bernstein operators. *Fuzzy Sets and Systems*, **257**, 41–66.

Coroianu, L., Gagolewski, M., and Grzegorzewski, P. (2019). Piecewise linear approximation of fuzzy numbers: Algorithms, arithmetic operations and stability of characteristics. *Soft Computing*, **23**(19), 9491–9505. doi:10.1007/s00500-019-03800-2.

Coroianu, L., Fullér, R., Gagolewski, M., and James, S. (2020). Constrained ordered weighted averaging aggregation with multiple comonotone constraints. *Fuzzy Sets and Systems*, **395**, 21–39. doi:10.1016/j.fss.2019.09.006.

Costas, R., van Leeuwen, T., and Bordons, M. (2010). A bibliometric classificatory approach for the study and assessment of research performance at the individual level: The effects of age on productivity and impact. *Journal of the American Society for Information Science and Technology*, **61**, 1564–1581.

Costas, R. and Bordons, M. (2007). The h-index: Advantages, limitations and its relation with other bibliometric indicators at the micro level. *Journal of Informetrics*, **1**, 193–203.

Costas, R. and Bordons, M. (2008). Is g-index better than h-index? An exploratory study at the individual level. *Scientometrics*, **77**(2), 267–288.

Couceiro, M. and Marichal, J.-L. (2010). Characterizations of discrete Sugeno integrals as polynomial functions over distributive lattices. *Fuzzy Sets and Systems*, **161**, 694–707.

Craig, A. T. and Hogg, R. V. (1978). *Intorudtion to Mathematical Statistics*. Macmillan Publishing Co., Inc., New York.

Cramér, H. (1946). *Mathematical methods of statistics*. Princeton University Press, Princeton.

Crawley, M. (2005). *Statistics: An Introduction Using R*. John Wiley & Sons.

Crawley, M. (2007). *The R Book*. John Wiley & Sons.

Cronin, B. (1998). Metatheorizing citation. *Scientometrics*, **43**(1), 45–55.

Crouse, D. F. (2016). On implementing 2D rectangular assignment algorithms. *IEEE Transactions on Aerospace and Electronic Systems*, **52**(4), 1679–1696. doi:10.1109/TAES.2016.140952.

Curtin, R. R., Edel, M., Lozhnikov, M., Mentekidis, Y., Ghaisas, S., and Zhang, S. (2018). mlpack 3: A fast, flexible machine learning library. *Journal of Open Source Software*, **3**(26), 726. doi:10.21105/joss.00726.

Ćwik, J. and Mielniczuk, J. (2009). *Statystyczne systemy uczące się. Ćwiczenia w oparciu o pakiet R*. OW Politechniki Warszawskiej, Warszawa.

Czogała, E. and Drewniak, J. (1984). Associative monotonic operations in fuzzy set theory. *Fuzzy Sets and Systems*, **12**, 249–269.

da Costa Pereira, C., Dragoni, M., and Pasi, G. (2012). Multidimensional relevance: Prioritized aggregation in a personalized Information Retrieval setting. *Information Processing & Management*, **48**(2), 340–357.

Dalgaard, P. (2008). *Introductory Statistics with R*. Springer-Verlag.

Damerau, F. J. (1964). A technique for computer detection and correction of spelling errors. *Communications of the ACM*, **7**(3), 171–176.

d'Angelo, C. A., Giuffrida, C., and Abramo, G. (2011). A heuristic approach to author name disambiguation in bibliometric databases for large-scale research assessments. *Journal of the American Society for Information Science and Technology*, **62**(2), 257–269.

Daniels, H. and Velikova, M. (2010). Monotone and partially monotone neural networks. *IEEE Transactions on Neural Networks*, **21**(6), 906–917.

Dantzig, G. (1963). *Linear Programming and Extensions*. Princeton University Press, Princeton.

DasGupta, A. (2008). *Asymptotic theory of statistics and probability*. Springer-Verlag, New York.

Dasgupta, M. and Deb, R. (1996). Transitivity and fuzzy preferences. *Social Choice and Welfare*, **13**, 305–318.

Dasgupta, S. and Ng, V. (2009). Single data, multiple clusterings. In *Proc. NIPS Workshop Clustering: Science or Art? Towards Principled Approaches*. URL `https://clusteringtheory.org`.

Dasu, T. and Johnson, T. (2003). *Exploratory Data Mining and Data Cleaning*. John Wiley & Sons, Inc.

Datta, A., Sen, S., and Zick, Y. (2016). Algorithmic transparency via quantitative input influence. In *Proc. 37th IEEE Symposium on Security and Privacy*, pages 598–617.

David, H. A. and Nagaraja, H. N. (2003). *Order statistics*. Wiley.

Davis, M., Whistler, K., and Scherer, M. (2014). Unicode Technical Standard #10, Unicode Collation Algorithm (revision 30). http://www.unicode.org/reports/tr10/tr10-30.html.

Davis, P. M. (2009). Reward or persuasion? The battle to define the meaning of a citation. *Learned Publishing*, **21**, 5–11.

De Baets, B. (2013). Aggregation 2.0. Plenary lecture slides, 7th International Summer School on Aggregation Operators (AGOP'13), Pamplona, Spain, July 16, 2013.

De Baets, B. (2017). A monometric-based approach to data aggregation. Plenary lecture slides, 9th International Summer School on Aggregation Operators (AGOP'17), Skövde, Sweden, June 2017.

De Baets, B. and Mesiar, R. (1999). Triangular norms on product lattices. *Fuzzy Sets and Systems*, **104**, 61–75.

De Cooman, G. and Kerre, E. (1994). Order norms on bounded partially ordered sets. *Journal of Fuzzy Mathematics*, **2**, 281–310.

de Finetti, B. (1931). Sul significato soggettivo della probabilitá. *Fundamenta Mathematicæ*, **17**, 298–329.

de la Rosa de Sáa, S., Gil, M. A., González-Rodríguez, G., López, M. T., and Lubiano, M. A. (2015). Fuzzy rating scale-based questionnaires and their statistical analysis. *IEEE Transactions on Fuzzy Systems*, **23**(1), 111–126.

Dean, J. and Ghemawat, S. (2004). MapReduce: Simplified data processing on large clusters. In *Proc. Operating System Design and Implementation (OSDI)*, pages 137–150, San Francisco, CA, 2004.

Decký, M., Mesiar, R., and Stupňanová, A. (2017). Deviation-based aggregation functions. *Fuzzy Sets and Systems*. in press, doi:10.1016/j.fss.2017.03.016.

Deineko, V. G. and Woeginger, G. J. (2009). A new family of scientific impact measures: The generalized Kosmulski-indices. *Scientometrics*, **80**(3), 819–826.

del Amo, A., Montero, J., and Molina, E. (2001). Representation of recursive rules. *European Journal of Operational Research*, **130**, 29–53.

del Castillo, J. and Daoudi, J. (2009). Estimation of the Generalized Pareto Distribution. *Statistics and Probability Letters*, **79**, 684–688.

Delgado, M., Verdegay, J., and Vila, M. (1993). On aggregation operations of linguistic labels. *International Journal of Intelligent Systems*, **8**(3), 351–370.

Delgado, M., Vila, M., and Voxman, W. (1998). On a canonical representation of a fuzzy number. *Fuzzy Sets and Systems*, **93**, 125–135.

Dementiev, R., Kettner, L., and Sanders, P. (2005). STXXL: Standard Template Library for XXL data sets. Technical Report 2005/18, Fakultät für Informatik, Universität Karlsruhe.

Demirci, M. (2006). Aggregation operators on partially ordered sets and their categorical foundations. *Kybernetika*, **42**, 261–277.

Deschrijver, G. (2011). Quasi-arithmetic means and OWA functions in interval-valued and Atanassov's intuitionistic fuzzy set theory. In Galichet, S. et al., editors, *Proc. Eusflat/LFA'11*, pages 506–513.

Deschrijver, G. and Kerre, E. E. (2003). On the relationship between some extensions of fuzzy set theory. *Fuzzy Sets and Systems*, **133**(2), 227–235.

Destercke, S., Dubois, D., and Chojnacki, E. (2008a). Unifying practical uncertainty representations. I: Generalized p-boxes. *International Journal of Approximate Reasoning*, **49**(3), 649–664.

Destercke, S., Dubois, D., and Chojnacki, E. (2008b). Unifying practical uncertainty representations. II: Clouds. *International Journal of Approximate Reasoning*, **49**(3), 664–677.

Desu, M. M. and Rodine, R. H. (1969). Estimation of the population median. *Skandinavisk Aktuarietidskrift*, **28**, 67–70.

Deza, M. M. and Deza, E. (2014). *Encyclopedia of Distances*. Springer.

Diaconis, P. and Graham, R. (1977). Spearman's footrule as a measure of disarray. *Journal of the Royal Statistical Society, Series B (Methodological)*, **39**(2), 262–268.

Diaconis, P. and Shahshahani, M. (1987). The subgroup algorithm for generating uniform random variables. *Probability In Engineering And Information Sciences*, **1**, 15–32.

Diamond, P. and Kloeden, P. (1994). *Metric spaces of fuzzy sets. Theory and applications.* World Scientific, Singapore.

Didehvar, F. and Eslahchi, C. (2007). An algorithm for rank aggregation problem. *Applied Mathematics and Computation*, **189**(2), 1847–1858.

Dinu, L. P. (2003). On the classification and aggregation of hierarchies with different constitutive elements. *Fundamenta Informaticæ*, **55**(1), 39–50.

Dinu, L. P. and Ionescu, R.-T. (2012a). Clustering methods based on closest string via rank distance. In *14th Intl. Symp. Symbolic and Numeric Algorithms for Scientific Computing*, pages 207–213. IEEE.

Dinu, L. P. and Ionescu, R.-T. (2012b). An efficient rank based approach for closest string and closest substring. *PLoS One*, **7**(6), e37576.

Dinu, L. P. and Manea, F. (2006). An efficient approach for the rank aggregation problem. *Theoretical Computer Science*, **359**(1–3), 455–461.

Dinu, L. P. and Popa, A. (2012). On the closest string via rank distance. *Lecture Notes in Computer Science*, **7354**, 413–426.

Domingo-Ferrer, J. and Torra, V. (2003). Disclosure risk assessment in statistical microdata protection via advanced record linkage. *Statistics and Computing*, **13**, 343–354.

Donoho, D. (1982). *Breakdown properties of multivariate location estimates.* PhD thesis, Department of Statistics, Harvard University.

Donoho, D. L. and Gasko, M. (1992). Breakdown properties of location estimates based on halfspace depth and projected outlyingness. *The Annals of Statistics*, **20**(4), 1803–1827.

Doshi-Velez, F. and Kim, B. (2017). Towards a rigorous science of interpretable machine learning. arXiv:1702.08608.

Dua, D. and Graff, C. (2019). Uci machine learning repository. URL `http://archive.ics.uci.edu/ml`.

Dubois, D. and Prade, H. (1978). Operations on fuzzy numbers. *Int. J. Syst. Sci.*, **9**, 613–626.

Dubois, D. and Prade, H. (1987a). Fuzzy numbers: An overview. In *In: Analysis of Fuzzy Information. Mathematical Logic, vol. I*, pages 3–39. CRC Press.

Dubois, D. and Prade, H. (1987b). The mean value of a fuzzy number. *Fuzzy Sets and Systems*, **24**, 279–300.

Dubois, D. and Prade, H. (1980). *Fuzzy sets and systems. Theory and applications.* Academic Press, New York.

Dubois, D. and Prade, H. (1985). A review of fuzzy set aggregation connectives. *Information Sciences*, **39**, 85–121.

Dubois, D. and Prade, H. (1996). Semantics of quotient operators in fuzzy relational databases. *Fuzzy Sets and Systems*, **78**(1), 89–93.

Dubois, D. and Prade, H. (2001). Possibility theory, probability theory and multiple-valued logics: A clarification. *Annals of Mathematics and Artificial Intelligence*, **32**, 35–66.

Dubois, D. and Prade, H. (2004). On the use of aggregation operations in information fusion processes. *Fuzzy Sets and Systems*, **142**, 143–161.

Dubois, D. and Prade, H. (2009). Formal representations of uncertainty. In Bouyssou, D., Dubois, D., Pirlot, M., and Prade, H., editors, *Decision-making process*, chapter 3. ISTE, London, UK.

Dubois, D., Prade, H., and Testemale, C. (1988). Weighted fuzzy pattern matching. *Fuzzy Sets and Systems*, **28**, 313–331.

Dubois, D., Fargier, H., and Prade, H. (1996). Refinements of the maximin approach to decision-making in a fuzzy environment. *Fuzzy Sets and Systems*, **81**, 103–122.

Dubois, D., Kerre, E., Mesiar, R., and Prade, H. (2000). Fuzzy interval analysis. In Dubois, D. and Prade, H., editors, *Fundamentals of fuzzy sets*, pages 483–581. Kluwer, Boston, Mass.

Dubois, D., Fortemps, P., Pirlot, M., and Prade, H. (2001). Leximin optimality and fuzzy set theoretic operations. *European Journal of Operational Research*, **130**(1), 20–28.

Dubois, D., Prade, H., and Smets, P. (2008). A definition of subjective possibility. *International Journal of Approximate Reasoning*, **48**(2), 352–364.

Dujmović, J. J. (1974a). Two integrals related to means. *Publikacije Elektrotehničkog Fakulteta Univerziteta u Beogradu*, **412–460**(457), 231–232.

Dujmović, J. J. (1974b). Weighted conjunctive and disjunctive means and their application in system evaluation. *Publikacije Elektrotehničkog Fakulteta Univerziteta u Beogradu*, **461–497**(483), 147–158.

Dukhovny, A. (2007). Lattice polynomials of random variables. *Statistics and Probability Letters*, **77**, 989–994.

Durante, F., Mesiar, R., Papini, P. L., and Sempi, C. (2007). 2-increasing binary aggregation operators. *Information Sciences*, **177**, 111–129.

Durier, R. (1994). The Fermat–Weber problem and inner-product spaces. *Journal of Approximation Theory*, **78**(2), 161–173.

Durier, R. (1997). Optimal locations and inner products. *Journal of Mathematical Analysis and Applications*, **207**, 220–239.

Durier, R. and Michelot, C. (1985). Geometrical properties of the Fermat–Weber problem. *European Journal of Operational Research*, **20**, 332–343.

Durocher, S., Fraser, R., Leblanc, A., Morrison, J., and Skala, M. (2014). On combinatorial depth measures. In *Proc. 26th Canadian Conf. Computational Geometry*, pages 206–211.

Dutta, B. (2002). Inequality, poverty and welfare. In Arrow, K., Sen, A., and Suzumura, K., editors, *Handbook of Social Choice and Welfare*, pages 597–633. Elsevier.

Dwork, C., Kumar, R., Naor, M., and Sivakumar, D. (2001). Rank aggregation methods for the web. In *Proceedings of the 10th International Conference on World Wide Web*, pages 613–622. ACM.

Dyckerhoff, R., Koshevoy, G., and Mosler, K. (1996). Zonoid data depth: Theory and computation. In Prat, A. et al., editors, *Proc. COMPSTAT 1996*, pages 235–240. Physica-Verlag, Heidelberg.

Eaton, M. L. (1983). *Multivariate Statistics*. Wiley, New York.

Eckhardt, U. (1980). Weber's problem and Weiszfeld's algorithm in general spaces. *Mathematical Programming*, **18**, 186–196.

Eddelbuettel, D. (2013). *Seamless R and C++ Integration with Rcpp*. Springer, New York.

Eddelbuettel, D. and François, R. (2011). Rcpp: Seamless R and C++ integration. *Journal of Statistical Software*, **40**(8), 1–18.

Eddy, W. (1982). Convex hull peeling. In *Proc. COMPSTAT'82*, pages 42–47. Physica-Verlag, Vienna.

Edelsbrunner, H. (1987). *Algorithms in Combinatorial Geometry*. Springer-Verlag, Heidelberg.

Egghe, L. (1987). Pratt's measure for some bibliometric distributions and its relation with the 80/20 rule. *Journal of the American Society for Information Science*, **38**(4), 288–297.

Egghe, L. (1998). Mathematical theories of citation. *Scientometrics*, **43**(1), 57–62.

Egghe, L. (2005). Relations between the continuous and the discrete Lotka power function. *Journal of the American Society for Information Science and Technology*, **56**(7), 664–668.

Egghe, L. (2006a). An improvement of the h-index: the g-index. *ISSI Newsletter*, **2**(1), 8–9.

Egghe, L. (2006b). Theory and practise of the g-index. *Scientometrics*, **69**(1), 131–152.

Egghe, L. (2007). Item-time-dependent Lotkaian informetrics and applications to the calculation of the time-dependent h-index and g-index. *Mathematical and Computer Modelling*, **45**, 864–872.

Egghe, L. (2008a). The influence of merging on h-type indices. *Journal of Informetrics*, **2**(3), 252–262.

Egghe, L. (2008b). Examples of simple transformations of the h-index: Qualitative and quantitative conclusions and consequences for other indices. *Journal of Informetrics*, **2**, 136–148.

Egghe, L. (2008c). Modelling successive h-indices. *Scientometrics*, **77**(3), 377–387.

Egghe, L. (2009a). Mathematical study of h-index sequences. *Information Processing and Management*, **45**(2), 288–297.

Egghe, L. (2009b). Performance and its relation with productivity in Lotkaian systems. *Scientometrics*, **81**(2), 567–585.

Egghe, L. (2009c). Time-dependent Lotkaian informetrics incorporating growth of sources and items. *Mathematical and Computer Modelling*, **49**(1–2), 31–37.

Egghe, L. (2010a). The Hirsch index and related impact measures. *Annual Review of Information Science and Technology*, **44**, 65–114.

Egghe, L. (2010b). Influence of adding or deleting items and sources on the h-index. *Journal of the American Society for Information Science and Technology*, **61**(2), 370–373.

Egghe, L. and Rousseau, R. (2006). An informetric model for the Hirsch-index. *Scientometrics*, **69**(1), 121–129.

Ehrenfeucht, A. and Haussler, D. (1988). A new distance metric on strings computable in linear time. *Discrete Applied Mathematics*, **20**, 191–203.

Elbassioni, K. and Tiwary, H. R. (2009). Complexity of approximating the vertex centroid of a polyhedron. *Lecture Notes in Computer Science*, **5878**, 413–422.

Elbassioni, K. and Tiwary, H. R. (2012). Complexity of approximating the vertex centroid of a polyhedron. *Theoretical Computer Science*, **421**, 56–61.

Elidan, G. (2013). Copulas in machine learning. In Jaworski, P., Durante, F., and Härdle, W., editors, *Copulæ in Mathematical and Quantitative Finance*, pages 39–60. Springer.

Ester, M., Kriegel, H.-P., Sander, J., and Xu, X. (1996). A density-based algorithm for discovering clusters in large spatial databases with noise. In *Proc. KDD'96*, pages 226–231.

Eto, H. (2008). Scientometric definition of science: In what respect is the humanities more scientific than mathematical and social sciences? *Scientometrics*, **76**(1), 23–42.

Even, Y. and Lehrer, E. (2014). Decomposition-integral: Unifying Choquet and the concave integrals. *Economic Theory*, **56**(1), 33–58.

Everitt, B. and Hothorn, T. (2006). *A Handbook of Statistical Analyses Using R*. Chapman & Hall.

Eysenck, H. and Eysenck, M. (2003). *Podpatrywanie umysłu*. GWP, Gdańsk.

Facchinetti, G. and Ricci, R. G. (2004). A characterization of a general class of ranking functions on triangular fuzzy numbers. *Fuzzy Sets and Systems*, **146**(2), 297–312.

Fan, K. (1943). Entfernung zweier zufälligen Größen und die Konvergenz nach Wahrscheinlichkeit. *Mathematische Zeitschrift*, **49**, 681–683.

Fernández, M.-L. and Valiente, G. (2001). A graph distance metric combining maximum common subgraph and minimum common supergraph. *Pattern Recognition Letters*, **22**(6–7), 753–758.

Fernández Salido, J. and Murakami, S. (2003). Extending Yager's orness concept for the OWA aggregators to other mean operators. *Fuzzy Sets and Systems*, **139**(3), 515–542.

Ferraro, M. B., Giordani, P., Vantaggi, B., Gagolewski, M., Gil, M. Á., Grzegorzewski, P., and Hryniewicz, O., editors (2017). *Soft Methods for Data Science*, volume 456 of *Advances in Intelligent Systems and Computing*. Springer. ISBN 978-3-319-42971-7.

Fiala, D., Rousselot, F., and Jezek, K. (2008). PageRank for bibliographic networks. *Scientometrics*, **76**(1), 135–158.

Field, C. and Ronchetti, E. (1990). *Small sample asymptotics*. Institute of Mathematical Statistics, Hayward, CA.

Filev, D. and Yager, R. R. (1998). On the issue of obtaining OWA operator weights. *Fuzzy Sets and Systems*, **94**, 157–169.

Fischer, K., Gärtner, B., and Kutz, M. (2003). Fast smallest-enclosing-ball computation in high dimensions. In *Proc. 11th European Symposium on Algorithms (ESA)*, pages 630–641.

Fishburn, P. (1977). Condorcet social choice functions. *SIAM Journal on Applied Mathematics*, **33**(3), 469–489.

Fishburn, P. C. (1974). Lexicographic orders, utilities and decision rules: A survey. *Management Science*, **20** (11), 1442–1471.

Fisher, N. (1993). *Statistical Analysis of Circular Data*. Cambridge University Press.

Fisher, R. (1922). On the mathematical foundations of theoretical statistics. *Philosophical Transactions of the Royal Society A*, **222**, 309–368.

Fisher, R. (1918). The correlation between relatives on the supposition of Mendelian inheritance. *Philosophical Transactions of the Royal Society of Edinburgh*, **52**, 399–433.

Fisher, R. A. and Yates, F. (1938). *Statistical tables for biological, agricultural and medical research*. Oliver & Boyd, London.

Floyd, R. and Rivest, R. (1975). Expected time bounds for selection. *Communications of the ACM*, **18**(3), 165–172.

Fodor, J. and de Baets, B. (2008). Fuzzy preference modelling: Fundamentals and recent advances. In Bustince, H. et al., editors, *Fuzzy Sets and Their Extensions: Representation, Aggregation and Models*, pages 207–217. Springer-Verlag.

Fodor, J. and Roubens, M. (1994). *Fuzzy Preference Modelling and Multicriteria Decision Support*. Springer.

Fodor, J., Marichal, J.-L., and Roubens, M. (1995). Characterization of the Ordered Weighted Averaging operators. *IEEE Transactions on Fuzzy Systems*, **3**(2), 236–240.

Fodor, J. C. and Marichal, J.-L. (1997). On nonstrict means. *Æquationes Mathematicæ*, **54**(3), 308–327.

Fodor, J. (1996). An extension of Fung-Fu's theorem. *International Journal of Uncertainty, Fuzziness and Knowledge-based Systems*, **4**(3), 235–243.

Foley, J., van Dam, A., Feiner, S., Hughes, J., and Phillips, R. (2001). *Wprowadzenie do grafiki komputerowej*. WNT, Warszawa.

Forgy, E. (1965). Cluster analysis of multivariate data: efficiency versus interpretability of classifications. *Biometrics*, **21**, 768–769.

Fowlkes, E. and Mallows, C. (1983). A method for comparing two hierarchical clusterings. *Journal of the American Statistical Association*, **78**(383), 553–569.

Frances, M. and Litman, A. (1997). On covering problems of codes. *Theory of Computing Systems*, **30**(2), 113–119.

Franceschet, M. (2010). A comparison of bibliometric indicators for computer science scholars and journals on *Web of Science* and Google *Scholar*. *Scientometrics*, **83**(1), 243–258.

Franceschini, F. and Maisano, D. A. (2009). The Hirsch index in manufacturing and quality engineering. *Quality and Reliability Engineering International*, **25**, 987–995.

Franceschini, F. and Maisano, D. A. (2010). Analysis of the Hirsch index's operational properties. *European Journal of Operational Research*, **203**(2), 494–504.

Franceschini, F. and Maisano, D. A. (2011). Structured evaluation of the scientific output of academic research groups by recent h-based indicators. *Journal of Informetrics*, **5**, 64–74.

Frank, A. and Asuncion, A. (2013). UCI machine learning repository. archive.ics.uci.edu/ml.

Frank, M. (1979). On the simultaneous associativity of $f(x, y)$ and $x + y - f(x, y)$. *Æquationes Mathematicæ*, **121–144**, 19.

Fraser, A. (1957). Simulation of genetic systems by automatic digital computers. I. Introduction. *Australian Journal of Biological Sciences*, **10**, 484–491.

Fraser, A. and Burnell, D. (1970). *Computer Models in Genetics*. McGraw-Hill, New York.

Friedl, J. (2001). *Wyrażenia regularne*. Helion, Gliwice.

Friedman, J. H. and Meulman, J. J. (2004). Clustering objects on subsets of attributes. *Journal of the Royal Statistical Society: Series B (Statistical Methodology)*, **66**(4), 815–849.

Fränti, P. and Sieranoja, S. (2018). K-means properties on six clustering benchmark datasets. *Applied Intelligence*, **48**(12), 4743–4759.

Fränti, P. and Virmajoki, O. (2006). Iterative shrinking method for clustering problems. *Pattern Recognition*, **39**(5), 761–765.

Fränti, P., Mariescu-Istodor, R., and Zhong, C. (2016). XNN graph. *Lecture Notes in Computer Science*, **10029**, 207–217. doi:10.1007/978-3-319-49055-7_19.

Fu, L. and Medico, E. (2007). FLAME, a novel fuzzy clustering method for the analysis of DNA microarray data. *BMC bioinformatics*, **8**, 3.

Fullér, R. and Majlender, P. (2003). On interactive fuzzy numbers. *Fuzzy Sets and Systems*, **143**, 355–369.

Gagolewski, M. (2011a). Bibliometric impact assessment with R and the `CITAN` package. *Journal of Informetrics*, **5**(4), 678–692. doi:10.1016/j.joi.2011.06.006.

Gagolewski, M. (2011b). *Aggregation operators and their application in a formal model for quality evaluation system of scientific research (Wybrane operatory agregacji i ich zastosowanie w modelu formalnym systemu jakości w nauce)*. PhD thesis, Systems Research Institute, Polish Academy of Sciences. In Polish.

Gagolewski, M. (2012). On the relation between effort-dominating and symmetric minitive aggregation operators. In Greco, S. et al., editors, *Advances in Computational Intelligence, Part III*, volume 299 of *Communications in Computer and Information Science*, pages 276–285. Springer. doi:10.1007/978-3-642-31718-7_29.

Gagolewski, M. (2013a). Statistical hypothesis test for the difference between Hirsch indices of two Pareto-distributed random samples. In Kruse, R. et al., editors, *Synergies of Soft Computing and Statistics for Intelligent Data Analysis*, volume 190 of *Advances in Intelligent Systems and Computing*, pages 359–367. Springer. doi:10.1007/978-3-642-33042-1_39.

Gagolewski, M. (2013b). Scientific impact assessment cannot be fair. *Journal of Informetrics*, **7**(4), 792–802. doi:10.1016/j.joi.2013.07.001.

Gagolewski, M. (2013c). On the relationship between symmetric maxitive, minitive, and modular aggregation operators. *Information Sciences*, **221**, 170–180. doi:10.1016/j.ins.2012.09.005.

Gagolewski, M. (2014). *Programowanie w języku R. Analiza danych, obliczenia, symulacje (R Programming. Data Analysis, Computing, Simulations)*. Wydawnictwo Naukowe PWN, Warsaw, Poland, 1 edition. ISBN 978-83-01-17461-3. In Polish.

Gagolewski, M. (2015a). *Data Fusion: Theory, Methods, and Applications*. Institute of Computer Science, Polish Academy of Sciences, Warsaw, Poland, 1 edition. ISBN 978-83-63159-20-7.

Gagolewski, M. (2015b). Sugeno integral-based confidence intervals for the theoretical h-index. In Grzegorzewski, P. et al., editors, *Strengthening Links Between Data Analysis and Soft Computing*, volume 315 of *Advances in Intelligent Systems and Computing*, pages 233–240. Springer. doi:10.1007/978-3-319-10765-3_28.

Gagolewski, M. (2015c). Some issues in aggregation of multidimensional data. In Baczynski, M., De Baets, B., and Mesiar, R., editors, *Proc. 8th International Summer School on Aggregation Operators (AGOP 2015)*, pages 127–132, Katowice, Poland, 2015c. University of Silesia. ISBN 978-83-8012-519-3.

Gagolewski, M. (2015d). Normalized WD_pWAM and WD_pOWA spread measures. In Alonso, J., Bustince, H., and Reformat, M., editors, *Proc. IFSA/EUSFLAT'15*, pages 210–216. Atlantis Press. doi:10.2991/ifsa-eusflat-15.2015.32.

Gagolewski, M. (2015e). Spread measures and their relation to aggregation functions. *European Journal of Operational Research*, **241**(2), 469–477. doi:10.1016/j.ejor.2014.08.034.

Gagolewski, M. (2016). *Programowanie w języku R. Analiza danych, obliczenia, symulacje (R Programming. Data Analysis, Computing, Simulations)*. Wydawnictwo Naukowe PWN, Warsaw, Poland, 2 edition. ISBN 978-83-01-18939-6. In Polish.

Gagolewski, M. (2017). Penalty-based aggregation of multidimensional data. *Fuzzy Sets and Systems*, **325**, 4–20. doi:10.1016/j.fss.2016.12.009.

Gagolewski, M. (2020a). *CITAN: CITation ANalysis toolpack*. R package; `http://CRAN.R-project.org/package=CITAN`.

Gagolewski, M. (2020b). *genieclust: Fast and Robust Hierarchical Clustering with Noise Point Detection*. URL `https://genieclust.gagolewski.com`. Python and R package; `https://pypi.org/project/genieclust/`.

Gagolewski, M. (2021a). genieclust: Fast and robust hierarchical clustering. *SoftwareX*, **15**, 100722. doi:10.1016/j.softx.2021.100722.

Gagolewski, M. (2021b). *Lightweight Machine Learning Classics with R*. doi:10.5281/zenodo.4539689. URL `https://lmlcr.gagolewski.com/`. book draft v0.2.1, https://lmlcr.gagolewski.com/.

Gagolewski, M. and Caha, J. (2020). *FuzzyNumbers: Tools to deal with fuzzy numbers in R*. R package; `http://cran.r-project.org/package=FuzzyNumbers`.

Gagolewski, M. and Cena, A. (2020). *R package; agop: Aggregation operators and preordered sets in R*. R package; `http://cran.r-project.org/package=agop`.

Gagolewski, M. and Grzegorzewski, P. (2009a). A geometric approach to the construction of scientific impact indices. *Scientometrics*, **81**(3), 617–634. doi:10.1007/s11192-008-2253-y.

Gagolewski, M. and Grzegorzewski, P. (2009b). Possible and necessary h-indices. In Carvalho, J. P. et al., editors, *Proc. IFSA/EUSFLAT'09*, pages 1691–1695. IFSA.

Gagolewski, M. and Grzegorzewski, P. (2009c). O pewnym uogólnieniu indeksu hirscha. In Kawalec, P. and Lipski, P., editors, *Kadry i infrastruktura nowoczesnej nauki: Teoria i praktyka, Proc. 1st Intl. Conf. Zarządzanie Nauką*, volume 2, pages 15–29, Lublin, 2009c. Wydawnictwo Lubelskiej Szkoły Biznesu. ISBN 978-83-61671-12-1. In Polish.

Gagolewski, M. and Grzegorzewski, P. (2010a). Arity-monotonic extended aggregation operators. In Hüllermeier, E. et al., editors, *Information Processing and Management of Uncertainty in Knowledge-Based Systems*, volume 80 of *Communications in Computer and Information Science*, pages 693–702. Springer. doi:10.1007/978-3-642-14055-6_73.

Gagolewski, M. and Grzegorzewski, P. (2010b). Metody i problemy naukometrii (methods and problems of scientometrics). In Rowiński, T. and Tadeusiewicz, R., editors, *Psychologia i informatyka. Synergia i kontradykcje*, pages 103–125. Wyd. UKSW, Warsaw, Poland. ISBN 978-83-707-2679-9. In Polish.

Gagolewski, M. and Grzegorzewski, P. (2010c). S-statistics and their basic properties. In Borgelt, C. et al., editors, *Combining Soft Computing and Statistical Methods in Data Analysis*, volume 77 of *Advances in Intelligent and Soft Computing*, pages 281–288. Springer. doi:10.1007/978-3-642-14746-3_35.

Gagolewski, M. and Grzegorzewski, P. (2011a). Axiomatic characterizations of (quasi-) L-statistics and S-statistics and the Producer Assessment Problem. In Galichet, S. et al., editors, *Proc. EUSFLAT/LFA'11*, pages 53–58. Atlantis Press. doi:10.2991/eusflat.2011.112.

Gagolewski, M. and Grzegorzewski, P. (2011b). Possibilistic analysis of arity-monotonic aggregation operators and its relation to bibliometric impact assessment of individuals. *International Journal of Approximate Reasoning*, **52**(9), 1312–1324. doi:10.1016/j.ijar.2011.01.010.

Gagolewski, M. and James, S. (2018). Fitting symmetric fuzzy measures for discrete Sugeno integration. In Kacprzyk, J. et al., editors, *Advances in Fuzzy Logic and Technology 2017*, volume 642 of *Advances in Intelligent Systems and Computing*, pages 104–116. Springer. doi:10.1007/978-3-319-66824-6_10.

Gagolewski, M. and Lasek, J. (2015a). The use of fuzzy relations in the assessment of information resources producers' performance. In *Proc. 7th IEEE International Conference Intelligent Systems IS'2014, Vol. 2: Tools, Architectures, Systems, Applications*, volume 323 of *Advances in Intelligent Systems and Computing*, pages 289–300. Springer. doi:10.1007/978-3-319-11310-4_25.

Gagolewski, M. and Lasek, J. (2015b). Learning experts' preferences from informetric data. In Alonso, J., Bustince, H., and Reformat, M., editors, *Proc. IFSA/EUSFLAT'15*, pages 484–491. Atlantis Press. doi:10.2991/ifsa-eusflat-15.2015.70.

Gagolewski, M. and Mesiar, R. (2012). Aggregating different paper quality measures with a generalized h-index. *Journal of Informetrics*, **6**(4), 566–579. doi:10.1016/j.joi.2012.05.001.

Gagolewski, M. and Mesiar, R. (2014). Monotone measures and universal integrals in a uniform framework for the scientific impact assessment problem. *Information Sciences*, **263**, 166–174. doi:10.1016/j.ins.2013.12.004.

Gagolewski, M., Dębski, M., and Nowakiewicz, M. (2013). Efficient algorithm for computing certain graph-based monotone integrals: The l_p-indices. In Mesiar, R. and Bacigal, T., editors, *Proc. Uncertainty Modeling*, pages 17–23. STU Bratislava. ISBN ISBN:978-80-227-4067-8.

Gagolewski, M., Bartoszuk, M., and Cena, A. (2016a). *Przetwarzanie i analiza danych w języku Python (Data Processing and Analysis in Python)*. Wydawnictwo Naukowe PWN, Warsaw, Poland, 1 edition. ISBN 978-83-01-18940-2. In Polish.

Gagolewski, M., Bartoszuk, M., and Cena, A. (2016b). Genie: A new, fast, and outlier-resistant hierarchical clustering algorithm. *Information Sciences*, **363**, 8–23. doi:10.1016/j.ins.2016.05.003.

Gagolewski, M., Cena, A., and Bartoszuk, M. (2016c). Hierarchical clustering via penalty-based aggregation and the Genie approach. In Torra, V. et al., editors, *Modeling Decisions for Artificial Intelligence*, volume 9880 of *Lecture Notes in Artificial Intelligence*, pages 191–202. Springer. doi:10.1007/978-3-319-45656-0_16.

Gagolewski, M., James, S., and Beliakov, G. (2019). Supervised learning to aggregate data with the sugeno integral. *IEEE Transactions on Fuzzy Systems*, **27**(4), 810–815. doi:10.1109/TFUZZ.2019.2895565.

Gagolewski, M., Bartoszuk, M., and Cena, A. (2020a). *genie: A Fast and Robust Hierarchical Clustering Algorithm*. R package; `http://cran.r-project.org/package=genie`.

Gagolewski, M., Pérez-Fernández, R., and Baets, B. D. (2020b). An inherent difficulty in the aggregation of multidimensional data. *IEEE Transactions on Fuzzy Systems*, **28**, 602–606. doi:10.1109/TFUZZ.2019.2908135.

Gagolewski, M. et al. (2020c). *R package stringi: Character string processing facilities*. R package; `http://cran.r-project.org/package=stringi`.

Gan, G., Ma, C., and Wu, J. (2007). *Data Clustering: Theory, Algorithms, and Applications*. ASA-SIAM Series on Statistics and Applied Probability, Philadelphia, Alexandria. ISBN 978-0-898716-23-8.

Gao, X., Xiao, B., Tao, D., and Li, X. (2010). A survey of graph edit distance. *Pattern Analysis and Applications*, **13**(1), 113–129.

García-Lapresta, J. L. and Pérez-Román, D. (2013). Consensus-based hierarchical agglomerative clustering in the context of weak orders. In *Proc. IFSA World Congress*, pages 1010–1015. Edmonton, Canada.

García-Lapresta, J. and Pérez-Román, D. (2008). Some measures of consensus generated by distances on weak orders. In *Proc. XIV Congreso Español sobre Tecnologías y Lógica fuzzy*, pages 477–483. Cuencas Mineras.

García-Lapresta, J., Lasso de la Vega, C., Marques Pereira, R., and Urrutia, A. (2015). A new class of fuzzy poverty measures. In *Proc. of IFSA/EUSFLAT'15*, pages 1140–1146. Atlantis Press.

Garcia-Perez, M. (2009). A multidimensional extension to Hirsch's h-index. *Scientometrics*, **81**(3), 779–785.

García-Torres, M., Gómez-Vela, F., Melián-Batista, B., and Moreno-Vega, J. M. (2016). High-dimensional feature selection via feature grouping: A variable neighborhood search approach. *Information Sciences*, **326**, 102–118.

Garfield, E. (1955). Citation indexes for science. *Science*, **122**(3159), 108–111.

Garfield, E. (1964). Can citation indexing be automated? In Stevens, M. E., Giuliano, V. E., and Heilprin, L. B., editors, *Proc. Statistical Association Methods for Mechanized Documentation*, pages 189–192, Washington, 1964.

Garfield, E. (1998). Random thoughts on citationology. Its theory and practice. *Scientometrics*, **43**(1), 69–76.

Garfield, E. (2006). The history and meaning of the Journal Impact Factor. *Journal of American Medical Association*, **295**(1), 90–93.

Garfield, E., Pudovkin, A. I., and Istomin, V. S. (2003). Why do we need algorithmic historiography? *Journal of the American Society for Information Science and Technology*, **54**(5), 400–412.

Gärtner, B. (1999). Fast and robust smallest enclosing balls. *Lecture Notes in Computer Science*, **1643**, 325–338.

Gärtner, B. and Schönherr, S. (2000). An efficient, exact, and generic quadratic programming solver for geometric optimization. In *Proc. 16th ACM Symposium on Computational Geometry*, pages 110–118.

Gentle, J. (2003). *Random Number Generation and Monte Carlo Methods*. Springer-Verlag.

Gentle, J. (2007). *Matrix Algebra*. Springer-Verlag.

Gentle, J. (2009). *Computational Statistics*. Springer-Verlag.

Gentleman, R. C., Carey, V. J., Bates, D. M., et al. (2004). Bioconductor: Open software development for computational biology and bioinformatics. *Genome Biology*, **5**, R80.

Genz, A. and Malik, A. (1980). An adaptive algorithm for numeric integration over an n-dimensional rectangular region. *Journal of Computational and Applied Mathematics*, **6**(4), 295–302.

Geras, A., Siudem, G., and Gagolewski, M. (2020). Should we introduce a dislike button for academic papers? *Journal of the Association for Information Science and Technology*, **71**(2), 221–229. doi:10.1002/ASI.24231.

Ghiselli Ricci, R. (2004). Finitely and absolutely non idempotent aggregation operators. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, **12**(2), 201–217.

Ghiselli Ricci, R. (2009). Asymptotically idempotent aggregation operators. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, **17**(5), 611–631.

Ghiselli Ricci, R. and Mesiar, R. (2011). Multi-attribute aggregation operators. *Fuzzy Sets and Systems*, **181** (1), 1–13.

Ghosh, A., Chattopadhyay, N., and Chakrabarti, B. (2014). Inequality in societies, academic institutions and science journals: Gini and k-indices. *Physica A*, **410**, 30–34.

Gil-Garcia, R. J., Badia-Contelles, J. M., and Pons-Porrata, A. (2006). A general framework for agglomerative hierarchical clustering algorithms. In *18th International Conference on Pattern Recognition (ICPR'06)*, volume 2, pages 569–572.

Gini, C. (1912). *Variabilità e mutabilità*. C. Cuppini, Bologna.

Gionis, A., Mannila, H., and Tsaparas, P. (2007). Clustering aggregation. *ACM Transactions on Knowledge Discovery from Data*, **1**(1), 4.

Glänzel, W. (2006a). On the h-index — A mathematical approach to a new measure of publication activity and citation impact. *Scientometrics*, **67**(2), 315–321.

Glänzel, W. (2006b). On the opportunities and limitations of the H-index. *Science Focus*, **1**(1), 10–11.

Glänzel, W. (2007). Some new applications of the h-index. *ISSI Newsletter*, **3**(2), 28–31.

Glänzel, W. (2008a). Seven myths in bibliometrics. About facts and fiction in quantitative science studies. *COLLNET Journal of Scientometrics and Information Management*, **2**(1), 9–17.

Glänzel, W. (2008b). H-index concatenation. *Scientometrics*, **77**(2), 369–372.

Glänzel, W. (2008c). On some new bibliometric applications of statistics related to the h-index. *Scientometrics*, **77**(1), 187–196.

Glänzel, W. and Persson, O. (2005). H-index for price medalists. *ISSI Newsletter*, **1**(4), 15–18.

Godo, L. and Torra, V. (2000). On aggregation operators for ordinal qualitative information. *IEEE Transactions on Fuzzy Systems*, **8**(2), 143–154.

Goldberg, D. (1991). What every computer scientist should know about floating-point arithmetic. *ACM Computing Surveys*, **21**(1), 5–48.

Goldfarb, D. and Idnani, A. (1983). A numerically stable dual method for solving strictly convex quadratic programs. *Mathematical Programming*, **27**, 1–33.

Golub, T. et al. (1999). Molecular classification of cancer: Class discovery and class prediction by gene expression monitoring. *Science*, **286**, 531–537.

González-Barrios, J. M. and Quiroz, A. J. (2003). A clustering procedure based on the comparison between the k nearest neighbors graph and the minimal spanning tree. *Statistics & Probability Letters*, **62**(1), 23–34.

Gonzalez-Pereira, B., Guerrero-Bote, V. P., and de Moya-Anegon, F. (2010). A new approach to the metric of journals' scientific prestige: The SJR indicator. *Journal of Informetrics*, **4**(3), 379–391.

Goodman, B. and Flaxman, S. (2016). EU regulations on algorithmic decision-making and a "right to explanation". In *Proc. ICML Workshop on Human Interpretability of Machine Learning'16*. New York.

Gosselin, F. (2001). Lorenz partial order: The best known logical framework to define evenness indices. *Community Ecology*, **2**(2), 197–207.

Gower, J. C. (1974). Algorithm AS 78: The Mediancentre. *Journal of the Royal Statistical Society. Series C (Applied Statistics)*, **23**(3), 466–470.

Gower, J. C. and Ross, G. J. S. (1969). Minimum spanning trees and single linkage cluster analysis. *Journal of the Royal Statistical Society. Series C (Applied Statistics)*, **18**(1), 54–64.

Gower, J. (1967). A comparison of some methods of cluster analysis. *Biometrics*, **23**(4), 623–637.

Grabisch, M. (1997a). k-order additive discrete fuzzy measures and their representation. *Fuzzy Sets and Systems*, **92**, 167–189.

Grabisch, M. (1997b). k-order additive discrete fuzzy measures and their representation. *Fuzzy Sets and Systems*, **92**(167–189).

Grabisch, M. (2000). A graphical interpretation of the Choquet integral. *IEEE Transactions on Fuzzy Systems*, **8**(5), 627–631.

Grabisch, M. (2003). The symmetric Sugeno integral. *Fuzzy Sets and Systems*, **139**, 473–490.

Grabisch, M. (2008). How to score alternatives when criteria are scored on an ordinal scale. *Journal of Multi-Criteria Decision Analysis*, **15**, 31–44.

Grabisch, M., Marichal, J.-L., Mesiar, R., and Pap, E. (2009). *Aggregation Functions*. Cambridge University Press.

Grabisch, M., Marichal, J.-L., Mesiar, R., and Pap, E. (2011a). Aggregation functions: Means. *Information Sciences*, **181**, 1–22.

Grabisch, M., Marichal, J.-L., Mesiar, R., and Pap, E. (2011b). Aggregation functions: Construction methods, conjunctive, disjunctive and mixed classes. *Information Sciences*, **181**, 23–43.

Graham, R. L. (1972). An efficient algorithm for determining the convex hull of a finite planar set. *Information Processing Letters*, **1**, 132–133.

Gramm, J., Niedermeier, R., and Rossmanith, P. (2003). Fixed-parameter algorithms for closest string and related problems. *Algorithmica*, **37**, 25–42.

Graves, D. and Pedrycz, W. (2010). Kernel-based fuzzy clustering: A comparative experimental study. *Fuzzy Sets and Systems*, **161**, 522–543.

Greco, S., Mesiar, R., and Rindone, F. (2014). Two new characterizations of universal integrals on the scale $[0, 1]$. *Information Sciences*, **267**, 217–224.

Green, P. (1981). Peeling bivariate data. In Barnett, V., editor, *Interpreting multivariate data*. Wiley, New York.

Groes, E., Jacobsen, H. J., Sloth, B., and Tranæs, T. (1998). Axiomatic characterizations of the Choquet integral. *Economic Theory*, **12**, 441–448.

Gross, P. L. K. and Gross, E. M. (1927). College libraries and chemical education. *Science*, **66**(1713), 385–389.

Grübel, R. (1996). Orthogonalization of multivariate location estimators: The orthomedian. *The Annals of Statistics*, **24**(4), 1457–1473.

Grygorash, O., Zhou, Y., and Jorgensen, Z. (2006). Minimum spanning tree based clustering algorithms. In *Proc. ICTAI'06*, pages 1–9.

Grzegorzewski, P. (1998). Metrics and orders in space of fuzzy numbers. *Fuzzy Sets and Systems*, **97**, 83–94.

Grzegorzewski, P. (2010). Algorithms for trapezoidal approximations of fuzzy numbers preserving the expected interval. In et al, B.-M. B., editor, *Foundations of Reasoning Under Uncertainty*, pages 85–98. Springer.

Grzegorzewski, P. and Pasternak-Winiarska, K. (2011). Trapezoidal approximations of fuzzy numbers with restrictions on the support and core. In *Proc. EUSFLAT/LFA 2011*, pages 749–756. Atlantis Press.

Grzegorzewski, P. (2004). Distances between intuitionistic fuzzy sets and/or interval-valued fuzzy sets based on the Hausdorff metric. *Fuzzy Sets and Systems*, **148**(2), 319–328.

Grzegorzewski, P. (2006). *Wspomaganie decyzji w warunkach niepewności. Metody statystyczne dla nieprecyzyjnych danych*. Exit, Warszawa.

Grzegorzewski, P. (2013). Granular regression. In *Proc. IFSA/NAFIPS'13*, pages 974–979. Edmonton, Canada.

Grzegorzewski, P. and Mrówka, E. (2005). Some notes on (Atanassov's) intuitionistic fuzzy sets. *Fuzzy Sets and Systems*, **156**, 492–495.

Grzegorzewski, P., Gagolewski, M., and Bobecka-Wesołowska, K. (2014). *Wnioskowanie statystyczne z wykorzystaniem środowiska R (Statistical Inference with R)*. Politechnika Warszawska, Warsaw, Poland, 1 edition. ISBN 978-83-93-72601-1. In Polish.

Grzegorzewski, P., Gagolewski, M., Hryniewicz, O., and Gil, M. Á., editors (2015). *Strengthening Links Between Data Analysis and Soft Computing*, volume 315 of *Advances in Intelligent Systems and Computing*. Springer. ISBN 978-3-319-10764-6.

Grzegorzewski, P. (2002). Nearest interval approximation of a fuzzy number. *Fuzzy Sets and Systems*, **130**(3), 321–330.

Grzegorzewski, P. (2008). Trapezoidal approximations of fuzzy numbers preserving the expected interval – Algorithms and properties. *Fuzzy Sets and Systems*, **159**(11), 1354–1364.

Grzegorzewski, P. and Mrówka, E. (2005). Trapezoidal approximations of fuzzy numbers. *Fuzzy Sets and Systems*, **153**(1), 115–135.

Grzegorzewski, P. and Mrówka, E. (2007). Trapezoidal approximations of fuzzy numbers – Revisited. *Fuzzy Sets and Systems*, **158**(7), 757–768.

Grąbczewski, K. (2014). *Meta-Learning in Decision Tree Induction*. Springer.

Gu, T., Dolan-Gavitt, B., and Garg, S. (2017). BadNets: Identifying vulnerabilities in the machine learning model supply chain. arXiv:1708.06733.

Guan, J. C. and Gao, X. (2009). Exploring the h-index at patent level. *Journal of the American Society for Information Science and Technology*, **60**(1), 35–40.

Guerrini, L. (2005). An extension of Witzgall's result on convex metrics. *Divulgaciones Matematicás*, **13**(2), 83–89.

Güngör, Z. and Ünler, A. (2007). K-harmonic means data clustering with simulated annealing heuristic. *Applied Mathematics and Computation*, **184**, 199–209.

Guns, R. and Rousseau, R. (2009a). Simulating growth of the h-index. *Journal of the American Society for Information Science and Technology*, **60**(2), 410–417.

Guns, R. and Rousseau, R. (2009b). Real and rational variants of the h-index and the g-index. *Journal of Informetrics*, **3**(1), 64–71.

Gupta, B. M., Sharma, L., and Karisiddappa, C. R. (1995). Modelling the growth of papers in a scientific speciality. *Scientometrics*, **33**(2), 187–201.

Gupta, M. et al. (2016). Monotonic calibrated interpolated look-up tables. *Journal of Machine Learning Research*, **17**(109), 1–47.

Guyon, I. and Elisseeff, A. (2003). An introduction to variable and feature selection. *Journal of Machine Learning Research*, **3**, 1157–1182.

Guyon, I., Nikravesh, M., Gunn, S., and Zadeh, L. A., editors (2006). *Feature Extraction: Foundations and Applications*. Springer.

Górecki, J., Hofert, M., and Holeňa, M. (2015). An approach to structure determination and estimation of hierarchical archimedean copulas and its application in Bayesian classification. *Journal of Intelligent Information Systems*, pages 1–39.

Halas, R., Gagolewski, M., and Mesiar, R., editors (2019). *New Trends in Aggregation Theory*, volume 981 of *Advances in Intelligent Systems and Computing*. Springer. ISBN 978-3-030-19493-2. doi:10.1007/978-3-030-19494-9.

Halmos, P. (1950). *Measure Theory*. Van Nostrand, New York.

Hamming, R. W. (1950). Error detecting and error correcting codes. *Bell System Technical Journal*, **29**(2), 147–160.

Hansen, N. (2006). The CMA evolution strategy: A comparing review. In Lozano, J., Larranga, P., Inza, I., and Bengoetxea, E., editors, *Towards a new evolutionary computation. Advances in estimation of distribution algorithms*, pages 75–102. Springer.

Hanss, M. (2005). *Applied Fuzzy Arithmetic*. Springer.

Harel, D. (2001). *Rzecz o istocie informatyki*. WNT, Warszawa.

Hartman, E. (2000). Training feedforward neural networks with gain constraints. *Neural Computation*, **12**(4), 811–829.

Harzing, A. W. K. and van der Wal, R. (2008). Google *Scholar* as a new source for citation analysis? *Ethics in Science and Environmental Politics*, **8**(1), 62–71.

Harzing, A.-W. and von der Wall, R. (2009). A Google Scholar h-index for journals: An alternative metric to measure journal impact in economics and business. *Journal of the American Society for Information Science and Technology*, **60**(1), 41–46.

Hastie, T., Tibshirani, R., and Friedman, J. (2013). *The Elements of Statistical Learning*. Springer.

Hastie, T., Tibshirani, R., and Friedman, J. (2017). *The Elements of Statistical Learning: Data Mining, Inference, and Prediction*. Springer-Verlag.

He, X. and Shi, P. (1998). Monotone b-spline smoothing. *Journal of the American Statistical Association*, **93** (442).

Heip, C. (1974). A new index measuring evenness. *Journal of Marine Biological Association of the United Kingdom*, **54**(3), 555–557.

Heller, M. (2009). *Jak być uczonym*. Znak, Kraków.

Helmers, R. and Ruymgaart, F. H. (1988). Asymptotic normality of generalized L-statistics with unbounded scores. *Journal of Statistical Planning and Inference*, **19**, 43–53.

Herrera, F., Herrera-Viedma, E., and Verdegay, J. (1996). Direct approach processes in group decision making using linguistic OWA operators. *Fuzzy Sets and Systems*, **79**(2), 175–190.

Herrera, F., Herrera-Viedma, E., and Verdegay, J. (1997). A rational consensus model in group decision making using linguistic assessments. *Fuzzy Sets and Systems*, **88**(1), 31–49.

Hettmansperger, T. P. and Randles, R. H. (2002). A practical affine equivariant multivariate median. *Biometrika*, **89**(4), 851–860.

Higham, N. (2002). *Accuracy and Stability of Numerical Algorithms*. SIAM, Philadelphia.

Higham, N. J. (1993). The accuracy of floating point summation. *SIAM Journal on Scientific Computing*, **14** (4), 783–799.

Hilbert, D. (1891). Über die stetige Abbildung einer Linie auf ein Flächenstück. *Mathematische Annalen*, **38**, 459–460.

Hinton, G., Vinyals, O., and Dean, J. (2015). Distilling the knowledge in a neural network. arXiv:13520.3051.

Hirota, K. (1981). Concepts of probabilistic sets. *Fuzzy Sets and Systems*, **5**, 31–46.

Hirsch, J. E. (2005). An index to quantify individual's scientific research output. *Proceedings of the National Academy of Sciences*, **102**(46), 16569–16572.

Hirsch, J. E. (2007). Does the h-index have predictive power? *Proceedings of the National Academy of Sciences*, **104**(49), 19193–19198.

Hoare, C. (1961). Algorithm 65: Find. *Communications of the ACM*, **4**(7), 321–322.

Hoeffding, W. (1963). Probability inequalities for sums of bounded random variables. *Journal of the American Statistical Association*, **58**(301), 13–30.

Hoerl, A. and Kennard, R. (1970). Ridge regression: Biased estimation for nonorthogonal problems. *Technometrics*, **12**(1), 55–67.

Hopcroft, J. and Ullman, J. (2003). *Wprowadzenie do teorii automatów, języków i obliczeń*. PWN, Warszawa.

Hornik, K. and Murdoch, D. (2011). Watch your spelling! *The R Journal*, **3**(2), 22–28.

Hornowska, E. (2007). *Testy psychologiczne. Teoria i praktyka*. Scholar, Warszawa.

Hou, H., Kretschmer, H., and Liu, Z. (2008). The structure of scientific collaboration networks in *Scientometrics*. *Scientometrics*, **75**(2), 189–202.

Hovden, R. (2013). Bibliometrics for internet media: Applying the h-index to YouTube. *Journal of the American Society for Information Science and Technology*, **64**(11), 2326–2331.

Hryniewicz, O. (2008). Statistics with fuzzy data in statistical quality control. *Soft Computing*, **12**(3), 229–234.

Hu, J., Shen, L., and Sun, G. (2017). Squeeze-and-excitation networks. arXiv:1709.01507.

Huang, G.-B., Zhu, Q.-Y., and Siew, C.-K. (2006). Extreme learning machine: Theory and applications. *Neurocomputing*, **70**(1), 489–501.

Huang, Y.-S., Liao, J.-T., and Lin, Z.-L. (2009). A study on aggregation of group decisions. *Systems Research and Behavioral Science*, **26**(4), 445–454.

Huang, Y.-S., Chang, W.-C., and Lin, Z.-L. (2013). Aggregation of utility-based individual preferences for group decision-making. *European Journal of Operational Research*, **229**, 462–469.

Huber, J. C. (2001). A new method for analyzing scientific productivity. *Journal of the American Society for Information Science and Technology*, **52**(13), 1089–1099.

Huber, J. C. (2002). A new model that generates Lotka's law. *Journal of the American Society for Information Science and Technology*, **53**(3), 209–219.

Huber, P. J. (1972). The 1972 Wald lecture robust statistics: A review. *Annals of Mathematical Statistics*, **42** (4), 1041–1067.

Huber, P. J. (1985). Projection pursuit. *The Annals of Statistics*, **13**(2), 435–475.

Hubert, L. and Arabie, P. (1985). Comparing partitions. *Journal of Classification*, **2**(1), 193–218. doi:10.1007/BF01908075.

Hufsky, F., Kuchenbecker, L., Jahn, K., Stoye, J., and Böcker, S. (2011). Swiftly computing center strings. *BMC Bioinformatics*, **12**, 106.

Hwang, Y.-A. (2013). An axiomatization of the Hirsch-index without adopting monotonicity. *Applied Mathematics and Information Sciences*, **7**(4), 1317–1322.

Hyndman, R. J. and Fan, Y. (1996). Sample quantiles in statistical packages. *The American Statistician*, **50** (4), 361–365.

Hüllermeier, E. (2005). Cho-k-NN: A method for combining interacting pieces of evidence in case-based learning. In *Proc. IJCAI'05*.

Hüllermeier, E. (2015). Does machine learning need fuzzy logic? *Fuzzy Sets and Systems*, **281**, 292–299.

Ibàñez, A., Larrañaga, P., and Bielza, C. (2013). Cluster methods for assessing research performance: Exploring Spanish computer science. *Scientometrics*, **97**(3), 571–600.

Inoue, J.-I., Ghosh, A., Chatterjee, A., and Chakrabarti, B. (2015). Measuring social inequality with quantitative methodology: Analytical estimates and empirical data analysis by gini and k indices. *Physica A*, **429**, 184–204.

Irpino, A. and Verde, R. (2008). Dynamic clustering of interval data using a wasserstein-based distance. *Pattern Recognition Letters*, **29**(11), 1648–1658.

Istrăţescu, V. I. (1987). *Inner Product Structures: Theory and Applications*. D. Reidel Publishing Company, Boston.

Ivancheva, L. (2008). Scientometrics today: A methodological overview. In Kretschmer, H. and Havemann, F., editors, *Proc. WIS 2008, 4th Intl. Conf. Webometrics, Informetrics and Scientometrics & 9th COLLNET Meeting*, Berlin, 2008.

Jacso, P. (2008). The plausability of computing the h-index of scholarly productivity and impact using reference-enhanced databases. *Online Information Review*, **32**(2), 266–283.

Jain, A. K. and Law, M. H. C. (2005). Data clustering: A user's dilemma. *Lecture Notes in Computer Science*, **3776**, 1–10.

Jain, A. K. and Richard C. Dubes (1988). *Algorithms for clustering data*. Prentice Hall. ISBN 0-13-022278-X.

Jakubowski, J. and Sztencel, R. (2010). *Wstęp do teorii pradopodobieństwa*. Script, Warszawa.

James, D. A. (2010). *RSQLite: SQLite interface for R*. URL `http://CRAN.R-project.org/package=RSQLite`. `R` package version 0.9-4.

Jamison, B., Orey, S., and Pruitt, W. (1965). Convergence of weighted averages of independent random variables. *Zeitschrift für Wahrscheinlichkeitstheorie und Verwandte Gebiete*, **4**(1), 40–44.

Jammalamadaka, S. R. and SenGupta, A. (2001). *Topics in Circular Statistics*. World Scientific Press, Singapore.

Janssens, F., Zhang, L., and Glänzel, W. (2009). Hybrid clustering for validation and improvement of subject-classification schemes. *Information Processing and Management*, **45**(6), 638–702.

Jarník, V. (1930). O jistém problému minimálním (z dopisu panu O. Borůvkovi). *Práce Moravské Přírodovědecké Společnosti v Brně*, **6**, 57–63.

Jaroszewicz, S. and Korzeń, M. (2012). Arithmetic operations on independent random variables: A numerical approach. *SIAM Journal on Scientific Computing*, **34**, A1241–A1265.

Jaworski, P., Durante, F., Härdle, W., and Rychlik, T. (2010). *Copula Theory and Its Applications*. Springer-Verlag.

Jenei, S. and De Baets, B. (2003). On the direct decomposability of t-norms on product lattices. *Fuzzy Sets and Systems*, **139**(3), 699–707.

Jensen, P., Rouquier, J.-B., and Croissant, Y. (2009). Testing bibliometric indicators by their prediction of scientific promotions. *Scientometrics*, **78**(3), 467–479.

Jiang, H., Yi, S., Li, J., Yang, F., and Hu, X. (2010). Ant clustering algorithm with K-harmonic means clustering. *Expert Systems with Applications*, **37**, 8679–8684.

Jiang, X., Wentker, J., and Ferrer, M. (2012). Generalized median string computation by means of string embedding in vector spaces. *Pattern Recognition Letters*, **33**, 842–852.

Jin, B., Liang, L., Rousseau, R., and Egghe, L. (2007). The R- and AR-indices: Complementing the h-index. *Chinese Science Bulletin*, **52**(6), 855–863.

Johnson, R. (1929). *Modern Geometry: An Elementary Treatise on the Geometry of the Triangle and the Circle*. Houghton Mifflin, Boston, MA.

Johnson, S. C. (1967). Hierarchical clustering schemes. *Psychometrica*, **32**(3), 241–254.

Johnson, S. G. (2017). The NLopt nonlinear-optimization package. http://ab-initio.mit.edu/nlopt.

Jones, O., Maillardet, R., and Robinson, A. (2009). *Introduction to Scientific Programming and Simulation Using R*. Chapman & Hall/CRC.

Juan, A. and Vidal, E. (1998). Fast median search in metric spaces. *Lecture Notes in Computer Science*, **1451**, 905–912.

Kacprzyk, J. and Zadrożny, S. (2007). Computing with words for text categorization. *Studies in Fuzziness and Soft Computing*, **209**, 339–362.

Kahan, W. (1965). Further remarks on reducing truncation errors. *Communications of the ACM*, **8**(1), 40.

Karaçal, F. and Mesiar, R. (2015). Uninorms on bounded lattices. *Fuzzy Sets and Systems*, **261**, 33–43.

Kärkkäinen, T. and Äyrämö, S. (2005). On computation of spatial median for robust data mining. In Schilling, R. et al., editors, *Proc. EUROGEN 2005*, pages 1–14.

Karypis, G., Han, E.-H., and Kumar, V. (1999). CHAMELEON: Hierarchical clustering using dynamic modeling. *Computer*, **32**(8), 68–75. doi:10.1109/2.781637.

Kate, S. and Bhapkar, H. (2010). *Basic of Mathematics*. Technical Publication Pune.

Katsaros, D., Akritidis, L., and Bozanis, P. (2008). Spam: it's not just for inboxes and search engines! Making Hirsch h-index robust to scientospam. arXiv:0801.0386v1 [cs.DL].

Kelly, C. D. and Jennions, M. D. (2006). The h index and career assessment by numbers. *TRENDS in Ecology and Evolution*, **21**(4), 167–170.

Kemeny, J. G. (1959). Mathematics without numbers. *Daedalus*, **88**(4), 577–591.

Kerns, G. (2011). *Introduction to Probability and Statistics Using R*. www.ipsur.org.

Kerre, E. E. (2011). A tribute to Zadeh's extension principle. *Scientia Iranica*, **18**(3), 593–595.

Kierzek, R. (2008). Polska nauka w indeksie Hirscha. *Biuletyn MNiSW*, **137**(6–7), 29–35.

Kierzek, R. (2009). Jak porównać „apples and oranges", czyli o ró?nych metodach analizy publikowalno?ci i dorobku naukowego. *Biuletyn MNiSW*, **143**(2), 33–41.

Kim, W. J., Ko, J. H., and Chung, M. J. (1994). Uncertain robot environment modelling using fuzzy numbers. *Fuzzy Sets and Systems*, **61**(1), 53–62.

Kimberling, C. (1994). Central points and central lines in the plane of a triangle. *Mathematics Magazine*, **67** (3), 163–187.

Kimberling, C. (1998). Triangle centers and central triangles. *Congressus Numerantium*, **129**, 1–295.

Kitagawa, T. (1934). On some class of weighted means. *Proceedings of the Physico-Mathematical Society of Japan*, **16**.

Kleene, S. C. (1955). On the forms of the predicates in the theory of constructive ordinals. *American Journal of Mathematics*, **77**(3), 405–428.

Klement, E., Mesiar, R., and Pap, E. (2010). A universal integral as common frame for Choquet and Sugeno integral. *IEEE Transactions on Fuzzy Systems*, **18**, 178–187.

Klement, E. P. and Mesiar, R. (2015). Monotone measures-based integrals. In Kacprzyk, J. and Pedrycz, W., editors, *Handbook of Computational Intelligence*, pages 61–74. Springer.

Klement, E. P., Mesiar, R., and Pap, E. (2000). *Triangular norms*. Kluwer Academic Publishers.

Klement, E. P., Mesiar, R., and Pap, E. (2004a). Triangular norms. Position paper I: Basic analytical and algebraic properties. *Fuzzy Sets and Systems*, **143**, 5–26.

Klement, E. P., Mesiar, R., and Pap, E. (2004b). Triangular norms. Position paper II: General constructions and parametrized families. *Fuzzy Sets and Systems*, **145**, 411–438.

Klement, E. P., Mesiar, R., and Pap, E. (2004c). Triangular norms. Position paper III: Continuous t-norms. *Fuzzy Sets and Systems*, **145**, 439–454.

Klement, E. P., Manzi, M., and Mesiar, R. (2011). Ultramodular aggregation functions. *Information Sciences*, **181**, 4101–4111.

Klir, G. J. and Yuan, B. (1995). *Fuzzy sets and fuzzy logic. Theory and applications*. Prentice Hall PTR, New Jersey.

Knuth, D. (1992). *Literate Programming*. CSLI.

Knuth, D. (2002a). *Sztuka programowania. Tom I. Algorytmy podstawowe*. WNT, Warszawa.

Knuth, D. (2002b). *Sztuka programowania. Tom II. Algorytmy seminumeryczne*. WNT, Warszawa.

Knuth, D. (2002c). *Sztuka programowania. Tom III. Sortowanie i wyszukiwanie*. WNT, Warszawa.

Knuth, D. (2005). *TeX. Podręcznik użytkownika*. WNT, Warszawa.

Knuth, D. E. (1998). *The Art of Computer Programming. Volume 2. Seminumerical Algorithms*. Addison Wesley, Reading, MA.

Kobren, A., Monath, N., Krishnamurthy, A., and McCallum, A. (2017). A hierarchical algorithm for extreme clustering. In *Proc. 23rd ACM SIGKDD'17*, pages 255–264. doi:10.1145/3097983.3098079.

Kobus, M. (2012). Attribute decomposition of multidimensional inequality indices. *Economics Letters*, **117**(1), 189–191.

Kobus, M. and Miłoś, P. (2012). Inequality decomposition by population subgroups for ordinal data. *Journal of Health Economics*, **31**(1), 15–21.

Kohonen, T. and Somervuo, P. J. (1998). Self-organizing maps of symbol strings. *Neurocomputing*, **21**, 19–30.

Kojadinovic, I. (2004). Unsupervised aggregation by the Choquet integral based on entropy functionals: Application to the evaluation of students. *Lecture Notes in Computer Science*, **3131**, 163–174.

Kojadinovic, I. (2008). Unsupervised aggregation of commensurate correlated attributes by means of the Choquet integral and entropy functionals. *International Journal of Intelligent Systems*, **23**(2), 128–154. doi:10.1002/int.20261.

Kojadinovic, I. and Marichal, J.-L. (2009). On the moments and distribution of discrete Choquet integrals from continuous distributions. *Journal of Computational and Applied Mathematics*, **230**, 83–94.

Kołacz, A. and Grzegorzewski, P. (2016). Measures of dispersion for multidimensional data. *European Journal of Operational Research*, **251**(3), 930–937.

Kolesárová, A., Mayor, G., and Mesiar, R. (2007). Weighted ordinal means. *Information Sciences*, **177**, 3822–3830.

Kolesárová, A., Mesiar, R., and Montero, J. (2015). Sequential aggregation of bags. *Information Sciences*, **294**, 305–314.

Kolmogorov, A. (1930). Sur la notion de la moyenne. *Atti della R. Academia nazionale dei Lincei*, **12**, 388–391.

Komorníková, M. and Mesiar, R. (2011). Aggregation functions on bounded partially ordered sets and their classification. *Fuzzy Sets and Systems*, **175**, 48–56.

Konohen, T. (1985). Median strings. *Pattern Recognition Letters*, **3**, 309–313.

Koppel, M., Schler, J., and Argamon, S. (2009). Computational methods in authorship attribution. *Journal of the American Society for Information Science and Technology*, **60**(1), 9–26.

Koronacki, J. and Ćwik, J. (2005). *Statystyczne systemy uczące się*. WNT, Warszawa.

Koronacki, J. and Mielniczuk, J. (2001). *Statystyka*. WNT, Warszawa.

Korzeń, M. and Jaroszewicz, S. (2014). PaCAL: A Python package for arithmetic computations with random variables. *Journal of Statistical Software*, **57**(10), 1–34.

Koshevoy, G. and Mosler, K. (1997). Zonoid trimming for multivariate distributions. *The Annals of Statistics*, **25**(5).

Kosmulski, M. (2006). A new Hirsch-type index saves time and works equally well as the original h-index. *ISSI Newsletter*, **2**(3), 4–6.

Kosmulski, M. (2007). MAXPROD — A new index for assessment of the scientific output of an individual, and a comparison with the h-index. *Cybermetrics*, **11**(1), 5.

Kostal, L., Lansky, P., and Pokora, O. (2013). Measures of statistical dispersion based on Shannon and Fisher information concepts. *Information Sciences*, **235**, 214–223.

Kostoff, R. N. (1998). The use and misuse of citation analysis in research evaluation. *Scientometrics*, **43**(1), 27–43.

Krarup, J. and Vajda, S. (1997). On Torricelli's geometrical solution to a problem of Fermat. *IMA Journal of Management Mathematics*, **8**, 215–223.

Kraus, D. and Czado, C. (2017). D-vine copula based quantile regression. *Computational Statistics & Data Analysis*, **110**, 1–18.

Krause, A. and Olson, M. (2005). *The Basics of S-PLUS*. Springer-Verlag.

Krebs, C. (1989). *Ecological Methodology*. Harper Collins, New York.

Kruskal, J. B. (1983). An overview of sequence comparison: Time warps, string edits, and macromolecules. *SIAM Review*, **25**(2), 201–237.

Kuhn, T. S. (2001). *Struktura rewolucji naukowych*. Aletheia, Warszawa.

Kuhn, T. S. (2006). *Przewrót kopernikański. Astronomia planetarna w dziejach myśli Zachodu*. Prószyński i ska, Warszawa.

Kulczycki, P. and Kowalski, P. A. (2011). Bayes classification of imprecise information of interval type. *Control and Cybernetics*, **40**(1), 101–123.

Kullback, S. and Leibler, R. (1951). On information and sufficiency. *Annals of Mathematical Statistics*, **22**(1), 79–86.

Kuś, M., Mankiewicz, L., and Życzkowski, K. (2009). Porównywanie indeksów Hirscha uczonych i instytucji naukowych. *Biuletyn MNiSW*, **144**(3), 30–33.

Kwakernaak, H. (1978). Fuzzy random variables: I. Definitions and theorems. *Information Sciences*, **15**(1), 1–29.

Kärkkäinen, I. and Fränti, P. (2002). Dynamic local search algorithm for the clustering problem. In *Proc. 16th Intl. Conf. Pattern Recognition'02*, volume 2, pages 240–243. IEEE.

Lance, G. and Williams, W. (1967). A general theory of classification sorting strategies: 1. Hierarchical systems. *Computer Journal*, pages 373–380.

Lanctot, J. K., Li, M., Ma, B., Wang, S., and Zhang, L. (2003). Distinguishing string selection problems. *Information and Computation*, **185**, 41–55.

Land, A. H. and Doig, A. G. (1960). An automatic method of solving discrete programming problems. *Econometrica*, **28**(3), 497–520.

Lang, B. (2005). Monotonic multi-layer perceptron networks as universal approximators. In *Proc. ICANN'05*, volume 3697, pages 750–750.

Lang, R. (1986). A note on the measurability of convex sets. *Arch. Math*, **47**, 90–92.

Lange, K. (2010). *Numerical Analysis for Statisticians*. Springer-Verlag.

Langerman, S. and Steiger, W. (2000). Computing a maximal depth point in the plane. In *Proc. Japan Conf. Discrete and Computational Geometry*, pages 46–47.

Langerman, S. and Steiger, W. (2003). Computing a high depth point in the plane. In *Developments in Robust Statistics*, pages 228–234.

Lasek, J. and Gagolewski, M. (2015a). Estimation of tournament metrics for association football league formats. In *Selected problems in information technologies (Proc. ITRIA'15 vol. 2)*, pages 67–78. Institute of Computer Science, Polish Academy of Sciences.

Lasek, J. and Gagolewski, M. (2015b). The winning solution to the AAIA'15 Data Mining Competition: Tagging firefighter activities at a fire scene. In Ganzha, M., Maciaszek, L., and Paprzycki, M., editors, *Proc. FedCSIS'15*, pages 375–380. IEEE. doi:10.15439/2015F418.

Lasek, J. and Gagolewski, M. (2018). The efficacy of league formats in ranking teams. *Statistical Modelling*, **18** (5–6), 411–435. doi:10.1177/1471082X18798426.

Lasek, J. and Gagolewski, M. (2020). Interpretable sport team rating models based on the gradient descent algorithm. *International Journal of Forecasting*. doi:10.1016/j.ijforecast.2020.11.008. in press.

Lasek, J., Szlavik, Z., Gagolewski, M., and Bhulai, S. (2016). How to improve a team's position in the FIFA ranking – A simulation study. *Journal of Applied Statistics*, **43**(7), 1349–1368. doi:10.1080/02664763.2015.1100593.

Lavine, M. (2010). *Introduction to Statistical Thought*. www.math.umass.edu/∼lavine/Book/book.html.

Lawrence, H. and Phipps, A. (1985). Comparing partitions. *Journal of Classification*, **2**, 193–218.

Lawrence, M. and Temple Lang, D. (2010). `RGtk2`: A graphical user interface toolkit for `R`. *Journal of Statistical Software*, **37**(8), 1–52.

Lázaro, J. and Calvo, T. (2005). XAO operators – The interval universe. In *Proc. Eusflat/LFA'05*, pages 189–197.

Le Gall, F. (2014). Powers of tensors and fast matrix multiplication. In *Proc. 39th Intl. Symp. Symbolic and Algebraic Computation (ISSAC'14)*, pages 296–303, New York, 2014. ACM.

LeCun, Y., Bottou, L., Bengio, Y., and Haffner, P. (1998). Gradient-based learning applied to document recognition. *Proceedings of the IEEE*, **86**(11), 2278–2324.

LeCun, Y., Bengio, Y., and Hinton, G. (2015). Deep learning. *Nature*, **521**, 436–444.

Lee, E. (1982). A simplified B-spline computation routine. *Computing*, **29**(4), 365–371.

Legendre, P. and Legendre, L. (2003). *Numerical Ecology*. Elsevier Science BV, Amsterdam.

Lehmann, E. L. (1955). Ordered families of distributions. *Annals of Mathematical Statistics*, **26**, 399–419.

Lehmann, E. and Casella, G. (1988). *Theory of Point Estimation*. Springer, New York.

Lehmann, S., Jackson, A. D., and Lautrup, B. E. (2006). Measures for measures. *Nature*, **444**, 1003–1004.

Lehmann, S., Jackson, A. D., and Lautrup, B. E. (2008). A quantitative analysis of indicators of scientific performance. *Scientometrics*, **76**(2), 369–390.

Lehrer, E. (2009). A new integral for capacities. *Economic Theory*, **39**(1), 157–176.

Lehtonen, E., Marichal, J.-L., and Teheux, B. (2014). Associative string functions. *Asian-European Journal of Mathematics*, **7**, 1450059.

Leisch, F. (2006). A toolbox for K-centroids cluster analysis. *Computational Statistics & Data Analysis*, **51**(2), 526–544.

Leisch, F. and Grün, B. (2006). Extending standard cluster algorithms to allow for group constraints. In Rizzi, A. and Vichi, M., editors, *Proc. Computational Statistics (Compstat'06)*, pages 885–892. Physica Verlag, Heidelberg, Germany.

Lenstra Jr., H. (1983). Integer programming with a fixed number of variables. *Mathematics of Operations Research*, **8**(4), 538–548.

Lessmann, M. and Würtz, R. P. (2012). Fast nearest neighbor search in pseudosemimetric spaces. In *Proc. VISAPP'12*, pages 667–674.

Levenshtein, V. I. (1966). Binary codes capable of correcting deletions, insertions, or reversals. *Soviet Physics Doklady*, **10**(8), 707–710.

Ley, C., Sabbah, C., and Verdebout, T. (2014). A new concept of quantiles for directional data and the angular Mahalanobis depth. *Electronic Journal of Statistics*, **8**(1), 795–816.

Leydesdorff, L. (1987). Various methods for the mapping of science. *Scientometrics*, **11**(5–6), 295–324.

Leydesdorff, L. (1998). Theories of citation? *Scientometrics*, **43**(1), 5–25.

Leydesdorff, L. (2009). The non-linear dynamics of meaning-processing in social systems. *Social Science Information*, **48**(1), 5–33.

Leydesdorff, L. and Opthof, T. (2010). Scopus' source normalized impact per paper (snip) versus the journal impact factor based on fractional counting of citations. *Journal of the American Society for Information Science and Technology*, **61**(11), 2365–2396.

Li, J. and Liu, R. Y. (2004). New nonparametric tests of multivariate locations and scales using data depth. *Statistical Science*, **19**(4), 686–696.

Li, M., Ma, B., and Wang, L. (2002). On the closest string and substring problems. *Journal of the ACM*, **49** (2), 157–171.

Li, W. (1992). Random texts exhibit Zipf's-law-like word frequency distribution. *IEEE Transactions on Information Theory*, **38**(6), 1842–1845.

Lin, S. (2010). Rank aggregation methods. *Wiley Interdisciplinary Reviews: Computational Statistics*, **2**(5), 555–570.

Ling, R. F. (1973). A probability theory of cluster analysis. *Journal of the American Statistical Association*, **68**(341), 159–164.

Lipschitz, R. O. S. (1864). De explicatione per series trigonometricas instituenda functionum unius variabilis arbitrariarum, et praecipue earum, quae per variabilis spatium finitum valorum maximourm et minimorum numerum habent infinitum, disquisitio. *Journal für die reine und angewandte Mathematik*, **63**(2), 296–308.

Lipton, Z. C. (2016). The mythos of model interpretability. In *Proc. ICML Workshop on Human Interpretability of Machine Learning'16*. New York.

Lisee, C., Lariviere, V., and Archambault, E. (2008). Conference proceedings as a source of scientific information: A bibliometric analysis. *Journal of the American Society for Information Science and Technology*, **59**(11), 1776–1784.

Liu, R. Y. (1990). On a notion of data depth based on random simplices. *Annals of Statistics*, **18**, 405–414.

Liu, R. Y. and Singh, K. (1992). Ordering directional data: Concepts of data depth on circles and spheres. *The Annals of Statistics*, **20**(3), 1468–1484.

Liu, R. Y., Parelius, J. M., and Singh, K. (1999). Multivariate analysis by data depth: Descriptive statistics, graphics and inference. *The Annals of Statistics*, **27**(3), 783–858.

Liu, Y. and Rousseau, R. (2007). Hirsch-type indices and library management: The case of Tongji University Library. In Torres-Salinas, D. and Moed, H. F., editors, *Proc. ISSI 2007*, pages 514–522, Madrid, 2007. CINDOC-CSIC.

Liu, Y. and Rousseau, R. (2008). Definitions of time series in citation analysis with special attention to the h-index. *Journal of Informetrics*, **2**(3), 202–210.

Lizasoain, I. (2013). Quasi-OWA operators on complete lattices. In Bustince, H., Fernandez, J., Mesiar, R., and Calvo, T., editors, *Aggregation Functions in Theory and in Practise (AISC 228)*, pages 521–532. Springer-Verlag.

Lizasoain, I. and Moreno, C. (2013). OWA operators defined on complete lattices. *Fuzzy Sets and Systems*, **224**, 36–52.

Lopuhaä, H. P. and Rousseeuw, P. J. (1991). Breakdown points of affine equivariant estimators of multivariate location and covariance matrics. *The Annals of Statistics*, **19**(1), 229–248.

Lou, Y., Caruana, R., Gehrke, J., and Hooker, G. (2013). Accurate intelligible models with pairwise interactions. In *Proc. KDD'13*, pages 623–631. ACM, Chicago, IL.

Lovisolo, L. and da Silva, E. A. B. (2001). Uniform distribution of points on a hyper-sphere with applications to vector bit-plane encoding. *IEE Proceedings on Vision, Image and Signal Processing*, **148**(3), 187–193.

Lowrance, R. and Wagner, R. A. (1975). An extension of the string-to-string correction problem. *Journal of the ACM*, **22**(2), 177–183.

Lucca, G., Sanz, J., Pereira Dimuro, G., Bedregal, B., Mesiar, R., Kolesárová, A., and Bustince, H. (2015). Pre-aggregation functions: construction and an application. *IEEE Transactions on Fuzzy Systems*. In press, doi:10.1109/TFUZZ.2015.2453020.

Lucchetti, R. (2006). *Convexity and Well-Posed Problems*. CMS Books in Mathematics.

Luceno, A. (2006). Fitting the Generalized Pareto Distribution to data using maximum goodness-of-fit estimators. *Computational Statistics and Data Analysis*, **1**(2), 904–917.

Lughofer, E. (2011). *Evolving Fuzzy Systems: Methodologies, Advanced Concepts and Applications*. Springer.

Lughofer, E. et al. (2017). Explaining classifier decisions linguistically for stimulating and improving operators labeling behavior. *Information Sciences*, **420**, 16–36.

Lunga, D., Prasad, S., Crawford, M. M., and Ersoy, O. (2014). Manifold-learning-based feature extraction for classification of hyperspectral data: A review of advances in manifold learning. *IEEE Signal Processing Magazine*, **31**(1), 55–66.

Ma, N., Guan, J., and Zhao, Y. (2008). Bringing PageRank to the citation analysis. *Information Processing & Management*, **44**, 800–810.

MacQueen, J. B. (1967). Some methods for classification and analysis of multivariate observations. In *Proc. Fifth Berkeley Symp. on Math. Statist. and Prob.*, volume 1, pages 281–297. University of California Press, Berkeley.

MacRoberts, M. H. and MacRobierts, B. R. (2010). Problems of citation analysis: A study of uncited and seldom-cited influences. *Journal of the American Society for Information Science and Technology*, **61**(1), 1–13.

Magdalena, L. (2015). Fuzzy rule-based systems. In Kacprzyk, J. and Pedrycz, W., editors, *Springer Handbook of Computational Intelligence*, pages 203–218. Springer, Berlin, Heidelberg.

Magiera, R. (2007a). *Modele i metody statystyki matematycznej. Część I. Rozkłady i symulacja stochastyczna*. GiS, Wrocław.

Magiera, R. (2007b). *Modele i metody statystyki matematycznej. Część II. Wnioskowanie statystyczne*. GiS, Wrocław.

Mahalanobis, P. (1936). On the generalized distance in statistics. *Proceedings of the National Institute of Sciences of India*, **12**, 49–55.

Makino, J. (1998). Productivity of research groups — Relation between citation analysis and reputation within research communities. *Scientometrics*, **43**(1), 87–93.

Mallig, N. (2010). A relational database for bibliometric analysis. *Journal of Informetrics*, **4**(4), 564–580.

March, W. B., Ram, P., and Gray, A. G. (2010a). Fast Euclidean minimum spanning tree: Algorithm, analysis, and applications. In *Proceedings of the 16th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining*, KDD'10, pages 603–612. ACM.

March, W. B., Ram, P., and Gray, A. G. (2010b). Fast euclidean minimum spanning tree: Algorithm, analysis, and applications. In *Proc. 16th ACM SIGKDD'10*, pages 603–612. doi:10.1145/1835804.1835882.

Marchant, T. (2009a). An axiomatic characterization of the ranking based on the h-index and some other bibliometric rankings of authors. *Scientometrics*, **80**(2), 325–342.

Marchant, T. (2009b). Score-based bibliometric rankings of authors. *Journal of the American Society for Information Science and Technology*, **60**(6), 1132–1137.

Mardia, K. (1975). Statistics of directional data. *Journal of the Royal Statistical Society. Series B (Methodological)*, **37**(3), 349–393.

Mardia, K. and Jupp, E. (1999). *Directional Statistics*. Wiley.

Marichal, J.-L. (2000a). On the associativity functional equation. *Fuzzy Sets and Systems*, **114**(3), 381–389.

Marichal, J.-L. (2000b). An axiomatic approach of the discrete Choquet integral as a tool to aggregate interacting criteria. *IEEE Transactions on Fuzzy Systems*, **8**(6), 800–807.

Marichal, J.-L. (2000c). On an axiomatization of the quasi-arithmetic mean values without the symmetry axiom. *Æquationes Mathematicæ*, **59**(1–2), 74–83.

Marichal, J.-L. (2000d). On Sugeno integral as an aggregation function. *Fuzzy Sets and Systems*, **114**, 347–365.

Marichal, J.-L. (2002). On order invariant synthesizing function. *Journal of Mathematical Psychology*, **46**(6), 661–676.

Marichal, J.-L. (2006). Cumulative distribution functions and moments of lattice polynomials. *Statistics and Probability Letters*, **76**, 1273–1279.

Marichal, J.-L. (2007). k-intolerant capacities and Choquet integrals. *European Journal of Operational Research*, **177**(3), 1453–1468.

Marichal, J.-L. (2008). Weighted lattice polynomials of independent random variables. *Discrete Applied Mathematics*, **156**, 685–694.

Marichal, J.-L. (2009). Weighted lattice polynomials. *Discrete Mathematics*, **309**, 814–820.

Marichal, J.-L. and Kojadinovic, I. (2008). Distribution functions of linear combinations of lattice polynomials from the uniform distribution. *Statistics and Probability Letters*, **78**, 985–991.

Marichal, J.-L. and Mathonet, P. (2001). On comparison meaningfulness of aggregation functions. *Journal of Mathematical Psychology*, **45**(2), 213–223.

Marichal, J.-L. and Mesiar, R. (2004). Aggregation on finite ordinal scales by scale independent functions. *Order*, **21**(2), 155–180.

Marichal, J.-L. and Rubens, M. (1993). Characterization of some stable aggregation functions. In *Proc. 1st Conf. Industrial Engineering and Production Management (IEPM'93)*, pages 187–196.

Marichal, J.-L. and Teheux, B. (2015). Preassociative aggregation functions. *Fuzzy Sets and Systems*, **268**, 15–26.

Marichal, J.-L., Mathonet, P., and Tousset, E. (1997). Characterization of some aggregation functions stable for positive linear transformations. *Fuzzy Sets and Systems*, **102**, 293–314.

Marichal, J.-L., Mesiar, R., and Rückschlossova, T. (2005). A complete description of comparison meaningful functions. *Æquationes Mathematicæ*, **69**, 309–320.

Marrara, S., Pasi, G., and Viviani, M. (2017). Aggregation operators in information retrieval. *Fuzzy Sets and Systems*, **324**(Supplement C), 3–19.

Marsaglia, G. (1972). Choosing a point from the surface of a sphere. *Annals of Mathematical Statistics*, **43**, 645–646.

Marsaglia, G. and Marsaglia, J. (2004). Evaluating the Anderson-Darling distribution. *Journal of Statistical Software*, **9**(2).

Martín, J., Mayor, G., and Suñer, J. (2001). On dispersion measures. *Mathware & Soft Computing*, **8**, 227–237.

Martin, J. and Mayor, G. (2009a). Aggregating pairwise distance values. In *Proc. EUROFUSE'09*, pages 147–152.

Martin, J. and Mayor, G. (2009b). How separated Palma, Inca and Manacor are? In *Proc. AGOP 2009*, pages 195–200.

Martin, J. and Mayor, G. (2010). Some properties of multi-argument distances and Fermat multidistance. In Hüllermeier, E. et al., editors, *Information Processing and Management of Uncertainty in Knowledge-Based Systems*, volume 80, pages 703–711. Springer-Verlag.

Martin, J. and Mayor, G. (2011). Multi-argument distances. *Fuzzy Sets and Systems*, **167**, 92–100.

Martín, J. and Mayor, G. (2017). Dispersion measures and multidistances on $\mathbb{R}^k$. In Ferraro, M. B. et al., editors, *Soft Methods for Data Science*, pages 347–354. Springer.

Martin, J., Mayor, G., and Valero, O. (2011a). A fixed point theorem for asymmetric distances via aggregation functions. In *Proc. 6th Intl. Summer School on Aggregation Operators (AGOP 2011)*, pages 217–222. Benevento, Italy.

Martin, J., Mayor, G., and Valero, O. (2011b). Functionally expressible multidistances. In Galichet, S. et al., editors, *Proc. Eusflat/LFA'11*, pages 41–46.

Martínez-Hinarejos, C., Juan, A., and Casacuberta, F. (2003). Median strings for k-nearest neighbour classification. *Pattern Recognition Letters*, pages 173–181.

Martínez-Panero, M., García-Lapresta, J. L., and Meneses, L. C. (2016). Multidistances and dispersion measures. *Studies in Fuzziness and Soft Computing*, **339**, 123–134.

Marzal, A. and Vidal, E. (1993). Computation of normalized edit distance and applications. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **15**(9), 926–932.

Masek, W. J. and Pateson, M. S. (1980). A faster algorithm computing string edit distances. *Journal of Computer and System Sciences*, **20**, 18–31.

Massé, J.-C. (2009). Multivariate trimmed means based on the Tukey depth. *Journal of Statistical Planning and Interference*, **139**, 366–384.

Massé, J.-C. and Plante, J. F. (2003). A Monte Carlo study of the accuracy and robustness of ten bivariate location estimators. *Computational Statistics & Data Analysis*, **42**, 1–26.

Matloff, N. and Salzman, P. (2008). *The Art of Debugging with GDB, DDD, and Eclipse*. No Starch Press.

Matloff, N. (2011). *The Art of R Programming: A Tour of Statistical Software Design*. No Starch Press.

Matsumoto, M. and Nishimura, T. (1998). Mersenne twister: A 623-dimensionally equidistributed uniform pseudo-random number generator. *ACM Transactions on Modeling and Computer Simulation*, **8**(1), 3–30.

May, K. O. (1952). A set of independent necessary and sufficient conditions for simple majority decision. *Econometrica*, **20**(4), 680–684.

May, K. O. (1953). A note of the complete independence of the conditions for simple majority decision. *Econometrica*, **21**(1), 172–173.

Mayor, G. and Calvo, T. (1997). On extended aggregation functions. In *Proc. IFSA 1997*, volume 1, pages 281–285. Academia, Prague.

Mays, E., Damerau, F. J., and Mercer, R. L. (1991). Context based spelling correction. *Information Processing & Management*, **27**(2), 517–522.

Mazumdar, A., Polyanskiy, Y., and Saha, B. (2013). On Chebyshev radius of a set in Hamming space and the closest string problem. In *Proc. IEEE Intl. Symp. Information Theory*, pages 1401–1405. IEEE.

McKinney, W. (2017). *Python for data analysis*. O'Reilly.

Meho, L. I. and Rogers, Y. (2008). Citation counting, citation ranking, and h-index of human-computer interaction researchers: A comparison between *Scopus* and *Web of Science*. *Journal of the American Society for Information Science and Technology*, **59**(11), 1711–1726.

Meho, L. I. and Sugimoto, C. R. (2009). Assessing the scholarly impact of information studies: A tale of two citation databases — *Scopus* and *Web of Science*. *Journal of the American Society for Information Science and Technology*, **60**(12), 2499–2508.

Mendel, F., Nad, T., and Schläffer, M. (2013). Improving local collisions: New attacks on reduced SHA-256. *Lecture Notes in Computer Science*, **7881**, 262–278.

Meneses, C. N., Lu, Z., Oliveira, C. A. S., and Pardalos, P. M. (2004). Optimal solutions for the closest-string problem via integer programming. *INFORMS Journal on Computing*, **16**(4), 419–429.

Merigó, J. M., Casanovas, M., and Yang, J.-B. (2014). Group decision making with expertons and uncertain generalized probabilistic weighted aggregation operators. *European Journal of Operational Research*, **235**, 215–224.

Mesiar, R. (2007). Fuzzy set approach to the utility, preference relations, and aggregation operators. *European Journal of Operational Research*, **176**, 414–422.

Mesiar, R. (2014). Integration based on decomposition. Seminar tutorial slides, Warsaw, Poland, December 11, 2014.

Mesiar, R. and Gagolewski, M. (2016). H-index and other Sugeno integrals: Some defects and their compensation. *IEEE Transactions on Fuzzy Systems*, **24**(6), 1668–1672. doi:10.1109/TFUZZ.2016.2516579.

Mesiar, R. and Mesiarová-Zemánková, A. (2011). The ordered modular averages. *IEEE Transactions on Fuzzy Systems*, **19**(1), 42–50.

Mesiar, R. and Pap, E. (2008). Aggregation of infinite sequences. *Information Sciences*, **178**, 3557–3564.

Mesiar, R. and Rückschlossova, T. (2004). Characterization of invariant aggregation operators. *Fuzzy Sets and Systems*, **142**, 63–73.

Mesiar, R. and Stupňanová, A. (2013). Decomposition integrals. *International Journal of Approximate Reasoning*, **54**(8), 1252–1259.

Mesiar, R., Kolesárová, A., and Komorníková, M. (2015). Aggregation functions on $[0, 1]$. In Kacprzyk, J. and Pedrycz, W., editors, *Handbook of Computational Intelligence*, pages 61–74. Springer.

Meyer, D. and Hornik, K. (2013). *relations: Data Structures and Algorithms for Relations*. URL `http://CRAN.R-project.org/package=relations`. R package version 0.6-2.

Miao, J. and Niu, L. (2016). A survey on feature selection. *Procedia Computer Science*, **91**, 919–926.

Micó, L. and Oncina, J. (2001). An approximate median search algorithm in non-metric spaces. *Pattern Recognition Letters*, **22**, 1145–1151.

Milasevic, P. and Ducharme, G. (1987). Uniqueness of the spatial median. *The Annals of Statistics*, **15**(3), 1332–1333.

Milligan, G. W. (1979). Ultrametric hierarchical clustering algorithms. *Psychometrika*, **44**(3), 343–346.

Mingers, J. and Lipkins, E. A. (2010). Counting the citations: A comparison of *Web of Science* and Google *Scholar* in the field of business and management. *Scientometrics*, **85**, 613–625.

Miroiu, A. (2013). Axiomatizing the hirsch index: Quantity and quality disjoined. *Journal of Informetrics*, **7**, 10–15.

Mittal, H. (2011). *R Graphs Cookbook*. Packt Publishing.

Miyamoto, S. (1998). Application of rough sets to information retrieval. *Journal of the American Society for Information Science*, **49**(3), 195–205.

Moed, H. F. (2010). Measuring contextual citation impact of scientific journals. *Journal of Informetrics*, **4**(3), 265–277.

Molinari, J. (1989). A calibrated index for the measurement of evenness. *Oikos*, **56**, 319–326.

Monahan, J. (2001). *Numerical Methods of Statistics*. Oxford University Press.

Moore, R. (1962). Interval arithmetic and automatic error analysis in digital computing. Technical Report 25 NR-0440211, Department of Mathematics, Stanford University, Stanford, California.

Morgan, H. L. (1970). Spelling correction in systems programs. *Journal of the ACM*, **13**(2), 90–94.

Mosteller, C. F. and Tukey, J. W. (1977). *Data analysis and regression*. Addison-Wesley, Reading, Mass.

Möttönen, J., Nordhausen, K., and Oja, H. (2010). Asymptotic theory of the spatial median. *Nonparametrics and Robustness in Modern Statistical Inference and Time Series*, **7**, 182–193.

Moyano, L. G. (2017). Learning network representations. *The European Physical Journal*, **226**(3), 499–518.

M.R. Garey, D.S. Johnson, H. W. (1982). The complexity of the generalized Lloyd-Max problem. *IEEE Transactions on Information Theory*, **IT-28**(2), 255–256.

Muenchen, R. (2011). *R for SAS and SPSS Users*. Springer-Verlag.

Muenchen, R. and Hilbe, J. (2010). *R for Stata Users*. Springer-Verlag.

Müller, A. C., Nowozin, S., and Lampert, C. H. (2012). Information theoretic clustering using minimum spanning trees. In *Proc. German Conference on Pattern Recognition*. URL `https://github.com/amueller/information-theoretic-mst`.

Müllner, D. (2011). Modern hierarchical, agglomerative clustering algorithms. *ArXiv:1109.2378 [stat.ML]*. URL `http://arxiv.org/abs/1109.2378`.

Müllner, D. (2013). fastcluster: Fast hierarchical, agglomerative clustering routines for R and Python. *Journal of Statistical Software*, **53**(9), 1–18.

Murrell, P. (2006). *R Graphics*. Chapman & Hall/CRC.

Murrell, P. (2011). Raster images in R graphics. *The R Journal*, **3**(1), 48–54.

Murtagh, F. (1984). Complexities of hierarchical cluster algorithms: State of the art. *Computional Statistics Quarterly*, **1**(2), 101–113.

Murtagh, F. (1985). Multidimensional clustering algorithms. In *Compstat Lectures*, volume 4. Physica-Verlag.

Nagler, T. and Czado, C. (2016). Evading the curse of dimensionality in nonparametric density estimation with simplified vine copulas. *Journal of Multivariate Analysis*, **151**, 69–89.

Nagumo, M. (1930). Über eine Klasse der Mittelwerte. *Japanese Journal of Mathematics*, **7**, 71–79.

Naidan, B., Boytsov, L., Malkov, Y., and Novak, D. (2019). *Non-metric space library (NMSLIB) manual, version 2.0*. URL `https://github.com/nmslib/nmslib/blob/master/manual/latex/manual.pdf`.

Nair, G. M. and Turlach, B. A. (2012). The stochastic h-index. *Journal of Informetrics*, **6**(1), 80–87.

Narukawa, Y. and Torra, V. (2009). Multidimensional generalized fuzzy integral. *Fuzzy Sets and Systems*, **160**, 802–815.

Nasıbov, E. and Kandemır-Cavas, C. (2011). OWA-based linkage method in hierarchical clustering: Application on phylogenetic trees. *Expert Systems with Applications*, **38**, 12684–12690.

Nasibov, E. N. and Peker, S. (2008). On the nearest parametric approximation of a fuzzy number. *Fuzzy Sets and Systems*, **159**(11), 1365–1375.

Navarro, G. (2001). A guided tour to approximate string matching. *ACM Computing Surveys*, **33**(1), 31–88.

Nee, S., Harvey, P., and Cotgreave, P. (1992). Population persistence and the natural relationship between body size and abundance. In *Conservation of biodiversity for sustainable development*, pages 124–136. Scandinavian University Press, Oslo.

Needleman, S. and Wunsch, C. D. (1970). A general method applicable to the search of similarities in the amino acid sequence of two proteins. *Journal of Molecular Biology*, **48**, 443–453.

Nelder, J. and Mead, R. (1965). A simplex method for function minimization. *Computer Journal*, **7**, 308–313.

Nelsen, R. (1999). *An Introduction to Copulas*. Springer-Verlag.

Neumann, K., Rolf, M., and Steil, J. J. (2013). Reliable integration of continuous constraints into extreme learning machines. *International Journal of Uncertainty, Fuzziness and Knowledge-Based Systems*, **21 (suppl. 2)**, 35–50.

Nicholls, P. T. (1987). Estimation of Zipf parameters. *Journal of the American Society for Information Science*, **38**(6), 443–445.

Nicholls, P. T. (1989). Bibliometric modeling processes and the empirical validity of Lotka's law. *Journal of the American Society for Information Science*, **40**(6), 379–385.

Nicolas, F. and Rivals, E. (2003). Complexities of the centre and median string problems. *Lecture Notes in Computer Science*, **2676**, 315–327.

Nicolas, F. and Rivals, E. (2005). Hardness results for the center and median string problems under the weighted and unweighted edit distances. *Journal of Discrete Algorithms*, **3**(2–4), 390–415.

Nicolini, C., Vakula, S., Italo Balla, M., and Gandini, E. (1995). Can the assignment of university chairs be automated? *Scientometrics*, **32**(2), 93–107.

Nienkötter, A. and Jiang, X. (2016). Improved prototype embedding based generalized median computation by means of refined construction methods. *Lecture Notes in Computer Science*, **10029**, 107–117.

Niinimaa, A., Oja, H., and Tableman, M. (1990). The finite-sample breakdown point of the oja bivariate median and of the corresponding half-samples version. *Statistics & Probability Letters*, **10**, 325–328.

Niinimaa, A., Oja, H., and Nyblom, J. (1992). Algorithm AS 277: The Oja bivariate median. *Journal of the Royal Statistical Society. Series C (Applied Statistics)*, **41**(3), 611–633.

Nocedal, J. and Wright, S. (2006). *Numerical Optimization*. Springer-Verlag, New York.

Noda, R., Sakai, T., and Morimoto, M. (1991). Generalized Fermat's problem. *Canadian Mathematical Bulletin*, **34**, 96–104.

Norris, M. and Oppenheim, C. (2010). Peer review and the h-index: Two studies. *Journal of Informetrics*, **4**, 221–232.

Nowak, P. (2008). *Bibliometria. Webometria. Podstawy. Wybrane zastosowania*. UAM, Poznań.

Oetiker, T., Przechlewski, T., and i in., R. K. (2007). *Nie za krótkie wprowadzenie do systemu LaTeX* 2_ε. ftp.gust.org.pl/pub/CTAN/info/lshort/polish/lshort2e.pdf.

of Science Editors, E. A. (1998). EASE statement on inappropriate use of impact factors. URL: http://www.ease.org.uk/statements/EASE_statement_on_impact_factors.shtml.

Ohki, M. and Murofushi, T. (2012). A ranking methodology using a new dispersion criterion on a group decision making. In *Proc. SCIS-ISIS 2012*, pages 1649–1653.

Oja, H. (1983). Descriptive statistics for multivariate distributions. *Statistics & Probability Letters*, **1**, 327–332.

Olivares-Rodríguez, C. and Oncina, J. (2008). A stochastic approach to median string computation. *Lecture Notes in Computer Science*, **5342**, 431–440.

Olson, C. F. (1995). Parallel algorithms for hierarchical clustering. *Parallel Computing*, **21**, 1313–1325. doi:10.1016/0167-8191(95)00017-I.

Oommen, B. (1986). Constrained string editing. *Information Sciences*, **40**, 267–284.

Orlov, A. I. (1981). The connection between mean quantities and admissible transformations. *Mathematical Notes*, **30**(4), 774–778.

Ortega, J. L., López-Romero, E., and Fernández, I. (2011). Multivariate approach to classify research institutes according to their outputs: The case of the CSIC's institutes. *Journal of Informetrics*, **5**, 323–332.

Otieno, B. S. (2002). *An Alternative Estimate of Preferred Direction for Circular Data*. PhD thesis, Virginia Polytechnic Institute and State University.

Otte, C. (2013). Safe and interpretable machine learning: A methodological review. In *Studies in computational intelligence*, volume 445, pages 111–122. Springer.

Ovchinnikov, S. (1996). Means on ordered sets. *Mathematical Social Sciences*, **32**, 39–56.

Ovchinnikov, S. (1998). Invariant functions on simple orders. *Order*, **14**, 365–371.

Ovchinnikov, S. and Dukhovny, A. (2002). On order invariant aggregation functionals. *Journal of Mathematical Psychology*, **46**, 12–18.

Page, L., Brin, S., Motwani, R., and Winograd, T. (1998). The PageRank citation ranking: Bringing order to the Web. Technical report, Stanford University.

Pagola, M., Forcen, J. I., Barrenechea, E., Lopez-Molina, C., and Bustince, H. (2017). Use of OWA operators for feature aggregation in image classification. In *Proc. FUZZ-IEEE'17*, pages 1–6. IEEE.

Palacios-Huerta, I. and Volij, O. (2004). The measurement of intellectual influence. *Econometrica*, **72**(3), 963–977.

Panaretos, J. and Malesios, C. (2009). Assessing scientific research performance and impact with single indices. *Scientometrics*, **81**(3), 635–670.

Papadimitriou, C. and Steiglitz, K. (1982). *Combinatorial Optimization: Algorithms and Complexity*. Prentice Hall, Englewood Cliffs, NJ.

Park, H.-S. and Jun, C.-H. (2009). A simple and fast algorithm for K-medoids clustering. *Expert Systems with Applications*, **36**, 3336–3341.

Parzen, E. (1962). On estimation of a probability density function and mode. *The Annals of Mathematical Statistics*, **33**(3), 1065–1076.

Pearson, K. (1894). Contributions to the mathematical theory of evolution. *Philosophical Transactions of the Royal Society A*, **185**, 71–110.

Pedregosa, F., Varoquaux, G., Gramfort, A., Michel, V., Thirion, B., Grisel, O., Blondel, M., Prettenhofer, P., Weiss, R., Dubourg, V., Vanderplas, J., Passos, A., Cournapeau, D., Brucher, M., Perrot, M., and Duchesnay, E. (2011). Scikit-learn: Machine learning in Python. *Journal of Machine Learning Research*, **12**, 2825–2830.

Pedrycz, W. (1998). Shadowed sets: Representing and processing fuzzy sets. *IEEE Transactions on Systems, Man, and Cybernetics*, **28**(1), 103–109.

Pedrycz, W., Skowron, A., and Kreinovich, V., editors (2008). *Handbook of Granular Computing*. John Wiley and Sons, Chichester.

Peneva, V. and Popchev, I. (2007). Aggregation of fuzzy preference relations to multicriteria decision making. *Fuzzy Optimization and Decision Making*, **6**, 351–365.

Peng, R. D. (2019). *R Programming for Data Science*. URL `https://bookdown.org/rdpeng/rprogdatascience/`.

Pérez, A., Larranaga, P., and Inza, I. (2009). Bayesian classifiers based on kernel density estimation: Flexible classifiers. *International Journal of Approximate Reasoning*, **50**, 341–362.

Pérez-Fernández, R., Rademaker, M., and De Baets, B. (2017). Monometrics and their role in the rationalisation of ranking rules. *Information Fusion*, **34**, 16–27.

Pérez-Fernández, R., Baets, B. D., and Gagolewski, M. (2019). A taxonomy of monotonicity properties for the aggregation of multidimensional data. *Information Fusion*, **52**, 322–334. doi:10.1016/j.inffus.2019.05.006.

Pérez-Fernández, R., Gagolewski, M., and Baets, B. D. (2021). On the aggregation of compositional data. *Information Fusion*, **73**, 103–110. doi:10.1016/j.inffus.2021.02.021.

Peters, G. (2011). Granular box regression. *IEEE Transactions on Fuzzy Systems*, **19**, 1141–1152.

Peters, G. and Lacic, Z. (2012). Tackling outliers in granular box regression. *Information Sciences*, **212**, 44–56.

Peterson, W. and Brown, D. (1961). Cyclic codes for error detection. *Proceedings of the IRE*, **49**(1), 228–235.

Pielou, E. (1969). *An Introduction to Mathematical Ecology*. Wiley-Interscience, New York.

Pielou, E. (1975). *Ecological Diversity*. Wiley, New York.

Pielou, E. (1977). *Mathematical Ecology*. Wiley, New York.

Pitman, E. (1939). The estimation of the location and scale parameters of a continuous population of any given form. *Biometrika*, **30**, 391–421.

Podlubny, I. (2005). Comparison of scientific impact expressed by the number of citations in different fields of science. *Scientometrics*, **64**(1), 95–99.

Potharst, R. and Bioch, J. (1999). A decision tree algorithm for ordinal classification. *Lecture Notes in Computer Science*, **1642**, 187–198.

Potharst, R., Bioch, J., and Petter, T. (1997). Monotone decision trees. Technical Report EUR-FEW-CS-97-06, Erasmus University Rotterdam.

Powell, M. J. D. (1994). A direct search optimization method that models the objective and constraint functions by linear interpolation. In *Advances in Optimization and Numerical Analysis*, volume 275 of *Mathematics and Its Applications*, pages 51–67.

Powell, M. J. D. (2009). The BOBYQA algorithm for bound constrained optimization without derivatives. Technical Report NA2009/06, Department of Applied Mathematics and Theoretical Physics, Cambridge England.

Prade, H., Rico, A., and Serrurier, M. (2009). Elicitation of Sugeno integrals: A version space learning perspective. *Lecture Notes in Computer Science*, **5722**, 392–401.

Prange, E. (1957). Cyclic error-correcting codes in two symbols. Technical Report AFCRC-TN-57-103, Air Force Cambridge Research Center, Bedford, Mass.

Prathap, G. (2010). Is there a place for a mock h-index? *Scientometrics*, **84**, 153–165.

Press, W., Teukolsky, S., Vetterling, W., and Flannery, B. (2007). *Numerical Recipes. The Art of Scientific Computing*. Cambridge University Press.

Price, D. J. (1965). Networks of scientific papers. *Science*, **149**(3683), 510–515.

Prim, R. C. (1957). Shortest connection networks and some generalizations. *Bell System Technical Journal*, **36** (6), 1389–1401. doi:10.1002/j.1538-7305.1957.tb01515.x.

Proń, A. and Szatyłowicz, H. (2006). Habilitacja dodaje „skrzydeł"? *Forum Akademickie*, **3**.

Prpić, K. (1998). Science ethics: A study of eminent scientists' professional values. *Scientometrics*, **43**(2), 269–298.

Puerta, C. and Urrutia, A. (2015). A dual decomposition of the single-parameter Gini social evaluation functions. In *Proc. IFSA/EUSFLAT'15*, pages 70–76. Atlantis Press.

Puerto, J. and Rodríguez-Chía, A. M. (1999). Location of a moving service facility. *Mathematical Methods of Operations Research*, **49**(3), 373–393.

Puerto, J. and Rodríguez-Chía, A. M. (2006). New models for locating a moving service facility. *Mathematical Methods of Operations Research*, **63**(1), 31–51.

Puri, M. L. and Ralescu, D. A. (1986). Fuzzy random variables. *Journal of Mathematical Analysis and Applications*, **114**(2), 409–422.

Quesada, A. (2009). Monotonicity and the Hirsch index. *Journal of Informetrics*, **3**(2), 158–160.

Quesada, A. (2010). More axiomatics for the Hirsch index. *Scientometrics*, **82**, 413–418.

Quesada, A. (2011a). Axiomatics for the hirsch index and the egghe index. *Journal of Informetrics*, **5**(3), 476–480.

Quesada, A. (2011b). Further characterizations of the Hirsch index. *Scientometrics*, **87**, 107–114.

Quinlan, J. R. (1986). Induction of decision trees. *Machine Learning*, **1**, 81–106.

R Development Core Team (2020). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing, Vienna, Austria. URL `http://www.R-project.org`.

Radavanovic, M., Nanopoulos, A., and Ivanovic, M. (2010). Hubs in space: Popular nearest neighbors in high-dimensional data. *Journal of Machine Learning Research*, **11**, 2487–2531.

Rademacher, L. (2007). Approximating the centroid is hard. In *Symposium on Computational Geometry*, pages 302–305.

Rademaker, M. and De Baets, B. (2010). A threshold for majority in the context of aggregating partial order relations. In *Proc. 19th IEEE International Conference on Fuzzy Systems (FUZZ-IEEE'10)*, pages 1–4. IEEE, Barcelona, Spain.

Rademaker, M. and De Baets, B. (2011). Aggregation of monotone reciprocal relations with application to group decision making. *Fuzzy Sets and Systems*, **184**(1), 29–51.

Rademaker, M. and De Baets, B. (2014). A ranking procedure based on a natural monotonicity constraint. *Information Fusion*, **17**(1), 74–82.

Rademaker, M., De Baets, B., and De Meyer, H. (2012). Optimal monotone relabelling of partially non-monotone ordinal data. *Optimization Methods and Software*, **27**(1), 17–31.

Rajagopalan, S. and Schulman, L. J. (2000). Verification of identities. *SIAM Journal on Computing*, **29**(4), 1155–1163.

Rand, W. M. (1971). Objective criteria for the evaluation of clustering methods. *Journal of the American Statistical Association*, **66**(336), 846–850. doi:10.2307/2284239.

Rao, C. R. (1999). *Statistics and truth. Putting chance to work*. World Scientific Publishing.

Rardin, R. (1998). *Optimization in Operations Research*. Prentice Hall, Englewood Cliffs.

Rasiowa, H. (2003). *Wstęp do matematyki współczesnej*. PWN, Warszawa.

Reiser, R. H., Bedregal, B., and Baczyński, M. (2013). Aggregating fuzzy implications. *Information Sciences*, **253**, 126–146.

Rényi, A. (1959). On the dimension and entropy of probability distributions. *Acta Mathematica Hungarica*, **10** (1–2), 193–215.

Rezaei, M. and Fränti, P. (2016). Set matching measures for external cluster validity. *IEEE Transactions on Knowledge and Data Engineering*, **28**(8), 2173–2186. doi:10.1109/TKDE.2016.2551240.

Ribeiro, M. T., Singh, S., and Guestrin, C. (2016). Why should I trust you?: Explaining the predictions of any classifier. In *Proc. KDD'16*, pages 1135–1144.

Richardson, M. and Domingos, P. (2002). The intelligent surfer: Probabilistic combination of link and content information in PageRank. In *Proc. Advances in Neural Information Processing Systems*, volume 14, pages 1441–1448, Cambridge, MA, 2002. MIT Press.

Ricotta, C. (2004). A recipe for unconventional evenness measures. *Acta Biotheoretica*, **52**, 95–104.

Ricotta, C., de Zuliani, E., Pacini, A., and Avena, G. (2001). On the mutual relatedness of evenness measures. *Community Ecology*, **2**(1), 51–56.

Riihimäki, J. and Vehtari, A. (2010). Gaussian processes with monotonicity information. In *Proc. AISTATS'10*, pages 645–652. Sardinia, Italy.

Rios, L. M. and Sahinidis, N. V. (2013). Derivative-free optimization: A review of algorithms and comparison of software implementations. *Journal of Global Optimization*, **56**, 1247–1293.

Ripley, B. (2005). Internationalization features of R 2.1.0. *R News*, **5**(1), 2–7.

Ristad, E. S. and Yianilos, P. N. (1998). Learning string-edit distance. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **20**(5), 522–532.

Robert, C. and Casella, G. (2004). *Monte Carlo Statistical Methods*. Springer-Verlag.

Rockafellar, R. T. (1970). *Convex Analysis*. Princeton University Press, New Jersey.

Rojas, K., Gómez, D., Rodríguez, J. T., and Montero, J. (2012). Some properties of consistency in the families of aggregation operators. *Advances in Intelligent and Soft Computing*, **107**, 169–176.

Ronkainen, T., Oja, H., and Orponen, P. (2003). Coputation of the multivariate Oja median. In *Proc. Intl. Conf. Robust Statistics*, pages 344–359.

Rothschild, M. and Stiglitz, J. (1970). Increasing risk: I. A definition. *Journal of Economic Theory*, **2**(3), 225–243.

Roubens, M. and Vincke, P. (1985). *Preference modeling*. Lecture Notes in Economics and Mathematical Systems 250. Springer-Verlag, Berlin.

Rousseau, R. (1990). Relations between continuous versions of bibliometric laws. *Journal of the American Society for Information Science*, **41**(3), 197–203.

Rousseau, R. (1998). Citation analysis as a theory of friction or polluted air? *Scientometrics*, **43**(1), 63–67.

Rousseau, R. (2007). The influence of missing publications on the Hirsch index. *Journal of Informetrics*, **1**(1), 2–7.

Rousseau, R. (2008a). Reflections on recent developments of the h-index and h-type indices. *COLLNET Journal of Scientometrics and Information Management*, **2**(1), 1–8.

Rousseau, R. (2008b). Woeginger's axiomatisation of the h-index and its relation to the g-index, the $h(2)$-index and the r^2-index. *Journal of Informetrics*, **2**(4), 335–340.

Rousseeuw, P. J. and Croux, C. (1993). Alternatives to the median absolute deviation. *Journal of the American Statistical Association*, **88**(424), 1273–1283.

Rousseeuw, P. J. and Hubert, M. (1999). Regression depth. *Journal of the American Statistical Association*, **94**(446), 388–402.

Rousseeuw, P. J. and Ruts, I. (1996). Algorithm AS 307: Bivariate location depth. *Applied Statistics*, **45**, 516–526.

Rousseeuw, P. J. and Ruts, I. (1998). Constructing the bivariate Tukey median. *Statistica Sinica*, **8**, 827–839.

Rousseeuw, P. J. and Struyf, A. (1998). Computing location depth and regression depth in higher dimensions. *Statistics and Computing*, **8**, 193–203.

Rousseeuw, P. J. and Struyf, A. (2004). Computation of robust statistics: depth, median, and related measures. In Goodman, J. E. and O'Rourke, J., editors, *The Handbook of Discrete and Computational Geometry*, pages 1279–1292. Chapman & Hall/CRC, Boca Raton.

Rousseeuw, P. J., Ruts, I., and Tukey, J. W. (1999a). The bagplot: A bivariate boxplot. *The American Statistician*, **53**(4), 382–387.

Rousseeuw, P. J., Van Aelst, S., and Hubert, M. (1999b). Regression depth: Rejoinder. *Journal of the American Statistical Association*, **94**(446), 419–433.

Rousseuw, P. J. and Ruts, I. (1999). The depth function of a population distribution. *Metrika*, **49**, 213–244.

Routledge, R. (1983). Evenness indices: Are any admissible? *Oikos*, **40**, 149–151.

Rowan, T. (1990). *Functional Stability Analysis of Numerical Algorithms*. PhD thesis, Department of Computer Sciences, University of Texas, Austin.

Rowiński, T. and Gagolewski, M. (2007). Preferencje i postawy wobec pomocy online (attitudes towards online counselling and psychotherapy). *Studia Psychologica UKSW*, **7**, 195–210. In Polish.

Rowiński, T. and Gagolewski, M. (2011). Internet a kryzys. In Jankowska, M. and Starzomska, M., editors, *Kryzys: Pułapka czy szansa?*, pages 211–224. WN Akapit, Warsaw, Poland. ISBN 978-83-609-5885-8. In Polish.

Rubin, D. and Little, R. (2002). *Statistical Analysis with Missing Data*. John Wiley & Sons.

Ruts, I. and Rousseeuw, P. J. (1996). Computing depth contours of bivariate point clouds. *Computational Statistics & Data Analysis*, **23**, 153–168.

Rytgaard, M. (1990). Estimation in the Pareto distribution. *ASTIN bulletin*, **20**(2), 201–216.

Rådström, H. (1952). An embedding theorem for spaces of convex sets. *Proceedings of the American Mathematical Society*, **3**, 165–169.

Sáanchez, G., Lladós, J., and Tombre, K. (2002). A mean string algorithm to compute the average among a set of 2D shapes. *Pattern Recognition Letters*, **23**, 203–213.

Saaty, T. (1994). *Fundamentals of decision making and priority theory with the analytic hierarchy process*. RWS Publications, Pittsburgh.

Sanchez, D. and Trillas, E. (2012). Measures of fuzziness under different uses of fuzzy sets. In Greco, S. et al., editors, *Proc. IPMU 2012 (CCIS 298)*, pages 25–43. Springer-Verlag.

Sarkar, D. (2008). *Lattice: Multivariate Data Visualization with R*. Springer-Verlag.

Schmidberger, M., Morgan, M., Eddelbuettel, D., Yu, H., Tierney, L., and Mansmann, U. (2009). State of the art in parallel computing with R. *Journal of Statistical Software*, **31**(1), 1–27.

Schmidt, M. and Lipson, H. (2009). Distilling free-form natural laws from experimental data. *Science*, **324** (5923), 81–85.

Schön, J. H. et al. (2001). Field-effect modulation of the conductance of single molecules. *Science*, **2138**(294). Artykuł został wycofany z powodu fałszerstwa wyników (przykład do rozdz. 1).

Schönherr, S. (2002). *Quadratic Programming in Geometric Optimization: Theory, Implementation, and Applications*. PhD thesis, Swiss Federal Institute of Technology, Zurich, Switzerland.

Schreiber, M. (2001). How to modify the g-index for multi-authored manuscripts. *Journal of Informetrics*, **4** (1), 42–52.

Schreiber, M. (2007). A case study of Hirsch index for 26 non-prominent physicists. *Annalen der Physik*, **16** (9), 640–652.

Schreiber, M. (2008). A modification of the h-index: The h_m-index accounts for multi-authored manuscripts. *Journal of Informetrics*, **2**(3), 211–216.

Schreiber, M. (2009a). A case study of the modified Hirsch index h_m accounting for multiple coauthors. *Journal of the American Society for Information Science and Technology*, **60**(6), 1274–1282.

Schreiber, M. (2009b). Fractionalized counting of publications for the g-index. *Journal of the American Society for Information Science and Technology*, **60**(10), 2145–2150.

Schubert, A. (2009). Using the h-index for assessing single publications. *Scientometrics*, **78**(3), 559–565.

Schubert, A. and Glänzel, W. (2007). A systematic analysis of Hirsch-type indices for journals. *Journal of Informetrics*, **1**, 179–184.

Schubert, A., Korn, A., and Telcs, A. (2009). Hirsch-type indices for characterizing networks. *Scientometrics*, **78**(2), 375–382.

Schumaker, L. (2007). *Spline Functions: Basic Theory*. Cambridge University Press.

Schutte, H. K. and Svec, J. G. (2007). Reaction of *Folia Phoniatrica et Logopaedica* on the current trend of Impact Factor measures. *Folia Phoniatrica et Logopaedica*, **59**, 281–285.

Schweizer, B. and Sklar, A. (1983). *Probabilistic Metric Spaces*. Elsevier, Amsterdam.

Serfling, R. J. (1980). *Approximation theorems of mathematical statistics*. John Wiley & Sons, New York.

Shannon, C. (1948). A mathematical theory of communications. *Bell System Technical Journal*, **27**(3), 379–423.

Shao, J. (2007). *Mathematical Statistics*. Springer, New York.

Sheikhpour, R., Sarram, M. A., Gharaghani, S., and Chahooki, M. A. Z. (2017). A survey on semi-supervised feature selection methods. *Pattern Recognition*, **64**, 141–158.

Shevtsova, I. G. (2007). Sharpening of the upper bound of the absolute constant in the Berry-Esseen inequality. *Theory of Probability and its Applications*, **51**(3).

Shi, J. and Malik, J. (2000). Normalized cuts and image segmentation. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **22**(8), 888–905.

Shiganov, I. S. (1986). Refinement of the upper bound of the constant in the central limit theorem. *Journal of Mathematical Sciences*, **35**(3), 2545–2550.

Shilkret, N. (1971). Maxitive measure and integration. *Indagationes Mathematicæ*, **33**, 109–116.

Shively, T. S., Sager, T. W., and Walker, S. G. (2009). A Bayesian approach to non-parametric monotone function estimation. *Journal of the Royal Statistical Society, Series B*, **71**(1), 159–175.

Shumway, R. and D.S., D. S. (2011). *Time Series Analysis and Its Applications with R Examples*. Springer-Verlag.

Sidiropoulos, A., Katsaros, D., and Manolopoulos, Y. (2007). Generalized h-index for disclosing latent facts in citation networks. *Scientometrics*, **72**(2), 253–280.

Silberschatz, A., Peterson, J., and Gagne, G. (2005). *Podstawy systemów operacyjnych*. WNT, Warszawa.

Simkin, M. V. and Roychowdhury, V. P. (2003). Read before you cite! *Complex Syst.*, **14**, 269–274.

Simovici, D. and Jaroszewicz, S. (2002). An axiomatization of partition entropy. *IEEE Transactions on Information Theory*, **48**(7), 2138–2142.

Simpson, E. (1949). Measurement of diversity. *Nature*, **163**, 688.

Sinova, B., Casals, M., Colubi, A., and Ángeles Gil, M. (2010). The median of a random interval. In Borgelt, C. et al., editors, *Combining Soft Computing and Statistical Methods in Data Analysis*, pages 575–583. Springer.

Sinova, B., Ángeles Gil, M., Colubi, A., and Van Aelst, S. (2012). The median of a random fuzzy number. The 1-norm distance approach. *Fuzzy Sets and Systems*, **200**, 99–115.

Sinova, B., Gonzales-Rodriguez, G., and Van Aelst, S. (2013). An alternative approach to the median of a random interval using an l_2 metric. In Kruse, R. et al., editors, *Synergies of Soft Computing and Statistics for Intelligent Data Analysis*, pages 273–281. Springer.

Sinova, B., Pérez-Fernández, S., and Montenegro, M. (2015). The Wabl/Ldev/Rdev median of a random fuzzy number and statistical properties. In Grzegorzewski, P. et al., editors, *Strengthening Links between Data Analysis and Soft Computing*, pages 143–150. Springer.

Siudem, G., Żogała-Siudem, B., Cena, A., and Gagolewski, M. (2020). Three dimensions of scientific impact. *Proceedings of the National Academy of Sciences of the United States of America (PNAS)*, **117**, 13896–13900. doi:10.1073/pnas.2001064117.

Sklar, A. (1959). Fonctions de répartition à n dimensions et leurs marges. *Publications de l'Institut de Statistique de L'Université de Paris*, **8**.

Small, C. G. (1987). Measures of centrality for multivariate and directional distributions. *Canadian Journal of Statistics*, **15**(1), 31–39.

Small, C. G. (1990). A survey of multidimensional medians. *International Statistical Review*, **58**(3), 263–277.

Small, H. (1998). Citations and consilience in science. *Scientometrics*, **43**(1), 143–148.

Small, H. (2003). Paradigms, citations, and maps of science: A personal history. *Journal of the American Society for Information Science and Technology*, **54**(5), 394–399.

Smith, B. and Wilson, J. (1996). A consumer's guide to evenness indices. *Oikos*, **76**, 70–82.

Sneath, P. H. A. (1957). The application of computers to taxonomy. *Journal of General Microbiology*, **17**(1), 201–226. doi:10.1099/00221287-17-1-201.

Soetaert, K., Petzoldt, T., and Setzer, R. (2010). Solving differential equations in R. *The R Journal*, **2**(2), 5–15.

Sokal, R. and Michener, C. (1958). A statistical method for evaluating systematic relationships. *University of Kansas Science Bulletin*, **38**, 1409–1438.

Soler, J. M. (2007). A rational indicator of scientific creativity. *Journal of Informetrics*, **1**(2), 123–130.

Somervuo, P. J. (2004). Online algorithm for the self-organizing map of symbol strings. *Neural Networks*, **17**, 1231–1239.

Spector, P. (2008). *Data Manipulation with R*. Springer-Verlag.

Springer, M. D. (1979). *The Algebra of Random Variables*. John Wiley & Sons, New York.

Stefanini, L. and Sorini, L. (2009). Fuzzy arithmetic with parametric LR fuzzy numbers. In *Proc. IFSA/EUSFLAT 2009*, pages 600–605.

Stefanini, L. and Sorini, L. (2012). Approximation of fuzzy numbers by F-transform. In Greco, S. et al., editors, *Advances in Computational Intelligence, Part III*, volume 299 of *Communications in Computer and Information Science*, pages 69–78. Springer.

Stephens, M. (1974). EDF statistics for goodness of fit and some comparisons. *Journal of the American Statistical Association*, **69**, 730–737.

Stevens, S. S. (1946). On the theory of scales of measurement. *Science*, **103**(2684), 677–680.

Stewart, T. A. (1997). *Intellectual capital — The new wealth of organizations*. Nicholas Brealey Publishing.

Stigler, S. M. (1969). Linear functions of order statistics. *The Annals of Mathematical Statistics*, **40**(3), 770–788.

Stoer, J. and Bulirsch, R. (1987). *Wstęp do analizy numerycznej*. PWN, Warszawa.

Storcheus, D., Rostamizadeh, A., and Kumar, S. (2015). A survey of modern questions and challenges in feature extraction. *Journal of Machine Learning Research*, **44**, 1–18.

Strotmann, A. and Zhao, D. (2012). Author name disambiguation: What difference does it make in author-based citation analysis? *Journal of the American Society for Information Science and Technology*, **63**, 1820–1933.

Struyf, A. and Rousseuw, P. J. (2000). High-dimensional computation of the deepest location. *Computational Statistics & Data Analysis*, **34**, 415–426.

Stubblebine, T. (2001). *Wyrażenia regularne. Leksykon kieszonkowy*. Helion, Gliwice.

Sugeno, M. (1974). *Theory of fuzzy integrals and its applications*. PhD thesis, Tokyo Institute of Technology.

Sun, H. and Wei, Y. (2006). A note on the PageRank algorithm. *Applied Mathematics and Computation*, **179**, 799–806.

Sylvester, J. J. (1857). A question in the geometry of situation. *Quarterly Journal of Pure and Applied Mathematics*, **1**, 79.

Szmidt, E. and Kacprzyk, J. (2000). Distances between intuitionistic fuzzy sets. *Fuzzy Sets and Systems*, **114** (3), 505–518.

Szmidt, E. and Kacprzyk, J. (2001). Analysis of consensus under intuitionistic fuzzy preferences. In *Proc. Intl. Conf. Fuzzy Logic and Technology*, pages 79–82. De Montfort University, Leicester, UK.

Szydłowski, M. and Krawiec, A. (2001). Scientific cycle model with delay. *Scientometrics*, **52**(1), 83–95.

Szydłowski, M. and Krawiec, A. (2009). Growth cycles of knowledge. *Scientometrics*, **78**(1), 99–111.

Szymanski, B. K., de la Rosa, J. L., and Krishnamoorthy, M. (2012). An internet measure of the value of citations. *Information Sciences*, **185**, 18–31.

Tai, K.-C. (1979). Tree-to-tree correction problem. *Journal of the ACM*, **26**(3), 422–433.

Taillie, C. (1979). Species equitibility: A comparative approach. In *Ecological Diversity in Theory and Practice*, pages 51–62. Int. Coop. Publ. House, Fairland, Maryland.

Tanenbaum, A. (2010). *Systemy operacyjne*. Helion, Gliwice.

Tastle, J. and Tastle, W. (2005). Extending the consensus measure: analyzing ordinal data with respect to extrema. In *Proc. ISECON 2005*, volume 22, pages 1–5. Columbus OH, USA.

Taylor, B. J., editor (2006). *Methods and Procedures for the Verification and Validation of Artificial Neural Networks*. Springer.

Tellier, L.-N. (1972). The Weber problem: Solution and interpretation. *Geographical Analysis*, **4**(3), 215–233.

The CGAL Project (2015). *CGAL User and Reference Manual*. CGAL Editorial Board, 4.6 edition. URL `http://doc.cgal.org/4.6/Manual/packages.html`.

Tibshirani, R., Hastie, T., Narasimhan, B., and Chu, G. (2002). Diagnosis of multiple cancer types by shrunken centroids of gene expression. *Proceedings of the National Academy of Sciences*, **99**(10), 6567–6572.

Tikhonov, A. and Arsenin, V. (1977). *Solution of ill-posed problems*. Winston & Sons, Washington.

Torra, V. (1997). The weighted OWA operator. *International Journal of Intelligent Systems*, **12**, 153–166.

Torra, V. (1999a). On the learning of weights in some aggregation operators: The weighted mean and OWA operators. *Mathware and Soft Computing*, **6**, 249–265.

Torra, V. (1999b). On some relationships between hierarchies of quasi-arithmetic means and neural networks. *International Journal of Intelligent Systems*, **14**, 1089–1098.

Torra, V. (2000). Learning weights for Weighted OWA operators. In *Proc. IEEE Intl. Conf. Industrial Electr. Control and Instrumentation*, pages 2530–2535.

Torra, V. (2002). Learning weights for the quasi-weighted means. *IEEE Transactions on Fuzzy Systems*, **10**(5), 653–666.

Torra, V., editor (2003). *Information Fusion in Data Mining*, volume 123 of *Studies in Fuzziness and Soft Computing*. Springer-Verlag.

Torra, V. (2004). OWA operators in data modeling and reidentification. *IEEE Transactions on Fuzzy Systems*, **12**(5), 652–660.

Torra, V. (2005). Aggregation operators and models. *Fuzzy Sets and Systems*, **156**, 407–410.

Torra, V. (2010). Information fusion. Methods and aggregation operators. In Maimon, O. and Rokach, L., editors, *The Data Mining and Knowledge Discovery Handbook*, pages 999–1008. Springer.

Torra, V. (2011). The WOWA operator: A review. In Yager, R. R., Kacprzyk, J., and Beliakov, G., editors, *Recent Developments in the Ordered Weighted Averaging Operators*, pages 17–28. Springer.

Torra, V. and Lv, Z. (2009). On the WOWA operator and its interpolation function. *International Journal of Intelligent Systems*, **24**, 1039–1056.

Torra, V. and Narukawa, Y. (2006). The interpretation of fuzzy integrals and their application to fuzzy systems. *International Journal of Approximate Reasoning*, **41**, 43–58.

Torra, V. and Narukawa, Y. (2007a). *Modeling Decisions: Information Fusion and Aggregation Operators*. Springer-Verlag.

Torra, V. and Narukawa, Y. (2007b). A view of averaging aggregation operators. *IEEE Transactions on Fuzzy Systems*, **15**(6), 1063–1067.

Torra, V. and Narukawa, Y. (2008). The h-index and the number of citations: Two fuzzy integrals. *IEEE Transactions on Fuzzy Systems*, **16**(3), 795–797.

Trutschnig, W., González-Rodríguez, G., Colubi, A., and Ángeles Gil, M. (2009). A new family of metrics for compact, convex (fuzzy) sets based on a generalized concept of mid and spread. *Information Sciences*, **179** (23), 3964–3972.

Tukey, J. W. (1974). Mathematics and the picturing of data. *Proc. Intl. Congress of Mathematicians*, pages 523–531.

Tukey, J. (1972). Some graphic and semigraphic displays. In Bancroft, T., editor, *Statistical Papers in Honor of George W. Snedecor*, pages 293–316. Ames.

Tuomisto, H. (2012). An updated consumer's guide to evenness and related indices. *Oikos*, **121**, 1203–1218.

Ukkonen, E. (1983). On approximate string matching. *Lecture Notes in Computer Science*, **158**, 487–495.

Ukkonen, E. (1992). Approximate string-matching with q-grams and maximal matches. *Theoretical Computer Science*, **92**, 191–211.

Ultsch, A. (2005). Clustering with SOM: U*C. In *Workshop on Self-Organizing Maps*, pages 75–82.

van der Loo, M. (2014). The stringdist package for approximate string matching. *The R Journal*, **6**(1), 111–122.

van Eck, N. J. and Waltman, L. (2008). Generalizing the h- and g-indices. *Journal of Informetrics*, **2**(4), 263–271.

van Kreveld, M., Mitchell, J. S., Rousseeuw, P., Sharir, M., Snoeyink, J., and Speckmann, B. (2008). Efficient algorithms for maximum regression depth. *Discrete and Computational Geometry*, **39**(4), 656–677.

van Raan, A. (2004). Sleeping beauties in science. *Scientometrics*, **59**(3), 467–472.

van Raan, A. F. J. (1998). In matters of quantitative studies of science. The fault of theorists is offering too little and asking too much. *Scientometrics*, **43**(1), 129–139.

van Raan, A. F. J. (2006). Comparison of the Hirsch-index with standard bibliometric indicators and with peer judgment for 147 chemistry research groups. *Scientometrics*, **67**(3), 491–502.

Vanclay, J. K. (2007). On the robustness of the h-index. *Journal of the American Society for Information Science and Technology*, **58**(10), 1547–1550.

Vannucci, S. (2010). Dominance dimension: A common parametric formulation for integer-valued scientific impact indices. *Scientometrics*, **84**, 43–48.

Vardi, Y. and Zhang, C.-H. (2000). The multivariate l_1-median and associated data depth. *Proceedings of the National Academy of Sciences*, **97**(4), 1423–1426.

Vazquez, A. (2001). Statistics of citation networks. arXiv:cond-mat/0105031v1.

Veenman, C., Reinders, M., and Backer, E. (2002). A maximum variance cluster algorithm. *IEEE Transactions on Pattern Analysis and Machine Intelligence*, **24**(9), 1273–1280.

Vellido, A., Martin-Guerrero, J. D., and Lisboa, P. J. (2012). Making machine learning models interpretable. In *Proc. European Symposium on Artificial Neural Networks, Computational Intelligence and Machine Learning ESANN'12*, pages 163–172.

Venables, W. and Ripley, B. (2000). *S Programming*. Springer-Verlag.

Venables, W. and Ripley, B. (2002). *Modern Applied Statistics with S*. Springer-Verlag.

Vieira, E. S. and Gomes, J. A. (2010). Citations to scientific articles: Its distribution and dependencies on the article features. *Journal of Informetrics*, **4**, 1–13.

Vieira, E. S. and Gomes, J. A. (2009). A comparison of *Scopus* and *Web of Science* for a typical university. *Scientometrics*, **81**(2), 587–600.

Villasenor-Alva, J. and Gonzalez-Estrada, E. (2009). A bootstrap goodness of fit test for the Generalized Pareto Distribution. *Computational Statistics and Data Analysis*, **53**(11), 3835–3841.

Vinh, N. X., Epps, J., and Bailey, J. (2010). Information theoretic measures for clusterings comparison: Variants, properties, normalization and correction for chance. *Journal of Machine Learning Research*, **11**(95), 2837–2854. URL `http://jmlr.org/papers/v11/vinh10a.html`.

Vinkler, P. (1998). Comparative investigation of frequency and strength of motives toward referencing. The reference threshold model. *Scientometrics*, **43**(1), 107–127.

Vinogradov, A. E. (1998). Secular trend of academician aging. *Scientometrics*, **43**(1), 149–160.

Vintsyuk, T. (1968). Speech discrimination by dynamic programming. *Cybernetics*, **4**(1), 52–57.

von Neumann, J. and Morgenstern, O. (1947). *Theory of games and economic behavior*. Princeton University Press, Princeton.

Wachenfeld, W. and Winner, H. (2016). Do autonomous vehicles learn? In Maurer, M., Gerdes, J. C., Lenz, B., and Winner, H., editors, *Autonomous Driving: Technical, Legal and Social Aspects*, pages 451–471. Springer, Berlin, Heidelberg.

Wagner, R. A. and Fischer, M. J. (1974). The string-to-string correction problem. *Journal of the ACM*, **21**(1), 168–173.

Wagner-Döbler, R. (1995). Where has the cumulative advantage gone? some observations about the frequency distribution of scientific productivity, of duration of scientific participation, and of speed of publication. *Scientometrics*, **32**(2), 123–132.

Wallis, W., Shoubridge, P., Kraetz, M., and Ray, D. (2001). Graph distances using graph union. *Pattern Recognition Letters*, **22**(6–7), 701–704.

Waltman, L. and van Eck, N. J. (2012). The inconsistency of the h-index. *Journal of the American Society for Information Science and Technology*, **63**(2), 406–415.

Waltman, L., van Eck, N. J., and Wouters, P. (2013). Counting publications and citations: Is more always better? *Journal of Informetrics*, **7**, 635–641.

Wandelt, S. et al. (2014). State-of-the-art in string similarity search and join. *SIGMOD Record*, **43**(1), 64–76.

Wang, X., Wang, X., and Wilkes, D. M. (2009). A divide-and-conquer approach for minimum spanning tree-based clustering. *IEEE Transations on Knowledge and Data Engineering*, **21**(7), 945–958.

Wang, X. and Kerre, E. E. (2001a). Reasonable properties for the ordering of fuzzy quantities (I). *Fuzzy Sets and Systems*, **118**(3), 375–385.

Wang, X. and Kerre, E. E. (2001b). Reasonable properties for the ordering of fuzzy quantities (II). *Fuzzy Sets and Systems*, **118**(3), 387–405.

Warshall, S. (1962). A theorem on Boolean matrices. *Journal of the ACM*, **9**(1), 11–12.

Weber, S. (1984). Measures of fuzzy sets and measures of fuzziness. *Fuzzy Sets and Systems*, **13**, 247–271.

Weiss, S. M. and Indurkhya, N. (1995). Rule-based machine learning methods for functional prediction. *Journal of Artificial Intelligence Research*, **3**, 383–403.

Weiszfeld, E. (1937). Sur le point par lequel la somme des distances de n points donnés est minimum. *Tohoku Mathematics Journal*, **43**, 355–386.

Welzl, E. (1991). Smallest enclosing disks (balls and ellipsoids). *Lecture Notes in Computer Science*, **555**, 359–370.

Wickham, H. (2009). *ggplot2: Elegant Graphics for Data Analysis*. Springer-Verlag.

Wickham, H. (2010). stringr: modern, consistent string processing. *The R Journal*, **2**(2), 38–40.

Wickham, H. (2011). testthat: Get started with testing. *The R Journal*, **3**(1), 5–10.

Wickham, H. and Grolemund, G. (2017). *R for Data Science*. O'Reilly.

Widrow, B. and Winter, R. (1998). Neural nets for adaptive filtering and adaptive pattern recognition. *Computer*, **21**, 25–39.

Wieczorkowski, R. and Zieliński, R. (1997). *Komputerowe generatory liczb losowych*. WNT, Warszawa.

Wierzchoń, S. T. and Kłopotek, M. A. (2018). *Modern algorithms of cluster analysis*. Springer.

Wilkin, T. and Beliakov, G. (2015). Weakly monotonic averaging functions. *International Journal of Intelligent Systems*, **30**(2), 144–169.

Wilkin, T., Beliakov, G., and Calvo, T. (2014). Weakly monotone averaging functions. *Communications in Computer and Information Science*, **444**, 364–373.

Wilkin, T. A. (2014). *Weakly monotonic averaging with application to image processing*. PhD thesis, Deakin University.

Wilkinson, L. (2005). *The Grammar of Graphics*. Springer-Verlag.

Williams, C. (1964). *Patterns in the balance of nature*. Academic Press, London.

Williams, V. V. (2012). Multiplying matrices faster than Coppersmith-Winograd. In *Proc. 44th ACM Symp. Theory of Computing (STOC '12)*, pages 887–898.

Wilsey, B. and Potvin, C. (2000). Biodiversity and ecosystem functioning: Importance of species evenness in an old field. *Ecology*, **81**(4), 887–892.

Winkler, W. (1990). String comparator metrics and enhanced decision rules in the Fellegi-Sunter model of record linkage. In *Proc. Section on Survey Research Methods, American Statistical Association*, pages 354–359.

Winkler, W. E. (2006). Overview of record linkage and current research directions. Technical Report 2006-2, U.S. Census Bureau, Washington, DC.

Witzgall, C. (1965). On convex metrics. *Journal of Research of the National Bureau of Standards – B. Mathematics and Mathematical Physics*, **69B**(3), 175–177.

Woeginger, G. J. (2008a). An axiomatic analysis of Egghe's g-index. *Journal of Informetrics*, **2**(4), 364–368.

Woeginger, G. J. (2008b). An axiomatic characterization of the Hirsch-index. *Mathematical Social Sciences*, **56** (2), 224–232.

Woeginger, G. J. (2008c). A symmetry axiom for scientific impact indices. *Journal of Informetrics*, **2**, 298–303.

Woeginger, G. J. (2009). Generalizations of Egghe's g-index. *Journal of the American Society for Information Science and Technology*, **60**(6), 1267–1273.

Woeginger, G. J. (2010). An algorithmic comparison of three scientific impact indices. *Acta Cybernetica*, **19**, 661–672.

Wolsey, L. (1998). *Integer Programming*. John Wiley & Sons, New York.

Wood, S. (2006). *Generalized additive models: An introduction with R*. CRC Press.

Wooley, J. C. (1999). Trends in computational biology: A summary based on a RECOMB plenary lecture. *Journal of Computational Biology*, **6**, 459–474.

Wróblewski, A. K. (2001). Bibliometryczne nieporozumienia. *Forum Akademickie*, **9**.

Wu, Q. (2010). The w-index: A measure to assess scientific impact by focusing on widely cited papers. *Journal of the American Society for Information Science and Technology*, **61**(3), 609–614.

Xie, Y. (2013). *Dynamic Documents with R and knitr*. Chapman & Hall/CRC.

Xu, R. and Wunsch II, D. C. (2009). *Clustering*. Wiley-IEEE Press.

Xu, Z. (2005). An overview of methods for determining OWA weights. *International Journal of Intelligent Systems*, **20**, 843–865.

Yager, R. R. (1987). Quasi-associative operations in the combination of evidence. *Kybernetes*, **16**(1), 37–41.

Yager, R. R. (1988). On ordered weighted averaging aggregation operators in multicriteria decision making. *IEEE Transactions on Systems, Man, and Cybernetics*, **18**(1), 183–190.

Yager, R. R. (1991). Connectives and quantifiers in fuzzy sets. *Fuzzy Sets and Systems*, **40**, 39–75.

Yager, R. R. (1992). On the specificity of a possibility distribution. *Fuzzy Sets and Systems*, **50**, 279–292.

Yager, R. R. (1993). Toward a general theory of information aggregation. *Information Sciences*, **68**(3), 191–206.

Yager, R. R. (1998). Fusion of ordinal information using weighted median aggregation. *International Journal of Approximate Reasoning*, **18**, 35–52.

Yager, R. R. (200). Intelligent control of the hierarchical agglomerative clustering process. *IEEE Transactions on Systems, Man, and Cybernetics, Part B (Cybernetics)*, **30**(6), 835–845.

Yager, R. R. (2008). Prioritized aggregation operators. *International Journal of Approximate Reasoning*, **48** (1), 263–274.

Yager, R. R. (2009). On generalized Bonferroni mean operators for multi-criteria aggregation. *International Journal of Approximate Reasoning*, **50**, 1279–1286.

Yager, R. R. (2010). Lexicographic ordinal OWA aggregation of multiple criteria. *Information Fusion*, **11**, 374–380.

Yager, R. R. and Beliakov, G. (2010). OWA operators in regression problems. *IEEE Transactions on Fuzzy Systems*, **18**(1), 106–113.

Yager, R. R. and Filev, D. P. (1994). *Essentials of fuzzy modeling and control*. Wiley.

Yager, R. R. and Kacprzyk, J., editors (1997). *The ordered weighted averaging operators. Theory and applications*. Kluwer Academic Publishers, Norwell.

Yager, R. R. and Rybalov, A. (1996). Uninorm aggregation operators. *Fuzzy Sets and Systems*, **80**, 111–120.

Yager, R. R. and Rybalov, A. (1997). Understanding the median as a fusion operator. *International Journal of General Systems*, **26**(3), 239–263.

Yager, R. R., Kacprzyk, J., and Beliakov, G., editors (2011). *Recent Developments in the Ordered Weighted Averaging Operators*. Springer.

Yan, J. (2007). Enjoy the joy of copulas: With a package copula. *Journal of Statistical Software*, **21**(4), 1–21.

Yang, F., Sun, T., and Zhang, C. (2009). An efficient hybrid data clustering method based on K-harmonic means and particle swarm optimization. *Expert Systems with Applications*, **36**, 9847–9852.

Yang, Q. (1985). The PAN-integral on the fuzzy measure space. *Fuzzy Mathematics*, **3**, 107–114.

Yeh, C.-T. (2008a). Trapezoidal and triangular approximations preserving the expected interval. *Fuzzy Sets and Systems*, **159**, 1345–1353.

Yeh, C.-T. (2009a). Weighted trapezoidal and triangular approximations of fuzzy numbers. *Fuzzy Sets and Systems*, **160**(21), 3059–3079.

Yeh, C.-T. (2007). A note on trapezoidal approximations of fuzzy numbers. *Fuzzy Sets and Systems*, **158**(7), 747–754.

Yeh, C.-T. (2008b). On improving trapezoidal and triangular approximations of fuzzy numbers. *International Journal of Approximate Reasoning*, **48**(1), 297–313.

Yeh, C.-T. (2009b). Approximation by interval, triangular and trapezoidal fuzzy numbers. In Carvalho, J. P. et al., editors, *Proc. IFSA/EUSFLAT'09*, pages 143–148. IFSA.

Yeh, C.-T. (2011). Weighted semi-trapezoidal approximations of fuzzy numbers. *Fuzzy Sets and Systems*, **165** (1), 61–80.

Yianilos, P. (1993). Data structures and algorithms for nearest neighbor search in general metric spaces. In *Proc. ACM-SIAM Symp. Discrete Algorithms*, pages 311–321. Society for Industrial and Applied Mathematics, Philadelphia, PA.

Yildirim, P. and Birant, D. (2017). K-linkage: A new agglomerative approach for hierarchical clustering. *Advances in Electrical and Computer Engineering*, **17**(4), 77–88. doi:10.4316/AECE.2017.04010.

Yin, M., Hu, Y., Yang, F., Li, X., and Gu, W. (2011). A novel hybrid K-harmonic means and gravitational search algorithm approach for clustering. *Expert Systems with Applications*, **38**, 9319–9324.

Young, N. S., Ioannidis, J. P. A., and Al-Ubaydli, O. (2008). Why current publication practices may distort science. *PLoS Medicine*, **5**(10), 1418–1422.

Yu, H., Davis, M., Wilson, C. S., and Cole, F. T. H. (2008). Object-oriented data modelling for informetric databases. *Journal of Informetrics*, **2**(3), 240–251.

Yu, J. and Yang, M.-S. (2005). Optimality test for generalized FCM and its application to parameter selection. *IEEE Transactions on Fuzzy Systems*, **13**(1), 164–176.

Yuan, B. and Klir, G. J. (1996). Constructing fuzzy measures: A new method and its application to cluster analysis. In *Proc. NAFIPS'96*, pages 567–571.

Zadeh, L. (1973). Outline of a new approach to the analysis of complex systems and decision processes. *IEEE Transactions on Systems, Man, and Cybernetics*, **3**, 28–44.

Zadeh, L. A. (1965). Fuzzy sets. *Information and Control*, **8**, 338–353.

Zadeh, L. A. (1996). Fuzzy logic = computing with words. *IEEE Transactions on Fuzzy Systems*, **4**(2), 103–111.

Zadrożny, S. and Kacprzyk, J. (2006). Computing with words for text processing: An approach to the text categorization. *Information Sciences*, **176**, 415–437.

Zahn, C. (1971). Graph-theoretical methods for detecting and describing gestalt clusters. *IEEE Transactions on Computers*, **C-20**(1), 68–86.

Zeng, W. and Li, H. (2006). Inclusion measures, similarity measures, and the fuzziness of fuzzy sets and their relations. *International Journal of Intelligent Systems*, **21**, 639–653.

Zhang, B. (1999). K-harmonic means – A data clustering algorithm. Technical Report HPL-1999-124, HP Laboratories, Palo Alto.

Zhang, B., Hsu, M., and Dayal, U. (2001). K-harmonic means – A spatial clustering algorithm with boosting. *Lecture Notes in Artificial Intelligence*, **2007**, 31–45.

Zhang, D. (2005). Triangular norms on partially ordered sets. *Fuzzy Sets and Systems*, **153**, 195–209.

Zhang, J. (2010). Improving on estimation for the Generalized Pareto Distribution. *Technometrics*, **52**(3), 335–339.

Zhang, J. and Stephens, M. A. (2009). A new and efficient estimation method for the Generalized Pareto Distribution. *Technometrics*, **51**(3), 316–325.

Zhang, K. and Shasha, D. (1989). Simple fast algorithms for the editing distance between trees and related problems. *SIAM Journal on Computing*, **18**(6), 1245–1262.

Zhang, L., Glänzel, W., and Liang, L. (2009a). Tracing the role of individual journals in a cross-citation network based on different indicators. *Scientometrics*, **81**(3), 821–838.

Zhang, L., Janssens, F., Liang, L., and Glänzel, W. (2009b). Hybrid clustering analysis for mapping large scientific domains. In Larsen, B. and Leta, J., editors, *Proc. 12th Intl. Conf. Scientometrics and Informetrics*, pages 178–188.

Zhang, L., Liu, X., Janssens, F., Liang, L., and Glänzel, W. (2010). Subject clustering analysis based on ISI category classification. *Journal of Informetrics*, **4**, 185–193.

Zhang, T., Ramakrishnan, R., and Livny, M. (1996). BIRCH: An efficient data clustering method for large databases. In *Proc. ACM SIGMOD International Conference on Management of Data – SIGMOD '96*, pages 103–114.

Zhang, X., Li, Z., Loy, C. C., and Lin, D. (2017). PolyNet: A pursuit of structural diversity in very deep networks. arXiv:1611.05725.

Zhivotovsky, L. A. and Krutowsky, K. V. (2008). Self-citation can inflate h-index. *Scientometrics*, **77**(2), 373–375.

Zieliński, R. (1990). *Siedem wykładów wprowadzających do statystyki matematycznej*. PWN, Warszawa.

Zieliński, R. (2009). Przedziały ufności dla frakcji. *Matematyka Stosowana*, **10**, 51–68.

Żogała-Siudem, B., Siudem, G., Cena, A., and Gagolewski, M. (2016). Agent-based model for the bibliometric h-index – Exact solution. *European Physical Journal B*, **89**(21). doi:10.1140/epjb/e2015-60757-1.

Zuo, Y. (2003). Projection-based depth functions and associated medians. *The Annals of Statistics*, **31**(5), 1460–1490.

Zuo, Y. and Serfling, R. (2000). General notions of statistical depth function. *The Annals of Statistics*, **28**(2), 461–482.

Życzkowski, K. (2008). Indeksy cytowań i wiosła. *Forum Akademickie*, **9**, 22–25.