

Publications:

A1 Journal articles (refereed):

18. Brunelli M. and Mezei J. (≥ 2016): An inquiry into approximate operations on fuzzy numbers. *International Journal of Approximate Reasoning*, (in press)
17. Mezei J., Brunelli M, and Carlsson C. (≥ 2016): A fuzzy approach to using expert knowledge for tuning paper machines. *Journal of the Operational Research Society*, (in press)
16. Brunelli M. (≥ 2016): Studying a set of properties of inconsistency indices for pairwise comparisons. *Annals of Operations Research*, (in press)
15. Brunelli M. (≥ 2016): On the conjoint estimation of inconsistency and intransitivity of pairwise comparisons. *Operations Research Letters*, 44(5), 672–675.
14. Brunelli M. (2016): A technical note on two inconsistency indices for preference relations: a case of functional relation. *Information Sciences*, 357, 1–5.
13. Brunelli M. (2016): Recent advances on inconsistency indices for pairwise comparisons — a commentary. *Fundamenta Informaticae*, 144(3–4), 321–332.
12. Brunelli M. and Fedrizzi M. (2015): Boundary properties of the inconsistency of pairwise comparisons in group decisions. *European Journal of Operational Research*, 240(3), 765–773.
11. Brunelli M. and Fedrizzi M (2015): Axiomatic properties of inconsistency indices for pairwise comparisons. *Journal of the Operational Research Society*, 66(1), 1–15.
10. Brunelli M., Fedrizzi M. and Fedrizzi M. (2014): Fuzzy m -ary adjacency relations in Social Network Analysis: Optimization and consensus evaluation. *Information Fusion*, 17, 36–45.
9. Brunelli M., Canal L. and Fedrizzi M (2013): Inconsistency indices for pairwise comparison matrices: a numerical study. *Annals of Operations Research*, 211(1), 493–509.
8. Brunelli M. and Mezei J. (2013): How different are ranking methods for fuzzy numbers? A numerical study. *International Journal of Approximate Reasoning*, 54(5), 627–639. ¹
7. Brunelli M., Critch A. and Fedrizzi M. (2013): A note on the proportionality between some consistency indices in the AHP. *Applied Mathematics and Computation*, 219(14), 7901–7906.
6. Carlsson C., Mezei J. and Brunelli M. (2013): Fuzzy ontology used for knowledge mobilisation. *International Journal of Intelligent Systems*, 28(1), 52–71.
5. Carlsson C., Brunelli M. and Mezei J. (2012): Decision making with a fuzzy ontology, *Soft Computing*, 16(7), 1143–1152.
4. Brunelli M. (2011): A note on the article “Inconsistency of pair-wise comparison matrix with fuzzy elements based on geometric mean” [Fuzzy Sets and Systems 161 (2010) 1604–1613], *Fuzzy Sets and Systems*, 176(1), 76–78.
3. Fedrizzi M. and Brunelli M. (2010): On the priority vector associated with a reciprocal relation and with a pairwise comparison matrix, *Soft Computing*, 14(6), 639–645.
2. Fedrizzi M. and Brunelli M. (2009): On the normalisation of a priority vector associated with a reciprocal relation, *International Journal of General Systems*, 38(5), 579–586.
1. Fedrizzi M. and Brunelli M. (2009): Fair consistency evaluation for reciprocal relations and in group decision making, *New Mathematics and Natural Computation*, 5(2), 407–420.

A3 Chapters in research books:

4. Mezei J. and Brunelli M. (2016): Decision analytics and soft computing with industrial partners: a personal retrospective. M. Collan, M. Fedrizzi, J. Kacprzyk, (Eds.): *Fuzzy Technology: Present Applications and Future Challenges*, in: Studies in Fuzziness and Soft Computing, Vol. 335, (pp. 193–205) Springer-Verlag, Berlin Heidelberg;

¹Number one (January–March and April–June 2013) and number two (year 2013) from the top 25 hottest articles of the Journal.

3. Brunelli M., Fullér R. and Mezei J. (2011): Opinion changing aversion functions for group settlement modeling. E. Herrera-Viedma, J.L. García-Lapresta, J. Kacprzyk, H. Nurmi, M. Fedrizzi, S. Zadrożny (Eds.): *Consensual Processes*, in: *Studies in Fuzziness and Soft Computing*, Vol. 267, (pp. 53–63) Springer-Verlag, Berlin Heidelberg;
2. Brunelli M., Fedrizzi M and Fedrizzi M. (2011): OWA-based fuzzy m -ary adjacency relations in Social Network Analysis. Yager R.R., Kacprzyk J. and Beliakov G. (Eds.): *Recent Developments in the Ordered Weighted Averaging Operators: Theory and Practice*, in: *Studies in Fuzziness and Soft Computing*, Vol. 265, (pp. 255–267) Springer-Verlag, Berlin Heidelberg;
1. Fedrizzi M., Fedrizzi M., Marques Pereira R.A. and Brunelli M. (2010): The dynamics of consensus in group decision making: investigating the pairwise interactions between fuzzy preferences. S. Greco, R. A. Marques Pereira, M. Squillante, R. R. Yager, J. Kacprzyk (Eds.): *Preferences and Decisions: Models and Applications*, in: *Studies in Fuzziness and Soft Computing*, Vol. 257, (pp. 159–182) Springer-Verlag, Berlin Heidelberg;

A4 Conference proceedings:

10. Carlsson C., Brunelli M., Mezei M. (2013): A soft computing approach to mastering paper machines. *HICSS 2013* (pp. 1394–1401), IEEE Computer Society.
9. Brunelli M., Fedrizzi M., Fedrizzi M. and Molinari F. (2012): On some connections between multidistances and valued m -ary adjacency relations.. *IPMU 2012, Part I*, (pp. 201–207), Springer-Verlag Berlin Heidelberg.
8. Brunelli M. and Fedrizzi M. (2010): The representation of uncertainty in Operational Research: considerations on the use of possibility, probability, and fuzzy numbers. *ICAOR 2010*. (pp. 24–33) Lecture Notes in Management Science, Tadbir.
7. Carlsson C., Brunelli M. and Mezei J. (2010): Fuzzy ontologies and knowledge mobilisation: Turning amateurs into wine connoisseurs. *WCCI 2010* (pp. 1717–1723).
6. Carlsson C., Brunelli M. and Mezei J. (2010): Fuzzy ontology and information granulation: An approach to knowledge mobilisation. *IPMU 2010, Part II* (pp. 420–429), Springer-Verlag Berlin Heidelberg.
5. Carlsson C., Brunelli M. and Mezei J. (2010): Knowledge mobilisation for knowledge whenever and wherever needed, *Bled eConference 2010*, (pp. 261–273)
4. Brunelli M. and Fedrizzi M. (2009): A fuzzy logic approach to social network analysis. *ASONAM 2009*, (pp. 225–230), IEEE Computer Society.
3. Fedrizzi M., Fedrizzi M., Marques Pereira R.A. and Brunelli M.(2008): Consensual dynamics in group decision making with triangular fuzzy numbers. *HICSS 2008* (pp. 70–78). CA Los Alamitos, IEEE Computer Society
2. Brunelli M. and Fedrizzi M (2007): Fair consistency evaluation in fuzzy preference relations and in AHP. *KES 2007/ WIRN 2007, Part II, LNAI 4693* (pp. 612–618). Springer-Verlag Berlin Heidelberg
1. Brunelli M., Fedrizzi M. and Giove S. (2007): Reconstruction methods for incomplete fuzzy preference relations: a numerical comparison. *WILF 2007, LNAI 4578* (pp. 86–93). Springer-Verlag Berlin Heidelberg;

C1 Books:

Brunelli M. (2014): *Introduction to the Analytic Hierarchy Process*, SpringerBriefs in Operations Research, Springer. ISBN 978-3-319-12501-5.

G5a Dissertations:

Brunelli M. (2011): *Some Advances in Mathematical Models for Preference Relations*, TUCS Dissertations, No. 136. ISBN 978-952-12-2596-3.