



# APPLIED SOFT COMPUTING

The Official Journal of the World Federation on Soft Computing (WFSC)

## AUTHOR INFORMATION PACK

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*Applied Soft Computing* is an international journal promoting an integrated view of **soft computing** to solve real life problems. Soft computing is a collection of methodologies, which aim to exploit tolerance for imprecision, uncertainty and partial truth to achieve tractability, robustness and low solution cost. The focus is to publish the highest quality research in application and convergence of the areas of **Fuzzy Logic, Neural Networks, Evolutionary Computing, Rough Sets** and other similar techniques to address real world complexities.

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### INTRODUCTION

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[2] Van der Geer, J., Hanraads, J.A.J., Lupton, R.A., 2018. The art of writing a scientific article. *Heliyon.* 19, e00205. <https://doi.org/10.1016/j.heliyon.2018.e00205>.

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[3] W. Strunk Jr., E.B. White, *The Elements of Style*, fourth ed., Longman, New York, 2000.

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[4] G.R. Mettam, L.B. Adams, How to prepare an electronic version of your article, in: B.S. Jones, R.Z. Smith (Eds.), *Introduction to the Electronic Age*, E-Publishing Inc., New York, 2009, pp. 281–304.

Reference to a website:

[5] Cancer Research UK, Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/>, 2003 (accessed 13 March 2003).

Reference to a dataset:

[dataset] [6] M. Oguro, S. Imahiro, S. Saito, T. Nakashizuka, Mortality data for Japanese oak wilt disease and surrounding forest compositions, *Mendeley Data*, v1, 2015. <https://doi.org/10.17632/xwj98nb39r.1>.

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### **NOTES ON REVIEW ARTICLES FOR AUTHORS**

Review Article is the article type in EES for survey and review papers. These are published time to time, serve as a valuable reference material reflecting upon the current developments in a certain area of research and applications, typically aligned with the scope of the journal and aimed at a relatively broad readership.

Expertise of the author and active involvement in the research area are a prerequisite for a successful survey/review material. Upon submission to ASOC, an extended bio can be entered as part of the letter to the editor to help the handling editor and reviewers, a condensed version can be put at the end of the survey. Writing a good survey is an arduous and challenging task. Reviewing a survey paper is also a very time-consuming task that requires a significant involvement of highly experienced reviewers.

When preparing a survey, one has to clearly identify the audience to whom this survey is catered (e.g., newcomers, specialists, practitioners, etc.) and specify the main objective of the survey work. It is anticipated that a good, useful, and of high impact survey has to include:

- (i) A well-thought-out taxonomy of the research completed in the area. A prudently balanced exposure of the material is essential
- (ii) critical, yet clearly articulated and presented in an unbiased manner, views of the author of the survey who has been working intensively in the area and has gathered solid evidence as to the quality, relevance and impact of the studies reported in the literature
- (iii) Identification of the key objectives formulated in the area and the main ways in which they have been addressed
- (iv) Discussion on related application areas offered at a certain level of generality; too specific material with a lot of domain details is misleading and accessible to a narrow group of readers familiar with a particular application domain
- (v) Comparative analysis, limitations, drawbacks, misleading opinions expressed in the existing literature. Different, maybe even conflicting, views expressed in the existing studies are important to be discussed and put in a right perspective
- (vi) A prudently established balance between a general, formula-free exposure and too dry formula-loaded coverage of the topic
- (vii) well-grounded conclusions as to the current progress and possible future prospects and promising directions, including open problems to be focused on.

In contrast, a good survey should NOT be:

- (i) A collection of abstracts of the papers without any critical assessment.
- (ii) a survey based solely on a literature review without authors perspective. Usually, such material does not sound convincing and could be of a very limited value and impact.
- (iii) A collection of graphs, pie plots, and others displaying general statistics and tendencies in the area but not being supported by any in-depth analysis.
- (iv) A very verbally biased presentation of the material lacking any depth of exposure.

Preparing a good survey the right way (some hints):



(i) How many papers should be referenced? Does a good survey always need hundreds of references? Doesn't a huge list of references already demonstrate honorable effort of authors? But see the comments given in this text: nothing really requires such a huge number of references. A survey can also be good with a lower number of discussed papers, for example with a focus on key papers or most cited papers.

(ii) Clarify the used bibliometric and retrieval method: the survey will necessarily involve a paper selection by authors, and thus has to be subject to the same scientific carefulness like any other kind of scientific report. Means: reproducible way of achieving results, clear statement of selection criteria, a motivated "material and method" section, judgment/justification of degree of completeness or degree of coverage.

(iii) Decide for one way among the possible ways of presenting results (like chronological, in historical context, by method grouping, by problem classes, by used paradigms) and follow this line. For example, it appears that tables with clearly introduced column headings are a generally good way, in favor of plain statistics and dozens of page-filling pie charts.

(iv) Before starting to prepare a survey at all, authors should ask themselves: is the survey (really) timely? And validate it in an objective way, e.g. by recent increase of publications in the field, new technology trends, or new application fields.

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ASOC also welcomes Letter submissions.

Letters should be concise summaries of recent methodological inventions and findings, new and hot trends, paradigms and concepts, with anticipated strong potential for wide application. Alternatively, they can describe significant and novel applications of an established technique or novel, yet unexplored aspects and viewpoints therein that are of high reference value to the same application area and other similar areas. It should motivate others to take that new point of view and work in that direction.

To serve the interests of a diverse readership, the introduction should provide a concise summary of the background of the work in an accepted terminology in computational intelligence and soft computing, state the unique contributions, and discuss broader impacts of the work outside the immediate subject area. All claims should be accompanied by reference work.

In summary: it should show ambition and devotion of authors to the topic at hand, demonstrate their confidence and expertise in the discipline, and last but not least be stimulating and insightful to others.

It also means Letters should NOT:

- present a novel contribution of the authors themselves (for this, a regular submission is the better form),
- make vague claims, be speculative, show a biased viewpoint, or make target claims against specific publications, and not
- serve as a citation hub for a single research group or being overly subjective in any other way.

All contributions are reviewed on the basis of scientific merits, solid referencing to the point and breadth of potential interests.

Technically: letters should not exceed 3500 words (about 10 pages). Submissions clearly meeting the letter format but for its length, should give ample motivation for the extra length in the cover letter. The title should start with "Letter: ." Letters are expected to undergo expedited review process and faster publication due to their shorter length.

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