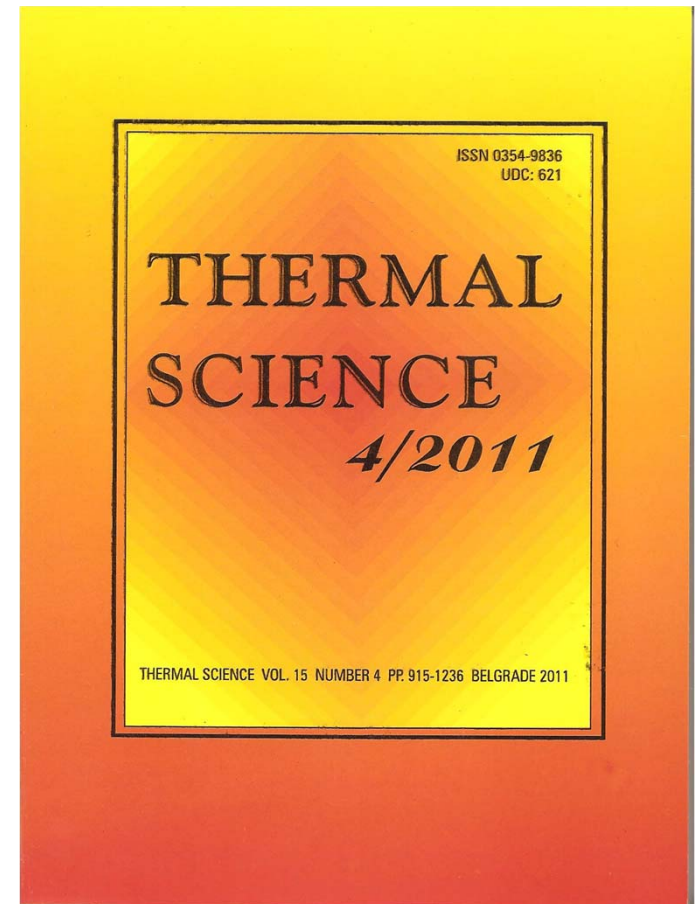


Archival papers from the point of view of an Editor-in-chief

**Prof. Dr. Simeon Oka, Editor-in-chief
Thermal Science
Publisher VINCA Institute, Belgrade, Serbia
Founder Society of Thermal Engineers of Serbia**



**Panel: How to write an archival paper that will be accepted in journals?
8th SDEWES Conference, September 22-27 , 2013, Dubrovnik, Croatia**

THERMAL SCIENCE

is founded in 1994

- In 1995 and 1996 – published in English as No. 4, of the journal TERMOTEHNIKA (other issues in Serbian)
- From 1997 – independent journal
 - 1997 – 2004 2 issues per year
 - 2005 3 issues per year
 - 2006 – 2009 4 issues per year
 - 2010 – Vol. 14 4 issues per year + 1 Supplement
 - 2011 – Vol. 15 4 issues per year + 2 Supplements
 - 2012 – Vol. 16 5 issues per year + 2 Supplements
 - 2013 – Vol. 17 5 issues per year + 1 Supplement + ?

Development of the journal

Website opened in 2004

Impact factor

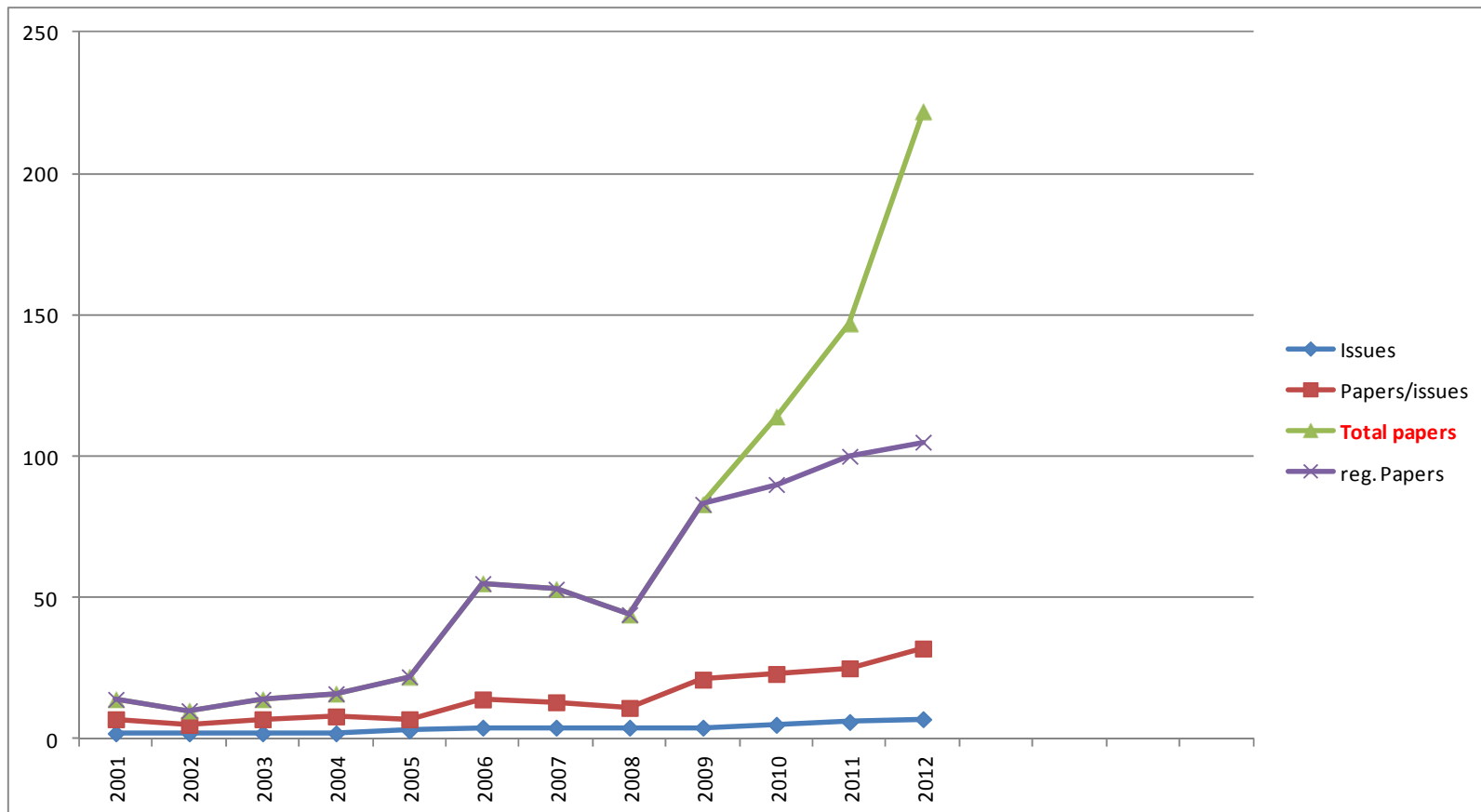
2009	0.407
2010	0.709
2011	0.779
2012	0.839

Number of published papers

2006 do 2008	total	- about 50 per year - 5-10 papers per issue
2012-2013	total	- 220 per year - 25-30 papers per issue

Increase of the number of published papers

- after oppening of the website and getting Impact factor



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What is the role and responsibility of journal editing?

- Goal of publishing papers is to inform and to promote scientific discussion, and not to make promotion in career easier, or to obtain easy PhD degree, or to make profit by selling scientific information.
- Publishing and dissemination of scientific results and achievements is a process in which - **authors, editors and reviewers** - are involved and all of them are responsible to disseminate fast and proper information to scientists all over the world
- Review of the papers is the most important part of this activity
- Specific role of the each member of the information chain is:
 - Scientist - in writing papers
 - Editors - in the choice of reviewers and choice of priorities of the journal
 - Reviewers - to give honest, objective, detailed and physically founded critic of the paper
- **Are Archival papers (in classic form), the only way to reach mentioned goals? And, how to recognize that paper is Archival? Or, are the papers of other form also scientifically significant?**

Conditions have been drastically changed in the last decade - globalization encompasses all of human activities

- Scientific activity is growing permanently, both in developed and developing countries
- Many experts educated in the best Universities are coming back to their native countries
- Mobility – (emigration or immigration) of the scientists from undeveloped countries to developed countries is increased, too
- **Education systems are equalized in many countries all over the world**
- **Criteria** for ranking Universities, scientists, for their promotion in scientific careers and for free access to doctoral studies are equalized in almost all countries – **MOSTLY ONLY** through number of papers published in high **Impact factor journals**
- Scientific information is available on the Internet, due to OPEN ACCESS journals or by payment to have access to scientific papers

Effects on presentation of scientific results and editing of journals

Positive

- Enormous increase of the number of papers submitted for publishing in existing journals,
- Appearance of the large number of new scientific journals:
 - Journals published in small countries, mainly OPEN ACCESS
 - Journals published only in electronic form
- Increased possibility for large number of researchers to present their results to worlds' scientific community

Negative

- Journal are overcrowded with submitted papers,
- It is difficult to find and have good reviewers (2/3 of reviewers do not accept invitation, large number of reviewers who accepted invitation forget that they have accepted to make review)
- Waste of time of the editors, reviewers and authors, and **large time lag period between** submission and publication of the papers (scientific results),

Dilemma: Only electronic version or both hard copy and electronic edition?

Character and quality of the scientific papers are changing

Classic form of the scientific (archival) papers:

- Introduction – state-of-the art on the topic and definition of the problem to be investigated
- Description of the problem dealing with in the paper
- Method used to solve problem – experimentally and theoretically
- Physical background and discussion of the results
- Validation of the method by solving standard cases
- Comparison of the results with the results of other authors
- Conclusions

Are presently all papers published Archival or not?

- More often papers do not have classical form of the scientific paper
- Papers are mainly theoretical or experimental, very seldom both,
- Uncritical use of the commercial CFD software without validation and comparisons with experimental results, or even without validation with numerical or analytical results of other authors, or without validation by modeling of different cases,
- **Dealing with problems, cases and conditions without any practical significance – most often this is mathematical exercise**
- Enormous list of References, in large percent without any connection to the topic of the paper, but given in order to increase citation of the papers written by colleagues.

Dilemma

- **Archival papers or fast information - possible by publishing short papers?**

PROBLEMS WITH WHICH EDITORS-IN-CHIEF ARE FACED

What is an acceptable form of the Archival scientific paper?

- Is state-of-the art on the topic obligatory?
- Is only use of commercial CFD software is acceptable?
 - Is validation of the commercial software obligatory?
 - Is comparison with experimental results obligatory?
 - Is comparison with numerical or analytical results obligatory?
- Is list of references (short or long) obligatory?
- For experimental research
 - Is detailed description and accuracy of the measurement methods obligatory?
- Validation of experimental results and comparison with analytical or experimental results?
- What is optimal (or maximal) number of pages for archival papers?
- Is fast transfer of the scientific results, or new scientific contribution more, important than form (classical archival) of the paper?
- How to treat short papers giving fresh, recent results?

Negative consequences of the necessity “to be cited” in the journal with high Impact factor

- Submission and publication by one author, or group of authors, of the large number of the same or similar papers, submitted in different journals
- “Cutting” of the an overall research (and insight in the physics of the processes), in small parts, and production of several small papers – devoted only to one aspect of the problem, or influence of only one of the parameters on the process investigated (salami papers)
- Uncritical citations of own papers or papers from the same institution – large list of references.
- “Copy and paste” of the whole paragraphs from other authors, or from earlier papers from the same author without citation.
- Self plagiarisms, or in worst cases - real plagiarisms of the papers or results of the other scientists

Is journal Impact factor measure for the quality of the single paper published in specific journal?

Large, world reputed journals edited by large (profit) publishing houses **vs.** small OPEN ACCESS journal

- How to maintain free, and cost free, flow of scientific information?
- How to maintain in life, and finance, small, OPEN ACCESS journals?
- How to find necessary number of reviewers, for so large number of journals?
- Is really quality of the papers published in large well known publishing houses significantly higher than that of papers in small OPEN ACCESS journals?
- **What is the role, and place of small OPEN ACCESS journals?**
- Are publishing of the results achieved by scientists from undeveloped countries, or from non-English speaking countries, equally easy in large journals?
- Depersonalization of the publishing and reviewing process – author – Editor-in-chief, Editor-in-chief – reviewers, **advantage of deficiency** of the Online journal editing (paper submission, correspondence with reviewers).
- Importance of the personal contacts between reviewers and Editors-in-chief, advantage of the small journals