Acceptance of Open Peer Review by Scientific Publishers

Radovan Vrana
Faculty of Humanities and Social Sciences, University of Zagreb
Department of Information and Communication Sciences
Ivana Lučića 3, Zagreb, Croatia
rvrana@ffzg.hr

Abstract. *The paper consists of two parts. The first part describes the importance and problems of the current peer review process and characteristics of open peer review. The second part provides results of the research study of the 100 top scientific publishers about their acceptance and possible implementation of the open peer review. Public documents about open peer review were sought on publishers' Web sites and the research showed that there are very few of them available. The research confirmed that open peer review is still not widely accepted even at the major publishing houses.*

Keywords. Scientific publishing, peer review, open peer review, scientific publishers

1 Introduction

The paper is divided into two parts. The first part presents a brief introduction and overview of the current peer review process and describes characteristics of open peer review. The second part of the paper presents results from the research of the 100 top scientific publishers and their acceptance and possible implementation of open peer review, one of the latest developments in scientific publishing.

Scientific publishing is one of the most important activities because it transfers new research based knowledge and innovation to the global scientific community and the general population. Scientific publications "are the end-products of the scientific work, and their quantity and citability are keys to the promotion of scientists" (Masic, 2012). The principal media for dissemination of information about scientific discoveries are still scientific journals. "For more than 350 years, journals have played a pivotal role in the transmission of scholarly communications among academics and researchers" (Greco, 2016). To verify the quality of scientific information, scientific community has invented peer review. Peer review process as we know it today is burdened with problems and scientists in cooperation with scientific publishers seek new solutions which would significantly improve (or possibly replace) the current peer review system with a new one. A recent attempt to made such an improvement is introduction and experimental implementation of open peer review.

Broadly defined, open peer review is "a process in which the names of the authors and reviewers are known to one another" (An Introduction to Open Peer Review, 2014). Furthermore, open peer review process is open to experts conducting the review but also potentially to anyone else willing to participate in the review process. Open peer review is part of open access publishing initiative which supports "content free online to readers while supporting operations by financial models that permit this free electronic distribution" (Overview of Open Access Publishing). Open access publishing provides "an opportunity to those researchers whose work is commendable, but cannot pay high charges for publishing in the leading scientific journals" (Janodia, 2017). When mentioning charges for publishing in open access scientific journals as obstacles for dissemination of scientific information for some scientists, one must have in mind two types of scientific journals: a type which charges a fee called the article-processing charge (APC) which covers the publisher's costs and is paid by the author, research funder or sometimes by the author's institution (Overview of Open Access Publishing). Another type refers to journals charging nothing at all and being supported through sponsorship, advertising, are run using voluntary labour or by selling subscriptions to the printed form of the journal (Overview of Open Access Publishing). More than half of open access journal publishers do not charge the APC (Overview of Open Access Publishing). Regardless of the type, scientific journals almost universally accept peer review as a basic mechanism for evaluation of article manuscripts submitted by scientists. Peer review is therefore, still a pillar of trust in science and remains to be present in most scientific journals in the world.

2 Peer review process

Peer review is a "an official and legitimated mechanism for evaluating and controlling scientific production" (Meruane, Gonzales and Pina-Stranger,

2016), it is a cornerstone of scholarly communication and a guard against the publication of flawed research and assuring that research meets a standard of rigor (Wang, Wolfram, Hoyt, Ingwersen, Pöschl, Smith and Bates, 2016) and it provides feedback to the author(s) so as to improve the article (Sandewall, 2012). The first peer review was done the in Medical Essays and Observations published by the Royal Society of Edinburgh in 1731 (Post-publication peer review). However, some other authors like Nassi-Calò (2017) and Csiszar (2016) suggest that the first peer review was done later, "in 1831 by William Whewell to the Royal Society of London, suggesting that a committee of eminent scholars produced reports on articles submitted for publication to the Philosophical Transactions journal". Since then, the term per review has become a symbol of "an admirable aspiration to intellectual integrity, calm deliberation, and detached evaluation in the accumulation of human knowledge" (Iannone, 2013). Today, peer review is accepted by most scientific journals worldwide (except in journals which state explicitly that they don't go through peer review process). Since its first implementation, peer review process has gone through many changes. Some of those changes were not ideal and the current peer review system is now burdened with problems well documented in literature. Because of the problems, peer review is "currently facing a transition moment, and many believe that it is necessary to redefine its principles and practices so as not to delay or hinder the progress of science" (Nassi-Calò, 2017).

3 Peer review problems

Problems with peer review include slowness, journal editors not being pro-active in favour of controversial or challenging articles, light-touch peer review where authors want rigorous peer review, the variable quality of reviewing, authors are sometimes misunderstood by the reviewers, a lack of transparency in reviewing, reviewers coming up with conflicting criticisms, open refereeing because it inhibits reviewers, authors proposing referees, authors suggesting their friends as reviewers (Watkinson et. al, 2015), editors not informing reviewers about the final status of the paper after the review process (Lahiri, 2006), censorship, inhibiting or delaying a new work (Wheeler, 2011), expensive, wasting academic time, highly subjective, something of a lottery, prone to bias, and easily abused (Smith, 2006).

This process also suffers from plagiarism, self-citation, conflicts of interest and sometimes it holds back competing research (Tattersall, 2015). Some reviewers also take the advantage of their position and do the review only because of the sense of power and vulnerability in relations to others (Lipworth, Kerridge, Carter and Little, 2011).

Peer review can be manipulated and article rejected even if its contents actually merit publication and this mistake can be hardly ever corrected (Sandewall, 2012).

Peer review employs reviewers who are experts in all aspects of a paper and thus can evaluate both its impact and validity and can evaluate the paper prior to obtaining answers from the authors or other referees (Lee, 2012). Lee (2012) analysed peer review from various aspects and he pointed out, among many other things, that peer review in which experts participate may create a big obstacle for innovative papers because one negative opinion about the paper could mean that a single review could determine the future of the paper. In contrast, the same author reminds that successfully published papers are evaluated by the whole scientific community and that evaluation is much more valuable than the single man's opinion.

One of the most frequent problem for journal editors is a short list of reliable peer reviewers (How is research publishing going to progress in the next 20 years?, 2014) because many researchers decline to participate in peer review on the grounds of being too busy (Lajtha and Baveye, 2010).

Some reviewers are motivated for participation in the peer review process by self-interest protecting their own work that submitted article manuscript is challenging; they can also be motivated by a desire to "look good" to the editor promoting overly critical reviews; they can make cognitive errors and have limited capacity to process information; they perform unfair review (Cooper, 2009).

The referees can also fail to be sufficiently expert, informed, conscientious or fair (Harnad, 2000). Reviewers are also criticized for their inability to discover fraud, plagiarism, repetitive publication and for being anti-innovative, non-constructive and causing unacceptable delays in publishing (Lipworth, Kerridge, Carter and Little, 2011).

Because of the enumerated problems with the peer review process, academic community is searching for new modes of improvement of the peer review process. One such attempt is open peer review.

4 Open peer review

The idea of open peer review is present in scientific publishing since 1990s as an attempt to increase "the transparency of the article selection process for a journal, and for obtaining a broader basis for feedback to the authors and for the acceptance decision" (Sandewall, 2012). In spite of the two decades of its existence, it is quite difficult to find a straightforward and universal definition of open peer review. Ross-Hellauer (2017) suggests that open peer review "has neither a standardized definition nor an agreed schema of its features and implementations". He collected the corpus of 122 definitions and analysed them for their content.

As a result, he proposed the following definition: "Open peer review is an umbrella term for a number of overlapping ways that peer review models can be

adapted in line with the ethos of open science, including making reviewer and author identities open, publishing review reports and enabling greater participation in peer review process" (Ross-Hellauer, 2017).

4.1 Open peer review complexities

Since open peer review is a rather new concept, literature explaining models, concepts, scenarios and details about it is neither abundant nor extensive. The following part of this chapter provides an insight into the most interesting thoughts about open peer review in their integral form without intervening into the original text. Ross-Hellauer (2017) offered the full list of open peer review traits: "1.) Open identities: Authors and reviewers are aware of each other's identity 2.) Open reports: Review reports are published alongside the relevant article 3.) Open participation: The wider community to able to contribute to the review process 4.) Open interaction: Direct reciprocal discussion between author(s) and reviewers, and/or between reviewers, is allowed and encouraged 5.) Open pre-review manuscripts: Manuscripts are made immediately available (e.g., via pre-print servers like arXiv) in advance of any formal peer review procedures 6.) Open final-version commenting: Review or commenting on final "version of record" publications 7.) Open platforms: Review is de-coupled from publishing in that it is facilitated by a different organizational entity than the venue of publication". Open peer review comes in several flavours or scenarios, depending on the publisher and / or scientific journal. For instance, The Royal Society proposed 4 different scenarios: "Author agrees to open peer review - referee agrees to open peer review: Signed referee report made public; Author does not agree to open peer review - referee agrees to open peer review: Referee name only disclosed to author, referee report is not made public; Author agrees to open peer review - referee does not agree to open peer review: Referee name not disclosed to author or made public, referee report made public and Author does not agree to open peer review - referee does not agree to open peer review: Referee name not disclosed to author, referee report is not made public" (Open peer review in Royal Society Open Science). Ford (2013) reviewed characteristics of open peer review and offered the following extensive list of the implementations of open peer review: "Signed review refers to submitted reviews signed by the referee that are either published alongside articles at the time of publication or are signed when an author receives them; Disclosed review refers to a process in which referees and authors know each other's' identities during peer review process, enabling them to engage in discussion or discourse; Editor-mediated review is a characteristic found in most open peer review processes. Editor mediation is any work done by a journal editor to facilitate open peer review. This may include editorial pre-selection of articles and/or final decision-making for acceptance or rejection of articles; The editor-mediated portion of any open peer review process may or may not be publicly disclosed; Transparent review refers to complete openness to a distinct com-munity or the public. It allows a public community to watch peer review unfold. Authors and the public know referees' identities, and referees know authors' identities; Author responses to referee comments are public. In transparent review the public can see manuscripts, reviews, and replies from authors and public reviewers as well as the published articles.; Crowd-sourced review is a public review process in which any community member may contribute to the article review. In crowd-sourced review there is no limit to the number of comments or reviews an article may receive. In some proposed implementations of crowd-sourced review, there is little editorial mediation of article reviews. Rather, authors may simply submit papers to a pre-print server or other community for crowd-sourced commentary; Pre-publication review occurs prior to article publication, and typically occurs in a public space such as a pre-print server; Synchronous review occurs at the same time as publication of the article. In the literature, synchronous review is approached only theoretically, as part of a novel and completely iterative publishing model.; Post-publication review occurs after an article is published, much like commentary on a blog post". Wang, Wolfram, Hoyt, Ingwersen, Pöschl, Smith and Bates (2016) analysed the current open peer review models and concluded that they aim at different levels of transparency and openness: "1.) Optional open peer review, in which reviewers are encouraged, but are not required, to provide their identity in review reports; and authors may choose, but are not required, to publish review histories alongside the articles. In a published review history, all versions of the manuscripts, reviewer reports, and author's rebuttals with time-stamps are accessible and linked to the article. 2.) Mandatory open peer review, in which the review process is open to the public and review histories are accessible to all. Reviews may be conducted prepublication so that there is a clear delineation between the under review versions and the final accepted version. Mandatory open peer review may also be conducted post-publication, in which, articles are published first and the review process is ongoing". There are also other views on open peer review which actually try to facilitate the implementation process itself and make it better. For instance, one of the harshest criticism of the peer review process is often directed towards choice of reviewers especially when journal editors are not sure whom to ask to be a reviewer because they could create a conflict with author(s). In such cases, some people are not suitable to be the reviewer and open peer review would allow authors to request a different reviewer (Bali, 2015) when not satisfied with the review.

5 Research

The research part of the paper is focused on scientific journal publishers and their acceptance and possible implementation of open peer review.

It must be noted that the development of peer review is an on-going process with not so many researches or practical experiences published and explained.

In the last 15 years, open peer review or its equivalents were experimentally implemented in very few scientific journals. In 2004 the Nursing Research inaugurated open peer review for the first time. Three years later, 32 papers were published accompanied with the corresponding reviews (Dougherty, 2004). Dougherty suggested the value of peer review itself and open peer review in hands of capable experts possessing specialized knowledge in the are addressed by paper manuscripts supporting the development of science (in journal's discipline) with their assessments and recommendations.

Journal Nature also started a trial in open peer review "to explore the interest of researchers in a particular model of open peer review, whether as authors or as reviewers" (Nature's Peer Review Trial, 2006). The result was that "despite the significant interest in the trial, only a small proportion of authors opted to participate" (Nature's Peer Review Trial, 2006). One of the most famous examples is journal Atmospheric Chemistry and Physics which experimented with the two stage open peer review (Koop and Pöschl, 2006). In January 2012 Agricultural and Forest Meteorology began publishing PDFs of editor-selected peer review reports alongside to the published articles. Finally, Elsevier started a pilot study of open peer review in 5 of its journals: Agricultural and Forest Meteorology, Annals of Medicine and Surgery, Engineering Fracture Mechanics, Journal of Hydrology: Regional Studies, International Journal of Surgery (Mehmani and van Rossum, 2014).

Mehmani and van Rossum (2014) reported that from the 1990s onwards, a number of scientific journals began to trial new approaches: BioMed Central asked reviewers to sign their reviews and publishes them alongside the author's response; F1000 (Faculty of 1000) launched F1000 Research which publishes review reports alongside with the submitted articles and eLIFE publishes parts of the post-review decision letters and the associated author responses (if they agree).

The Nature publishing reported in 2016 that three journals: PeerJ, the BMJ and F1000Research embraced open peer review in various different forms, while Nature Communications is experimenting with this type of peer review (Callaway, 2016). Ross-Hellauer, Deppe and Schmidtthe (2017) presented findings of an online survey conducted in 2016 for the OpenAIRE2020 about attitudes of editors, authors and reviewers towards and levels of experience with open pee review. The findings showed that the majority of respondents (total of 3,062 full responses were collected) to be in favour of open peer review becoming mainstream scholarly practice. The same survey showed that three out of four (76.2%) respondents reporting having taken part in open peer review.

The purpose of the research in this paper was to establish whether scientific journal publishers offer publicly available documents (policies, author guidelines etc.) which explicitly describe a publisher's views and stand on open peer review and its implementation. Content analysis and comparison were applied as main research methods. The source of data about scientific publishers for analysis and comparison was the Top publishers list at http://www.scijournal.org/top-international-journal-publisher.shtml where 1600 journal publishers were listed publishing anything from 1 journal to over 2500 journals.

The research questions were:

RQ1: Do scientific publishers support open peer review by publicly announcing their support in form of a publicly available document(s)?

RQ2 Is there a difference between big and small publishers (in number of scientific journal owned by a publisher) in accepting the open peer review?

The main hypothesis of the research is that despite not so short existence of open peer review, it is still not widely accepted and implemented.

During the period of June 14th till June 19th 2017 Web sites of the first 100 scientific publishers from the Top publishers list were visited, searched and browsed (read) for information about publicly available documents (policies, guidelines etc.) which contained explanation about what type of peer review is applied in journal(s) of a particular publisher.

Table 1. The first 100 publishers on the Top publishers list and number of journals they publish (information retrieved in June 2017 from http://www.scijournal.org/top-international-journal-publisher.shtml)

Publisher	**# of journals published**
Elsevier	2571
Springer-Verlag	2209
Taylor and Francis	1803
John Wiley and Sons	1604
Sage Publications	742
SciELO	684
Walter de Gruyter	683
Redalyc	447
RMIT Publishing	415
Inderscience Publishers	391
Hindawi Publishing Corporation	366
Project MUSE	361
Cambridge University Press	329

Oxford University Press (OUP)	310
Revues.org	309
Emerald	308
Wolters Kluwer - Lippincott Williams and Wilkins	287
Biomed Central Ltd.	268
African Journals Online	230
Scientific Research Publishing	214
Sabinet Online Ltd	185
Medknow Publishers	177
Institute of Electrical and Electronics Engineers (IEEE)	174
Informa Healthcare	166
Thieme Publishing Group	157
SpringerOpen	150
Brill Academic Publishers	146
IGI Global	146
De Gruyter Open	135
Dove Medical Press	129
MDPI	124
World Scientific	114
Nature Publishing Group	110
Bentham Science	109
Scientific and Academic Publishing (SAP)	105
Karger	104
Ã‰rudit	99
ISRN International Scholarly Research Network	96
Intellect	95
IOS Press	93
Bangladesh Journals Online	87
Libertas Academica	87
OECD - Organisation for Economic Co-operation and Development	83
Mary Ann Liebert	81
ScopeMed	77
Universidad Complutense de Madrid	75
Academic Journals	73
Science and Education Publishing	72
FrancoAngeli	70
Institute of Physics (IOP)	70
American Psychological Association (APA)	68
PAGEPress	64
Akademiai Kiado RT	62
STM Journals	61
Nepal Journals Online	60

Palgrave MacMillan	60
Frontiers Media	57
University of Chicago Press, The	57
EDP Sciences	55
Horizon Research Publishing	55
Duke University Press	54
Science Alert	52
SciTechnol	50
PePSIC	48
American Chemical Society (ACS)	47
Science and Engineering Publishing Company	47
BMJ Publishing Group	46
Brepols Publishers	46
OMICS Publishing Group	45
Annual Reviews	44
Association for Computing Machinery (ACM)	44
John Benjamins Publishing Company	44
Sri Lanka Journals Online	44
Royal Society of Chemistry, The	42
Canadian Center of Science and Education	41
OA Publishing London	40
Edinburgh University Press	39
M.E. Sharpe	39
Morgan and Claypool	38
Peeters Publishers	37
University of California Press	36
American Society of Civil Engineers (ASCE)	35
Consejo Superior de Investigaciones CientÃficas	35
Berghahn Journals	34
Co-Action Publishing	34
Herbert Publications	34
Future Medicine	33
Institution of Engineering and Technology (IET)	33
MIT Press	33
Copernicus Publications	32
Hogrefe and Huber Publishing Group	32
ICE Publishing	32
Penn State University Press	32
Maney Publishing	31
Multiscience	31
American Institute of Physics (AIP)	30

Asian Network for Scientific Information (ANSInet)	30
International Institute for Science, Technology and Education (IISTE)	30
OpenJournals Publishing	30
Tehran University of Medical Sciences	30

It must be said that with some publishers, journals have an autonomy to decide which type of peer review will be applied. Consequentially, the content of publishers' Web sites was carefully analysed to find the proper and accurate information about the peer review process. Individual scientific journals were not analysed because the first 100 publishers from the Top publishers' list own the total of 20053 journals (Table 1.). However, such a significant number of journals presents a real possibility of implementation of open peer review (something that can be analysed in future research). Publishers' Web sites were analysed for publicly available documents explaining open peer review acceptance and / or implementation in a journal or journals owned by a particular publisher. In spite of possible deficiencies (some publishers tend to avoid clarity about the peer review process in their journals or give different names to the peer review types in order to achieve better marketing effect for their journals) it is the best approach for discovering the actual and current situation regarding the acceptance and implementation of open peer review process at the major scientific publishers.

5.1 Research results

After the careful analysis of the Web sites of the first 100 publishers from the Top publishers list, the results are presented in the Table 2.

Table 2. Publishers offering open peer review

Publisher	**Open peer review**	**# of journals**	**Publication type and title**
Elsevier	Yes	5	Journals: Agricultural and Forest Meteorology, Annals of Medicine and Surgery, Engineering Fracture Mechanics Journal of Hydrology: Regional Studies,
			International Journal of Surgery
Oxford University Press	Yes	1	Journal: Giga Science
Biomed Central Ltd.	Yes	2	Journals: BMC Infectious Diseases, Journal of Inflammation
Springer Open	Yes	?	?
MDPI	Yes	1	Journal: Life
Nature Publishing Group	Yes	1	?
Palgrave MacMillan	Yes	?	Books
BMJ Publishing Group	Yes	2	Journals: BMJ Open, BMJ
Copernicus Publications	Yes*	?	?

* Open peer review is called Interactive Public Peer Review

? Information not available

Three publishers stated they implement open peer review but didn't provide the number of journals in which they implement open peer review and two publishers didn't provide the titles of journals in which they implement open peer review. These results clearly indicate experimental nature of open peer review because of the small number of scientific publishers implementing this type of peer review. The remaining publishers which Web sites were analysed in this research stated that they apply "standard peer review", "classic peer review" or more specifically "single-blind peer review" and "double-blind peer review". Though modest, the results are significant because big publishing houses have a substantial influence on development of the scientific publishing market in general and can lead other publishers into the new phase of development of peer review if they decide to share their results of implementation of open peer review publicly which might become a key issue regarding the improvement of peer review process. The results must contain transparent explanation of the implementations and their good and bad sides. By doing so, the major scientific publishers will help other publishers, journal editors and authors to decide whether to implement open peer review or not. Since many scientific journals publishers promote open access on their Web pages, it is safe to assume that they will be more interested in open peer review in future if it demonstrates positive impact on quality of peer review in general.

6 Future research

After this initial research about the current state in implementation of open peer review, more detailed research is planned to discover details about what scientific publishers expect and want from open peer review. The focus of the future research will primarily be on publishers of the Croatian scientific journals, journal editors and authors. While small scientific communities are naturally part of the global scientific community, they still have their particularities and are often not included in scope of experiments of the world major scientific publishers because of the size of their market. Being a big or small community does not presume the outcome of implementation of open peer review and could provide a valuable insight into effects of implementation of open peer review in the process of transformation of the scientific information publishing. Such research should be specially focused on reasons why some publishers or journals should or should not accept open peer review.

7 Conclusion

There is no doubt in any researcher's mind that the peer review process should be improved. The question is – in what direction? The literature shows that little has changed in the peer review process in the last few decades. The latest development in this process is invention of open peer review, a process which should be transparent and open to anyone interested in it. The research study in this paper showed that only few major scientific publishers have commenced an experimental implementation of open peer review in their journals. The research study answered the both research questions. RQ1: Scientific publishers support open peer review in a small number of cases. This is not encouraging but one should have in mind that the system of scientific publishing has always been changing very slowly as well as the system of scientific information in general, and that changes have not often been immediately visible. This doesn't mean that changes shouldn't be done but instead, it means that they should be better documented and presented and the information about changes should be made publicly available. RQ2: The research study showed that major publishers are more inclined towards experimenting and acceptance of open peer review but are also very careful about extent and way of its implementation. Future research which will include direct contact with scientific publishers of different sizes would presumably provide more answers. The main hypothesis of the research that open peer review is still not widely accepted and implemented has been confirmed. At this moment, open peer review is not researched enough so there are still many uncertainties surrounding it. As Harnad (1997) pointed out: "Peer review is imperfect; it can no doubt be improved upon, but alternatives should first be tested; and in testing, one is well-advised to manipulate one variable at a time: Here we are dealing with a change in medium (paper to electronic), a change in economic model (subscription to author-side payment) and a change in quality control mechanism (peer review to open peer commentary)".

References

An Introduction to Open Peer Review. (2014) *Scientific American*. Retrieved from https://blogs.scientificamerican.com/information-culture/an-introduction-to-open-peer-review/

Callaway, E. (2016). Open peer review finds more takers. Retrieved from http://www.nature.com/news/open-peer-review-finds-more-takers-1.20969?WT.ec_id=NATURE-20161117&spMailingID=52782037&spUserID=MjA1NTQwOTk5MwS2&spJobID=1045580408&spReportId=MTA0NTU4MDQwOAS2

Cooper, M. L. (2009). Problems, Pitfalls, and Promise in the Peer-Review Process: Commentary on. *Perspectives on Psychological Science*, 4(1), 84-90.

Csiszar, A. Peer review: Troubled from the start. *Nature*, 532(7599) Retrieved from https://www.nature.com/news/peer-review-troubled-from-the-start-1.19763

Dougherty, M. (2007). Open Peer Review 3 Years Later. *Nursing Research*, 56(5), 295.

Eaton K.A., Rex Holland G., Giannobile W.V., Hancocks S., Robinson P.G. and Lynch C.D. (2014). How is research publishing going to progress in the next 20 years?: transcription of session for editors, associate editors, publishers and others with an interest in scientific publishing held at IADR meeting in Seattle on Wednesday, 20 March 2013. Journal of dentistry, 42(3), 219-228.

Ford, E. (2013). Defining and Characterizing Open Peer Review: A Review of the Literature Journal of Scholarly Publishing. *Journal of Scholarly Publishing*, 44(4), 311-326.

Harnad, S. (1997). Open Peer Commentary: A Supplement, Not a Substitute, for Peer Review. Retrieved from http://listserv.nasig.org/scripts/wa-NASIG.exe?A3=ind9706&L=SERIALST&E=0&P=23967&B=--&T=text%2Fplain&header=1

Harnad, S. (2000). The Invisible Hand of Peer Review. *Exploit Interactive*, 5 Retrieved from http://users.ecs.soton.ac.uk/harnad/nature2.html

Iannone, C. (2013) Peer Review and Other Problems. *Academic Questions*, 26(2), 137-140.

Janodia M.D. (2017). Open Access Publishing and Peer Review: Problems and Solutions, *Manipal Journal of Pharmaceutical Sciences*, 3(1), 1.

Koop, T.and Pöschl, U. (2006). An open,two-stage peer review journal. Nature. Retrieved from http://www.nature.com/nature/peerreview/debate/nature04988.html

Lahiri, D. K. (2006). Discourse among referees and editors would help. *Nature*, 439(16), 784.

Lajtha, K. and Baveye, P. C. (2010). How should we deal with the growing peer-review problem?, *Biogeochemistry*, 101, 1–3.

Lee, C. (2012). Open peer review by a selected-papers network. *Frontiers in computational neuroscience*, 6. Retrieved from http://journal.frontiersin.org/article/10.3389/fncom.2012.00001/full

Lipworth, W. L., Kerridge, I. H., Carter, S. M. and Little, M. (2011). Journal peer review in context: A qualitative study of the social and subjective dimensions of manuscript review in biomedical publishing, *Social Science & Medicine*, 72, 1056-1063.

Masic, I. (2012). Plagiarism in scientific publishing. *Acta Informatica Medica*, 20(4), 208-213.

Mehmani, B. and van Rossum, J. (2014). Elsevier trials publishing peer review reports as articles. Retrieved from https://www.elsevier.com/reviewers-update/story/peer-review/elsevier-pilot-trials-publishing-peer-review-reports-as-articles

Meruane, O.S., González Vergara, C. and Pina-Stranger, Á. (2016). What We Still Don't Know About Peer Review. *Journal of Scholarly Publishing*, 47(2), 180-212.

Nassi-Calò, L. Adoption of open peer review is increasing. Retrieved from http://blog.scielo.org/en/2017/01/10/adoption-of-open-peer-review-is-increasing/#.WUO7leklGRQn

Nature's Peer Review Trial (2006). *Nature*. Retrieved from http://www.nature.com/nature/peerreview/debate/nature05535.html

Open peer review in Royal Society Open Science. Retrieved from http://rsos.royalsocietypublishing.org/open-peer-review

Overview of Open Access Publishing. Retrieved from http://www.openoasis.org/index.php%3Foption%3Dcom_content%26view%3Darticle%26id%3D358%26Itemid%3D263

Overview: Nature's peer review trial. Retrieved from http://www.nature.com/nature/peerreview/debate/nature05535.html.

Post-publication peer review. Retrieved from https://www.revolvy.com/topic/Post-publication%20peer%20review&item_type=topic

Ross-Hellauer, T. (2017). What is open peer review? A systematic review. *F1000Research 2017*, 6, 588.

Ross-Hellauer, T., Deppe, A. and Schmidt, B. (2017). OpenAIRE survey on open peer review: Attitudes and experience amongst editors, authors and reviewers. Retrieved from https://zenodo.org/record/570864

Sandewall, E. (2012). Maintaining live discussion in two-stage open peer review. *Frontiers in computational neuroscience*, 6, 1-11.

Smith, R. (2006). Peer review: a flawed process at the heart of science and journals. *Journal of the Royal Society of Medicine*, 99, 178-182.

Tattersall, A. (2015). For what it's worth – open peer review landscape. *Online Information Review*, 39(5), 649-663.

Wang, P., Hoyt, J., Poschl, U., Wolfram, D., Ingwersen, P., Smith, R. and Bates, M. (2016). The last frontier in open science: Will open peer review transform scientific and scholarly publishing?. *Proceedings of the Association for Information Science and Technology*, 53(1), 1-4.

Watkinson, A., Jamali, H. R., Herman, E. and Allard, S.L. (2015). Peer review: still king in the digital age. *Learned publishing*, 28, 15-21.

Wheeler, B. (2011). The ontology of the scholarly journal and the place of peer review. *Journal of scholarly publishing*, 42(3), 307-322.