March 23, 2016

Optimize articles for search engine to improve research visibility

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Optimize articles for search engine to improve research visibility

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www.researcherid.com/rid/C-2414-2009
http://scholar.google.com/citations

23th March 2016
3rd SERIES OF INTRODUCTORY WORKSHOP ON:

Strategies to Enhance Research Visibility, Impact & Citations

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www.researcherid.com/rid/C-2414-2009
http://scholar.google.com/citations

Available online at: https://dx.doi.org/10.6084/m9.figshare.3122038.v1
& https://figshare.com/authors/Nader_Ale_Ebrahim/100797

Abstract: The number of citations a paper receives helps to determine the impact of your research. Even if your research is excellent, if no one finds your paper, it won’t be cited. Similar to a company for marketing a retail product, Academic Search Engine Optimization (ASEO) of your journal papers is important to market your research findings. ASEO is almost obligatory if you would like to increase readership of your papers, increase citations and acknowledgment and to create an overall stronger academic visibility, both offline and online. By optimizing your articles, you guarantee that your articles are indexed and gain a higher ranking in general and academic search engines, such as Google Scholar.

This presentation provides guidelines on how to optimize scholarly literature for academic search engines like Google Scholar, in order to increase the article visibility and citations. The closer your paper is to the number one search result, the more likely it will be read.

Keywords: H-index, Improve citations, Research tools, Bibliometrics, ASEO, Research impact, Research Visibility
Top 10 authors with the highest profile view counts on ResearchGate

Table 11. Top 10 authors with the highest profile view counts on ResearchGate (9th of November, 2015), compared to the same indicator on the 10th of September, 2015.

<table>
<thead>
<tr>
<th>AUTHOR NAME</th>
<th>SEPTEMBER 10th (2015) PROFILE VIEWS</th>
<th>NOVEMBER 9th (2015) PROFILE VIEW</th>
<th>MISMATCH (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nader Ale Ebrahim</td>
<td>19,821</td>
<td>13,281</td>
<td>67.00</td>
</tr>
<tr>
<td>Chaomei Chen</td>
<td>7,760</td>
<td>3,937</td>
<td>50.73</td>
</tr>
<tr>
<td>Loet Leydesdorff</td>
<td>4,227</td>
<td>1,758</td>
<td>41.59</td>
</tr>
<tr>
<td>Bakthavachalam Elango</td>
<td>2,883</td>
<td>1,756</td>
<td>60.91</td>
</tr>
<tr>
<td>Zaida Chinchilla</td>
<td>5,840</td>
<td>1,569</td>
<td>26.87</td>
</tr>
<tr>
<td>Mike Thelwall</td>
<td>4,297</td>
<td>1,568</td>
<td>36.49</td>
</tr>
<tr>
<td>Lutz Bornmann</td>
<td>3,129</td>
<td>1,439</td>
<td>45.99</td>
</tr>
<tr>
<td>Wolfgang Glänzel</td>
<td>3,012</td>
<td>1,301</td>
<td>43.19</td>
</tr>
<tr>
<td>Kevin Boyack</td>
<td>3,256</td>
<td>1,135</td>
<td>34.86</td>
</tr>
<tr>
<td>Peter Ingwersen</td>
<td>2,335</td>
<td>1,025</td>
<td>43.90</td>
</tr>
</tbody>
</table>

February 2016 Top 100 Technology Experts to Follow on Twitter

#24) @elearningpros - Unlimited (Up from #39)

#25) @bbvaOpenMind - OpenMind (Down from #33)

#26) @Danny_Lounge - Danny (Up from #28)

#27) @WhichTech - Which Technology (Up from #31)

#28) @FouadAkkad - Fouad Akkad (Up from #33)

#29) @AskDyson - Ask Dyson (Up from #34)

#30) @ChikaUwazie - Chika Uwazie

#31) @aleebrahim - Nader Ale Ebrahim (Up from #37)

#32) @alessandroleerro - Alessandro M. Lerro (Up from #57)

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Make sure your paper doesn’t get lost in the crowd. Get your paper Optimized for Search Engines.

When writing a paper title, think about the visibility and consider the search terms people may use to locate information about your topic and include these words.

When submitting an article for publication, authors should consider how easily discoverable their research will be to their audience and enhance opportunities for citation.

Source: [http://guides.library.ucla.edu/seo](http://guides.library.ucla.edu/seo)
Traditional Search Facilities

Card Catalog

Source: http://krishi.icar.gov.in/presentation/eprints_cmfri.ppt
Today: Online

- Google searches
- Digitized print resources
- Scholars’ webpages with reading lists
- Consulting a list of online library resources

What is SEO?

SEO stands for “search engine optimization.” It is the process of getting traffic from the “free,” “organic,” “editorial” or “natural” search results on search engines.

- All major search engines such as Google, Bing and Yahoo have primary search results, where web pages and other content such as videos or local listings are shown and ranked based on what the search engine considers most relevant to users.

Source: http://searchengineland.com/guide/what-is-seo
What Is ASEO?

• Academic Search Engine Optimization (ASEO) is the process of transforming your research paper into one which is easily indexed and categorized by the search engines, and thereby more advantageously positioned to increase visibility and citations.

Source: http://howtopublishinjournals.com/2013/12/08/academic-seo-for-your-research-papers/
Get found — optimize your research articles for search engines

Keywords
Keyword analysis

Social Media
Tell people about your articles

Metadata
Descriptions/information about data

Citations
Proof of validity

Graphics
Types of graphics and keyword usage

Optimizing your research articles for search engines

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Source: https://www.elsevier.com/connect/get-found-optimize-your-research-articles-for-search-engines
• **Write a good and short title for your article.** If you can use one or more keywords in the title while accurately describing the content of your article, then do it. Keep in mind the audience of your article and any academic keywords specific to your field to inform which keywords may be best to use.

• **In addition to the keywords tool from Google, check out Google Insights and Google Trends.** With the latter two, you can see the popularity of keywords over a period of time and by geographic location, which may or may not be relevant for you and to your article. Until now, Google offers the most tools for SEO.

• **Don’t go overboard with using numerous top keywords in every location of your article.** You want to tastefully optimize your article without compromising the relevance and quality of your writing and research.

• **Using the most popular keyword tool may not always be best for you and your article.** After all, it is the most popular for a reason, partly because it is frequently used in documents by others. You can test this by doing your own search of the keyword and seeing how many search results are found. If it is an exorbitant amount of articles, you may want to choose another keyword that is also very relevant to your research topic.
1. **Find the Keywords and search phrase to optimize your document**
   - Think about the most important words that are relevant to the article.
   - Consider looking up specific keywords on [Google Trends](https://trends.google.com) or the [Google Adwords Keywords tool](https://adwords.google.com) to find out which search terms are popular.
   - Try out your keywords in Google Scholar, etc. and if too many results are returned, it may be better to consider a keyword with less competition.

2. **Make sure you have a SEO-friendly title for your article**
   - The title needs to be descriptive and must contain a key phrase related to your topic.
   - Put your keywords within the first 65 characters of the title. Google Scholar considers the length of a title. In a search for the phrase ‘SEO for Authors: A How-to Guide’ would be ranked higher than one titled ‘Search Engine Optimization (SEO) for Authors: Ranking Information and Publishing Tips’. Although in general titles should be fairly short, we suggest choosing a longer title if there are many relevant keywords.

3. **Write your abstract using keywords, phrases and synonyms**
   - Include the keywords and phrases in your abstract that a researcher might search on to find your article. Provide additional relevant keywords and synonyms for those keywords as they relate to your article keeping in mind those keywords are also used by the abstracting and indexing services as a method to tag the research content.

Source: [http://guides.library.ucla.edu/seo](http://guides.library.ucla.edu/seo)
4. Stay consistent
   - Refer to authors names and initials in a consistent manner throughout the paper and in the same way they've been referred to in the past online publications. If names are used inconsistently, search engines may not be able to id articles or citations correctly; as a consequence, citations may be assigned incorrectly, and articles will not be as highly ranked as they should be. For instance, Jöran, Joeran, and Joran are all correct spellings of the same name (given different transcription rules), but Google Scholar sees them as three different names. Obtain an ORCID and use it when submitting works to publishers to aid dissambiguation.

5. Use headings
   - Headings for the various sections of your article tip off search engines to the structure and content of your article. Incorporate your keywords and phrases in these headings wherever it’s appropriate.

6. Cite your own, or your co-authors, previous publications
   - Academic search engines, and especially Google Scholar, assign significant weight to citation counts. Citations influence whether articles are indexed at all, and they also influence the ranking of articles. When referencing your own published work, it is important to include a link where that work can be downloaded. This helps readers to find your article and helps academic search engines to index the referenced articles' full text.

7. Text in figures and tables should be machine readable
   - Vector graphics containing font based text should be used instead of rasterized images so it can be indexed by academic search engines. Graphics stored as JPEG, BMP, GIF, TIFF, or PNG files are not vector graphics.
   - When documents are converted to PDF, all metadata should be correct (especially author and title). Some search engines use PDF metadata to identify the file or to display information about the article on the search engine results page.

Source: http://guides.library.ucla.edu/seo

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Help Readers Find Your Article

• Repeat key phrases in the abstract while writing naturally
Search engines look at the abstract page of your article, which is free for everyone to look at on SAGE Journals Online. Your abstract is not only the sales pitch that tempts the researcher into reading your article, it’s also the information that gives a search engine all the data it needs to be able to find your article and rank it in the search results page. Try to repeat the key descriptive phrases. Try to imagine the phrases a researcher might search for if your paper would be of interest to them. Google can detect abuse of this so don’t overplay it, focus on just 3 or 4 key phrases in your abstract.

• Get the title right
Ensure the main key phrase for your topic is in your article title. Make sure your title is descriptive, unambiguous, accurate and reads well. Remember people search on key phrases not just single words eg ‘women’s health’ not ‘health’.

• Choose your key words carefully
Include your main 3 or 4 key phrases and add in at least 3 or 4 additional key words. Where more than one phrase (or abbreviation) is often used to describe the same thing, include both/all variants, e.g. drug names.
More on SEO for publishing

• **Think about what someone might search on to find your article.** The phrase or first three or four words that first pop into your head may be what you should lead your article title with. A couple of good examples of optimized articles from Wiley’s portfolio include: “Ocean Acidification and Its Potential Effects on Marine Ecosystems” and “Nanomaterials in the environment: Behavior, fate, bioavailability, and effects.” You can see from both of these titles that the keywords lead the title and you can even hear the search terms in the titles.

• **Use a tool to help.** You can easily use Google’s [Keyword Planner](http://example.com) or [RankChecker](http://example.com) (you’ll have to sign up for a free registration for these) to find out which terms related to your article’s subject matter are popular keywords or search terms.

• **Make sure the keywords you choose accurately reflect the content of your article.** This is a no-brainer, but you don’t want to plug in keywords that have really strayed from your article’s content. Remember those “natural connections” to your content I mentioned that Google is looking for when crawling webpages.

• **Use the keywords field to your advantage.** Make sure you use this field to your advantage when submitting your paper. You not only need your keywords from the article title and abstract, but also synonyms. Is there another name or acronym for a concept, study, compound, etc, that you’re featuring in your research? Include it here!

• **Repeat keywords in your abstract in ways that make sense.** It’s important to repeat your keywords in your article abstract of course but, once again, make sure they are still used in a way that achieves your primary objective, which should be to briefly communicate the content of your article.
1. General guidelines

- Manuscripts are accepted in English. Any consistent spelling and punctuation styles may be used. Long quotations of 40 words or more should be indented without quotation marks.
- A typical manuscript will not exceed 8500 words including tables, references and captions. Manuscripts that greatly exceed this will be critically reviewed with respect to length. Authors should include a word count with their manuscript.
- Manuscripts should be compiled in the following order: title page; abstract; keywords; main text; acknowledgements; references; appendices (as appropriate); table(s) with caption(s) (on individual pages); figure caption(s) (as a list).
- Abstracts of 250 words are required for all manuscripts submitted.
- Each manuscript should have keywords.
- Search engine optimization (SEO) is a means of making your article more visible to anyone who might be looking for it. Please consult our guidance here.

It is essential that authors, editors, and publishers make every effort to ensure articles are found online, quickly and accurately, ideally within the top three hits. The key to this is the appropriate use of keywords.

Source: http://journalauthors.tandf.co.uk/preparation/writing.asp
Keywords

• **Recent evidence suggests that a strong correlation exists between online hits and subsequent citations for journal articles.** Search engines rank highly as starting points. Students are increasingly more likely to start their research by using Google Scholar™, rather than by the traditional starting point of Abstracting and Indexing resources.

• We know that the use of keywords helps to increase the chances of the article being located, and therefore **cited.**

• Many search engines have their own algorithms for ranking sites, some by ranking the relevance of content and links to the site from other websites. Some search engines use **metadata** or "meta-tagging" to assess relevant content. Most search engines, however, scan a page for keyword phrases, which gives emphasis to phrases in headings and/or repeated phrases. The number of other sites that link to a web page also indicates how that page is valued.

• **Authors should know the key phrases for their subject area.** Reference to an established common indexing standard in a particular discipline is a useful starting point - GeoRef, ERIC Thesaurus, PsycInfo, ChemWeb, and so on.

• Keyword terms may differ from the actual text used in the title and abstract, but should accurately reflect what the article is about. **Why not try searching for the keywords you have chosen, before you submit your article?** This will help you see how useful they are.

Source: [http://journalauthors.tandf.co.uk/preparation/writing.asp](http://journalauthors.tandf.co.uk/preparation/writing.asp)
Search engine optimization

- You need to ensure that search engines index your article, so that it comes up in a good position in the list of results when a reader enters keywords into a search engine. This makes it more likely that people will read your article. A strong correlation exists between online hits and subsequent citations for journal articles. We know that many readers start their research by using academic search engines such as Google Scholar™.
- **How do academic search engines work?**
  Many search engines have their own algorithms for ranking sites, some by ranking the relevance of content and links to the site from other websites. Some search engines use metadata or "meta-tagging" to assess relevant content. Most search engines, however, scan a page for keyword phrases, which gives emphasis to phrases in headings and/or repeated phrases. The number of other sites that link to a web page also indicates how that page is valued.

Please see the detailed guidelines provided by Google Scholar here.

- **What can I do as an author or editor?**
  We know that the use of **keywords** helps to increase the chances of the article being located, and therefore cited. Which words in your article are the most important? **Put yourself in the position of a reader. Which words might they type in to a search engine if they were looking for something on your topic?** Authors should know the key phrases for their subject area. Reference to an established common indexing standard in a particular discipline is a useful starting point - GeoRef, ERIC Thesaurus, PsycInfo, ChemWeb, and so on. There is further guidance on choosing keywords above.

Source: [http://journalauthors.tandf.co.uk/preparation/writing.asp](http://journalauthors.tandf.co.uk/preparation/writing.asp)

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• The **title** and **abstract** you provide are also very important for search engines. Some search engines will only index these two parts of your article. Your article title should be concise, accurate, and informative. The title should be specific and it should contain words that readers might be searching for. This will make it more likely that people will find and read your article. Remember that you are writing for people as well as search engines! And do not be tempted to over-optimize your article (as discussed in the first reference below). The title must reflect the content of your article; if it does not, readers will be confused or disappointed. The title must also be comprehensible to the general reader outside your field. Where possible avoid abbreviations, formulae, and numbers. The following should also usually be omitted: "Investigation of..."; "Study of..."; More about..."; "...revisited".

• Think about how you can increase the number of people reading and citing your article (see our detailed guidance here), because the number of citations will influence where it appears in the rankings. Link to the article once it is published, for example, from your blog, via social networking sites, and from pages on your university website. (Tips on promoting your article can be found here).

• **Further reading**


Source: [http://journalauthors.tandf.co.uk/preparation/writing.asp](http://journalauthors.tandf.co.uk/preparation/writing.asp)
Papers are accepted based on novelty, importance and scientific merit. But once published, a well-crafted title and abstract can help your work be found.

Source: http://blogs.nature.com/naturejobs/2015/07/10/publishing-high-impact-papers-natures-way
Titles: be simple and specific

- Use active rather than passive verbs.
- Avoid words that don’t add to the story such as: “on this”, “study”, and “investigation”.
- Be specific in delivering your message:
- Not every reader may know what Akt and Foxo1 are, but the title is declarative and specific. “But don’t be too specific”.
- When possible, avoid acronyms and other jargon, which renders the title opaque to readers not already conversant in the field.
- Avoid question marks: titles should present outcomes, without teasing the reader.
- Focus on what is novel in the work.
- Avoid complex, compound nouns. For example, the term “excess water-weight remover”.

Source: http://blogs.nature.com/naturejobs/2015/07/10/publishing-high-impact-papers-natures-way

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Strategies for Enhancing the Impact of Research

Preparing for Publication

• Add the name of study in the title of all publications and use the same title/name consistently.

• Assign keyword terms to the manuscript.

• Formulate a concise, well-constructed title and abstract. Include crucial keywords in the abstract.

• Publish your work in an open access journal.

• Consider the desired audience when choosing a journal for publication.

Source: Washington University School of Medicine, St. Louis Missouri

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Consider where you would like to appear – in other words, what is your niche? If someone searched for a topic, where would you like to appear?

Improving Readership of Your Articles

 Appearing at the top of the list of search results, and having a useful description of your work, greatly improve the likelihood that a reader will find and download your document.

• Abstracts should include keywords that potential readers are likely to use in searches. It is especially valuable to modify and reuse words that appear in the document's title and full text to improve the article's rank when readers search for those words.

• The first sentence of the abstract is all that is likely to be displayed in the search page results, so make your first sentence one that will encourage readers to click the link.

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False Remembering in the Aged

Researchers studying human memory have increasingly focused on memory accuracy in aging populations. In this article we briefly review the literature on memory accuracy in healthy older adults. The prevailing evidence indicates that, compared to younger adults, older adults exhibit both diminished memory accuracy and greater susceptibility to misinformation. In addition, older adults demonstrate high levels of confidence in their false memories. We suggest an explanatory framework for the high level of false memories observed in older adults, a framework based on the theory that consciously controlled uses of memory decline with age, making older adults more susceptible to false memories that rely on automatic processes. We also point to future research that may remedy such deficits in accuracy.

This article appears on the first page of results in Google for false+memory+aged.

Source: http://authorservices.wiley.com/bauthor/seo.asp

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**False** Remembering in the Senior Population

Researchers studying human memory have increasingly focused on its accuracy in senior populations. In this article we briefly review the literature on such accuracy in healthy older adults. The prevailing evidence indicates that, compared to younger adults, older adults exhibit both diminished accuracy and greater susceptibility to misinformation. In addition, older adults demonstrate high levels of confidence in their false memories. We suggest an explanatory framework for the high levels observed in older adults, a framework based on the theory that consciously controlled uses of memory decline in later life, making older adults more susceptible to false memories that rely on automatic processes. We also point to future research that may remedy such deficits in accuracy.
Compare Keywords “Senior Population” with “Aged”
Compare Keywords
“Senior Population” with “Aged”
My recent publications

Qualitative and quantitative analysis of solar hydrogen generation literature from 2001 to 2014

Mohammad Reza Mahjami, Shahin Navabi Asl, Mohammad Esmaeili Rezadad, Nader Ale Ebrahim, Chandima Gomes

100 Most Cited Articles in Urban Green and Open Spaces: A Bibliometric Analysis

Mehdi Rakshashdehroo, Mohd Johari Mohd Yusof, Nader Ale Ebrahim, Al Sharghi, Roozbeh Arabi

1Faculty Of Design And Architecture, University Putra Malaysia, Malaysia
2Centre Of Research Services, Institute Of Research Management And Monitoring (Ipp), University Of Malaysia, Malaysia
3Faculty Of Architecture And Urban Planning, Shahid Rajaee Teacher Training University (Srttu), Tehran, Iran.

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Questions?

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Twitter: @aleebrahim

www.researcherid.com/rid/C-2414-2009
http://scholar.google.com/citations

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=====================================  
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Research Management & Innovation Complex
University of Malaya, Kuala Lumpur, Malaysia
www.researcherid.com/rid/C-2414-2009
http://scholar.google.com/citations

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References


2. Charlie Rapple, Co-Founder Kudos (2015) Increasing the reach and impact of published research


17. Ale Ebrahim, N. (2016). Publish online magazine to promote publications and research findings. Retrieved from Research Support Unit, Centre for Research Services, Institute of Research Management and Monitoring (IPPP), University of Malaya: https://dx.doi.org/10.6084/m9.figshare.2069559.v1


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