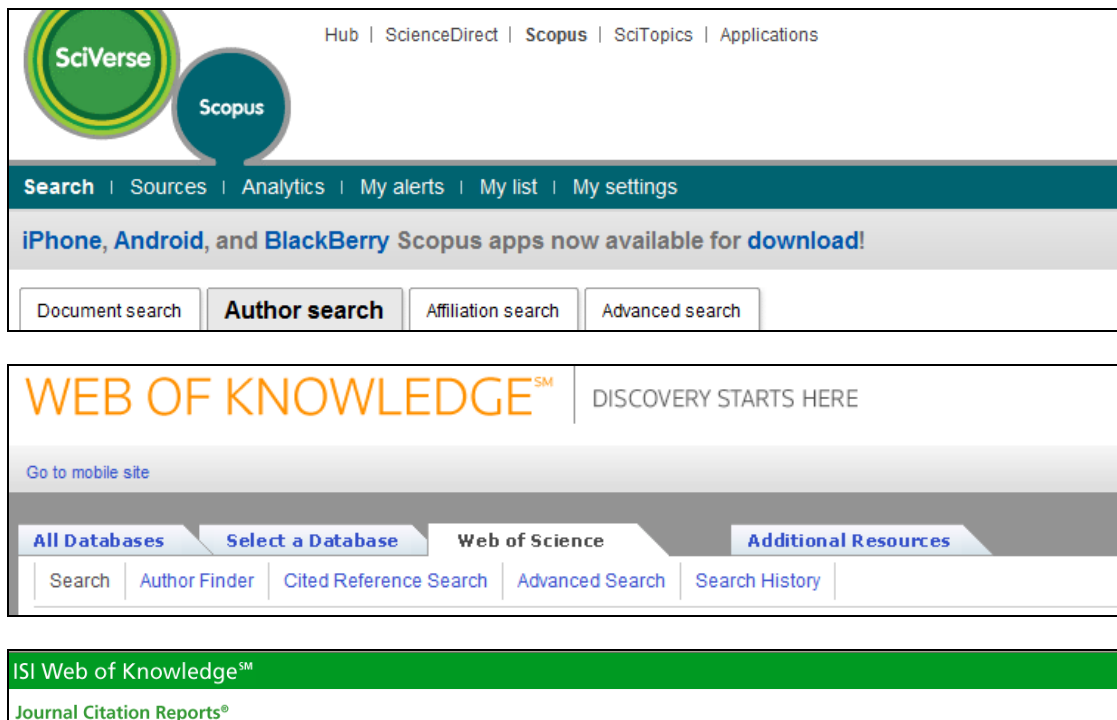


The H-index and Journal Impact Factors



The image shows two screenshots of academic databases. The top screenshot is the Scopus interface, featuring the SciVerse and Scopus logos, navigation links for Hub, ScienceDirect, Scopus, SciTopics, and Applications, and a search bar with options for Document search, Author search, Affiliation search, and Advanced search. The bottom screenshot is the ISI Web of Knowledge interface, displaying the 'WEB OF KNOWLEDGE' logo, the tagline 'DISCOVERY STARTS HERE', and navigation options for All Databases, Select a Database, Web of Science, and Additional Resources, along with search options like Search, Author Finder, Cited Reference Search, Advanced Search, and Search History.

Learning outcomes

At the end of the course you will be able to:

- Find your h-index in the SCOPUS database
- Find your h-index in the Web of Science database
- Find journal Impact Factors using the Journal Citation Reports database

Information Services, Philson Library

Phone 09-3737599 plus ext. no:

Sue Foggin	ext. 86123	sm.foggin@auckland.ac.nz
Lorraine Nielsen	ext. 86158	lm.nielsen@auckland.ac.nz
Fran Clements	ext. 89121	f.clements@auckland.ac.nz
Anne Wilson	ext. 86126	a.wilson@auckland.ac.nz

May 2012

Researcher metrics: The h-index

Definitions:

- **The h-index “gives an estimate of the importance, significance, and broad impact of a scientist’s cumulative research contributions”**
Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences*, 102(46), 16569-16572
- **“A scientist has an index h if h of his or her Np papers have at least h citations each and the other (Np – h) papers have less than or equal to h citations each.”**
Hirsch, J. E. (2005). An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences*, 102(46), 16569-16572
- **“ If an h-graph for an author has an h index of 12, it means that of the total number of documents selected to produce the graph, 12 of the documents have been cited at least 12 times. Published documents with fewer citations than h, in this case less than 12, are considered, but would not count in the h index.”**
http://help.scopus.com.ezproxy.auckland.ac.nz/flare/Content/h_auteval.htm
- **“The value of h is equal to the number of papers (N) in the list that have N or more citations.”**
http://images.isiknowledge.com.ezproxy.auckland.ac.nz/WOK46/help/WOS/h_citationrpt.html#footnote

Complicating factors:

The value for the h-index depends on the range of papers being examined, and how comprehensively the citations for each have been indexed. An author’s h-index can vary with:

- The number of his/her papers included in the database being used
- The number of citations for those papers included in the database
 - Both of these may vary with number of years and/or journals covered in the database

Also, obtaining a comprehensive listing of an author’s papers is complicated by the need to:

- Identify variant spellings of an author’s name
 - eg Mc or Mac; names ending in ff, ii, v; names including punctuation or spaces; names that are not standard English
- Identify alternative names for an author (eg married names)
- Avoid combining different authors who share the same name
- Identify single authors who have been mis-identified as multiple authors due to multiple institutional affiliations
- Identify Study groups the author has published as part of eg ISAAC. **Note:** The Scopus database ‘unpacks’ study groups to list all authors. To search for publications with the group as the author, use the Web of Science database and type in the author variant as indexed by Web of Science eg ISAAC Phase One Study Group.

MyRI : Measuring your Research Impact

<http://www.ndlr.ie/myri/>

This open access tool kit on citation analysis includes a tutorial with information and visuals on finding your h-index in Scopus, Web of Science, and Publish or Perish.

Research outputs

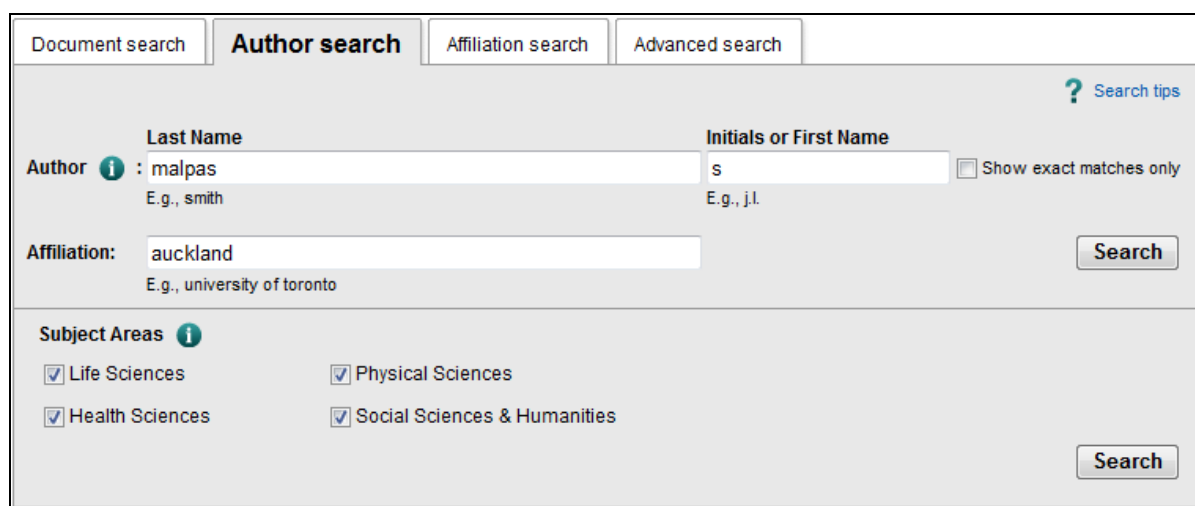
The H-index provided in Research Outputs (RO) comes from either Scopus or Web of Science records that have been approved from a trawled search.

Finding an h-index using SCOPUS

SCOPUS calculates the h-index of an author or a group of authors using journal publications from 1996-current, ie papers published before 1996 are not included in the calculation (see p. 5 for how to include earlier papers). Publications such as book chapters are not included in the list of publications or as sources for the citation count.

Start with the Author Search:

1. In the default search screen, select the *Author Search* tab:



The screenshot shows the Scopus search interface with the 'Author search' tab selected. The 'Author' field is filled with 'malpas' and 's'. The 'Affiliation' field is filled with 'auckland'. The 'Subject Areas' section has four checkboxes: Life Sciences, Physical Sciences, Health Sciences, and Social Sciences & Humanities, all of which are checked. There are 'Search' buttons for both the author search and the subject areas search.

2. Enter the surname plus initials(s)/first name. It is often best to use just the first initial as most authors do not use exactly the same version of their name on all publications.
3. Click in the *Show exact matches only* tick box if desired.
4. Include the institutional affiliation if desired. This helps to differentiate authors of the same name. You can type just a single word from the institution's name eg Toronto, Auckland. Results are presented as an alphabetical listing of matching

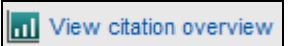
authors, showing variant names, subject area, affiliation, city, and country to help identify the correct author.

Author results: 2 of 5 Show Profile Matches with One Document			
<input type="checkbox"/> All <input type="checkbox"/> Page	With selected: Show documents View citation overview Request to merge authors		
Authors	Documents	Subject Area	Affiliation
<input type="checkbox"/> 1 Malpas, Simon C. Malpas, S. Malpas, S. C. Malpas, Simon	106 Show Last Title	Biochemistry, Genetics and Molecular Biology ; Medicine ; Neuroscience; ...	University of Auckland
<input type="checkbox"/> 2 Malpas, Simon C. Malpas, Simon	8 Show Last Title	Engineering ; Biochemistry, Genetics and Molecular Biology ; Computer Science; ...	University of Auckland
<input type="checkbox"/> All <input type="checkbox"/> Page	With selected: Show documents View citation overview Request to merge authors		

Note: the same author may have more than one entry in this initial results list. To include all an author's publications, you may need to combine several entries for the same author (see below).

To view an author's details: Click on his/her name to see the Author Details page. This page summarises information about a given author, including: the h-index (with a link to the relevant graphs and lists of subject areas, document types and co-authors); known variants of the author's name; the author's current affiliation and known affiliation history; citation information taken from the database.

If there are other names you think are the same person in the initial results list:

1. For a quick look, select all the variant names of the same author. Then click  [View citation overview](#).
2. **OR** click on each name to see details to help decide which entries are really your author
3. Find the entry for your author which has the largest number of documents, then click on that author name to open the Author Details page
4. Click on the *Find potential author matches* link on the Author Details page
5. Up to the first 6 possibilities are listed. There may still be more, if so there will be a **View full list** link, click on it to see all possibilities.
6. Select all names that refer to the same author and click on *View Grouped with author*.

With selected:		Request to merge with author				
Authors	Documents	Subject area	Affiliation	City	Country	
<input checked="" type="checkbox"/> 1 Malpas, Simon C. Malpas, Simon	8 <a>Show last title	Engineering; Biochemistry, Genetics and Molecular Biology; Computer Science; ...	University of Auckland	Auckland	New Zealand	
<input checked="" type="checkbox"/> 2 Malpas, Simon	1 <a>Show last title	Medicine;	Telemetry Research	Auckland	New Zealand	
<input checked="" type="checkbox"/> 3 Malpas, Simon C.	1 <a>Show last title	Medicine;	University of Auckland	Auckland	New Zealand	
<input type="checkbox"/> 4 Malpas, Simon	1 <a>Show last title	Earth and Planetary Sciences;	Universite de Liege	Liege	Belgium	
<input type="checkbox"/> 5 Malpas, Simon	1 <a>Show last title	Arts and Humanities; Social Sciences;	Manchester Metropolitan University	Manchester	United Kingdom	
<input type="checkbox"/> 6 Malpas, Simon	1 <a>Show last title	Social Sciences;	Cardiff University	Cardiff	United Kingdom	

[View full list](#)

7. Citation information and statistics are now updated to include all grouped authors. The aggregate details are shown to the right of the original author's details:

Malpas, Simon C.

[Find potential author matches](#)

Personal

Name: Malpas, Simon C.
 Other formats: Malpas, S., Malpas, S. C., Malpas, Simon
 Author ID: 7007046847
 Affiliation: University of Auckland, Department of Physiology, Auckland, New Zealand

Research

<p>Malpas, Simon C.</p> <p>Documents: 106 View Author Evaluator Add to my list Set alert</p> <p>References: 2158</p> <p>Citations: 2248 total citations by 1406 documents View citation overview Set alert</p> <p><i>h</i> Index: 24 View h-Graph <small>The <i>h</i> Index considers Scopus articles published after 1995.</small></p> <p>Co-authors: 101</p> <p>Web search: 1976</p> <p>Subject area: Biochemistry, Genetics and Molecular Biology Medicine Neuroscience More...</p>	<p>Total including 3 grouped authors</p> <p>Documents: 116 View Author Evaluator Add to my list Set alert</p> <p>References: 2269</p> <p>Citations: 5 total citations by 1408 documents View citation overview Set alert</p> <p><i>h</i> Index: 24 View h-Graph</p> <p>Co-authors: 120</p> <p>Web search: 2489</p>
---	--

Grouped authors

You have grouped 3 potential author matches with Malpas, Simon C.
 To store this group in Settings, click **Save group**.

All | Delete | [Request to merge with author](#)

<input type="checkbox"/> Malpas, Simon C. Identifier 35264705300	8
<input type="checkbox"/> Malpas, Simon Identifier 55088230500	1
<input type="checkbox"/> Malpas, Simon C. Identifier 55034339400	1

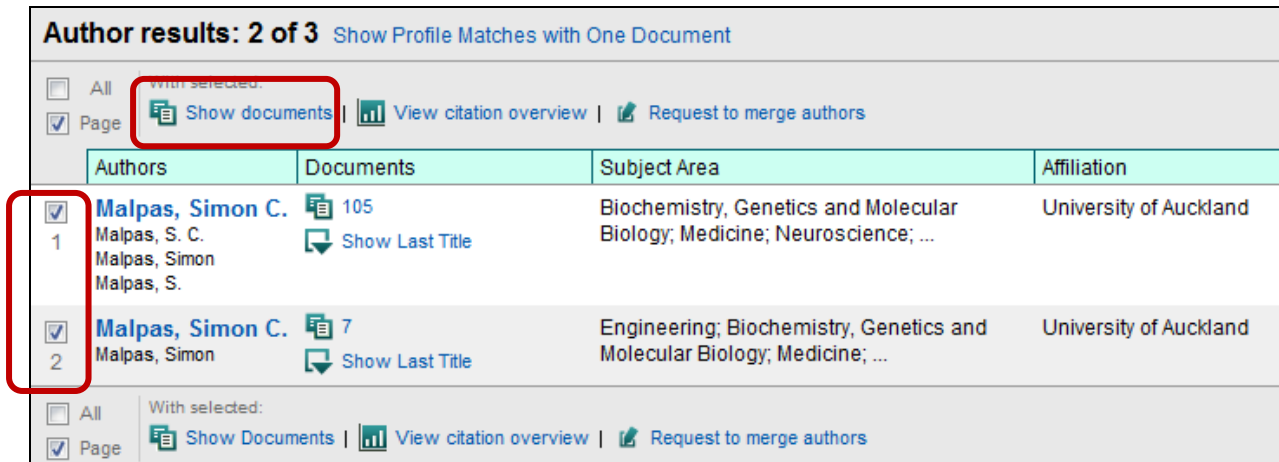
[Save group](#)

To see a graphical representation of the h-index covering all authors you grouped:

1. Click on the *view h-graph* button. 

Determining an h-index in SCOPUS which includes papers published prior to 1996:

1. **Either:** In the Author Search results, tick the boxes for your author then click *Show documents*



Author results: 2 of 3 [Show Profile Matches with One Document](#)

All Page [Show documents](#) | [View citation overview](#) | [Request to merge authors](#)

	Authors	Documents	Subject Area	Affiliation
<input checked="" type="checkbox"/>	Malpas, Simon C. Malpas, S. C. Malpas, Simon Malpas, S.	105 Show Last Title	Biochemistry, Genetics and Molecular Biology; Medicine; Neuroscience; ...	University of Auckland
<input checked="" type="checkbox"/>	Malpas, Simon C. Malpas, Simon	7 Show Last Title	Engineering; Biochemistry, Genetics and Molecular Biology; Medicine; ...	University of Auckland

All Page With selected: [Show Documents](#) | [View citation overview](#) | [Request to merge authors](#)

OR: click on the number of papers (Documents) for the author on the Author details page (good when you have just grouped several name variations together)



Research	Malpas, Simon C.	Total including 3 grouped authors
Documents	106 View Author Evaluator Add to my list Set alert	116 View Author Evaluator Add to my list Set alert
References	2158	2269
Citations	2248 total citations by 1406 documents View citation overview Set alert	5 total citations by 1408 documents View citation overview Set alert
h Index	24 View h-Graph	24 View h-Graph

The h Index considers Scopus articles published after 1995.

2. In the Results table, click and choose Citations in the *Sort by* box.
3. Scan down the list of results. The h-index is the first record number (on the left hand side of the title of the paper) where the number of citations for that paper (right hand side) is greater or equal to the record number:

Document results: 116 | Show all abstracts


Page: 2 of 6 | Go | Next >

Sort by: Cited by

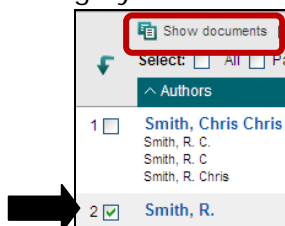
Document title	Author(s)	Date	Source title	Cited by
21 Do different levels and patterns of sympathetic activation all provoke renal vasoconstriction?	Malpas, S.C., Evans, R.G.	1998	Journal of the Autonomic Nervous System 69 (1), pp. 72-82	35
22 Sympathetic nervous system overactivity and its role in the development of cardiovascular disease	Malpas, S.C.	2010	Physiological Reviews 90 (2), pp. 513-557	34
23 The amplitude and periodicity of synchronized renal sympathetic nerve discharges in anesthetized cats: Differential effect of baroreceptor activity	Malpas, S.C., Ninomiya, I.	1992	Journal of the Autonomic Nervous System 40 (3), pp. 189-198	33
24 Long-term control of renal blood flow: What is the role of the renal nerves?	Barrett, C.J., Navakatikyan, M.A., Malpas, S.C.	2001	American Journal of Physiology - Regulatory Integrative and Comparative Physiology 280 (5 49-5), pp. R1534-R1545	31
25 Resonance in the renal vasculature evoked by activation of the sympathetic nerves	Malpas, S.C., Hore, T.A., Navakatikyan, M., Lukoshkova, E.V., Nguang, S.K., Austin, P.C.	1999	American Journal of Physiology - Regulatory Integrative and Comparative Physiology 276 (5 45-5), pp. R1311-R1319	29
26 Dynamic relationship between sympathetic nerve activity and renal blood flow: A frequency domain approach	Guild, S.-J., Austin, P.C., Navakatikyan, M., Ringwood, J.V., Malpas, S.C.	2001	American Journal of Physiology - Regulatory Integrative and Comparative Physiology 281 (1 50-1), pp. R206-R212	28
27 Heart rate variability and cardiac autonomic function in men with chronic alcohol dependence	Malpas, S.C., Whiteside, E.A., Maling, T.J.B.	1991	British Heart Journal 65 (2), pp. 84-88	28
28 A real-time algorithm for the quantification of blood pressure waveforms	Navakatikyan, M.A., Barrett, C.J., Head, G.A., Ricketts, J.H., Malpas, S.C.	2002	IEEE Transactions on Biomedical Engineering 49 (7), pp. 662-670	27

To find the h-index of an author who has two dissimilar surnames (eg unmarried name Smith, married name Jones):

1. Obtain a complete list of documents for both names:

- a. Search for each name separately using Author Search, as described above
- b. At the end of each search, be sure to either click the *View documents for this author* button 

OR tick the box by the author name and click the *Show documents* link on the grey bar above the list of authors to put this search into the Search History.



- c. When the last list of papers is showing, click the *View Search History* link (located on the blue Your Query bar)
- d. In the Search History list, combine the searches for each author using the OR operator in the Combine box, eg #1 OR #2:

Select: All


Combine queries: Search ? Combining queries

Search	Results	Actions
2 <input type="checkbox"/> AU-ID("Smith, R." 25647036300)	20	Edit Save Set alert Set feed
1 <input type="checkbox"/> AU-ID("Jones, R." 8565920200)	11	Edit Save Set alert Set feed


- e. The subsequent results table consolidates all papers for the searches included in step d.
2. Find the h-index:
 - a. In the Results table, click on the label of the Citations column to sort the papers by number of citations
 - b. Scan down the list of results. The h-index is the first record number (on the left hand side of the title of the paper) where the number of citations for that paper (right hand side) is greater or equal to the record number.

Correcting your own details in SCOPUS:

Either:

1. Perform an Author Search. Click in the tick boxes beside variations of your name
2. Click on  [Request to merge authors](#)

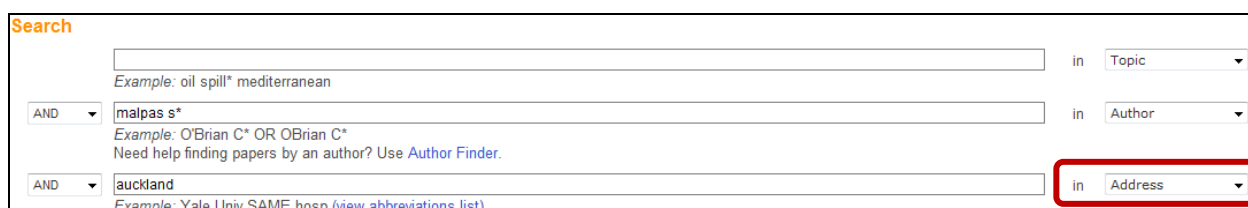
Or:

1. From the Author Details page: Click  [Request author detail corrections](#)

Finding an h-index using Web of Science

Web of Science calculates the h-index of an author using journal publications from 1900-current. Publications such as book chapters are not included in the list of publications or as sources for the citation count.

A **quick method** is to type surname initial* in the Author search box (works best if you have a distinctive name). Additionally, type Auckland in the next search box and search in Address.



Search

Example: oil spill* mediterranean

AND malpas s* in Author

Example: O'Brian C* OR OBrian C*

Need help finding papers by an author? Use [Author Finder](#).

AND auckland in Address

Example: Yale Univ SAME hosp ([view abbreviations list](#))

Click the Create Citation Report link at the top right of the results list.



View Distinct Author Sets for malpas s*

The Distinct Author Set feature is a discovery tool showing sets of papers likely written by the same person. ([Tell me more](#))

Save to: EndNote Web EndNote ResearcherID more options

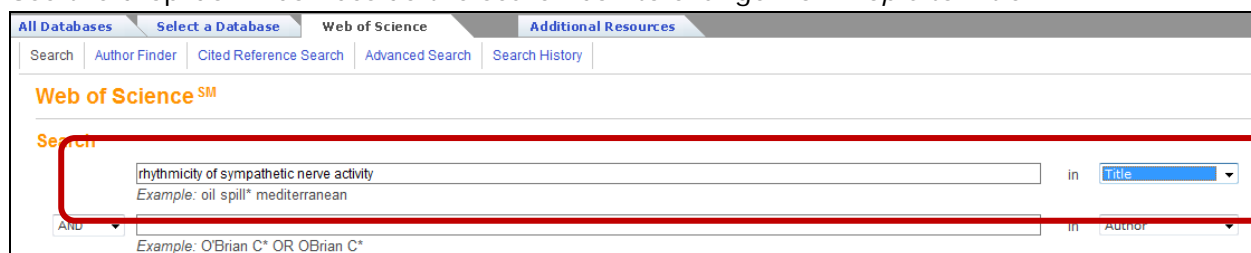
Analyze Results Create Citation Report

1. Title: Baroreflex control of renal sympathetic nerve activity and heart rate in near-term fetal sheep
Author(s): Booth Lindsea C.; Gunn Alistair J.; Malpas Simon C.; et al.
Source: EXPERIMENTAL PHYSIOLOGY Volume: 96 Issue: 8 Pages: 736-744 DOI: 10.1113/expphysiol.2011.058354 Published: AUG 2011
Times Cited: 0 (from Web of Science)
[Find Full Text](#) [View abstract](#)

Method 2: Working from a single paper

If you are reasonably certain an author's name is unique, you can identify all papers by that author starting with a single paper:

1. In the default search screen, enter the exact title of the paper (or a large portion of it) into the first search box
2. Use the drop-down box beside the search box to change from *Topic* to *Title*



All Databases Select a Database Web of Science Additional Resources

Search Author Finder Cited Reference Search Advanced Search Search History

Web of Science SM

Search rhythmicity of sympathetic nerve activity in Title

Example: oil spill* mediterranean

AND in Author

Example: O'Brian C* OR OBrian C*

3. Click on the *Search* button. The list of results will usually consist of only one paper.
4. Click on the title of the paper. The subsequent record screen includes the hyperlinked names of the authors.
5. Click on the name of the author you are interested in. This produces a list of all of the papers known to be by that author; however, it will not include papers for variant spellings of the author's name, or papers where the author has been otherwise mis-identified.

- Click on the *Create Citation Report* link (top right, just above the list of papers)
- The Citation Report screen shows various citation statistics for the list of papers, including the h-index, and average number of citations per item. (It also displays the list of papers sorted by number of citations. The h-index is indicated in this list by a green line passing under the last record where the number of citations for the paper [to the right] is equal to or greater than the record number [to the left of the paper title]: the record number of this paper is the h-index.)
- Identifying articles you know have been written by the author but that are missing from the list will alert you to possible variations in the way the author's name has been cited.
- To check variations in author name click on the *View all Author Sets for this author name* link that appears above the list of papers:

The Distinct Author Sets feature shows sets of papers likely written by the same person. (Tell me more.)
[View all Author Sets for Malpas, SC](#) [View the articles authored by Malpas, SC](#)

- On the Distinct Author Sets page, select those author names you believe to be variations in the name of the author you are interested in by clicking in the tick boxes beside them (you can check the publications attributed to individual names by clicking on the figure in the Records column), eg:

Distinct Author Sets: Malpas, SC*

Timespan=All Years. Databases=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH.

The Distinct Author Sets feature shows sets of papers likely written by the same person. (Tell me more.)
[View the articles authored by Malpas, SC*](#)

Author Sets: 14 Page 1 of 2 Go

Refine Author Sets

You entered: Malpas, SC
 Searched: Malpas, SC*

Web of Science Categories: [Refine](#)

- BIOCHEMISTRY MOLECULAR BIOLOGY
- BIOLOGY
- PERIPHERAL VASCULAR DISEASE
- PHARMACOLOGY PHARMACY
- PHYSIOLOGY
- [more options / values...](#)

Subject Areas

- Author and Coauthor Institutions
- Publication Years
- Author and Coauthor Countries/Territories
- Source Titles

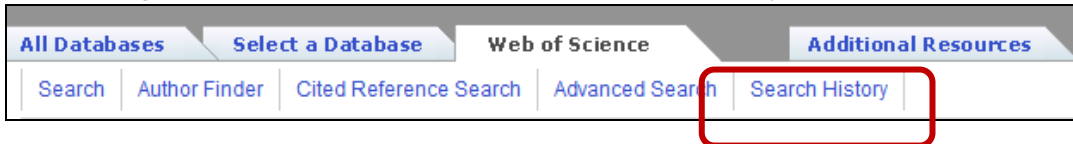
Select Page	Author Names	Records	Last Known Institution	Publication Years
<input type="checkbox"/> 1.	MALPAS SC MALPAS S	113	Univ Auckland	1992 - 2010
Source Titles for this author (top 5 by record count): AMERICAN JOURNAL OF PHYSIOLOGY REGULATORY INTEGRATIVE AND COMPARATIVE PHYSIOLOGY (26) CLINICAL AND EXPERIMENTAL PHARMACOLOGY AND PHYSIOLOGY (18) FASEB JOURNAL (17) JOURNAL OF THE AUTONOMIC NERVOUS SYSTEM (9) HYPERTENSION (8)				
A Sampling of Publications by this Author:				
<input type="checkbox"/> 2.	MALPAS SC	6	Undetermined	1989 - 1991
Source Titles for this author (top 5 by record count): BRITISH HEART JOURNAL (1)				

- Click on the *View Records* button to see a consolidated list of publications by all of the name variants you have selected.
- Click on the *Create Citation Report* link (top right, just above the list of papers) to see the h-index for this list of publications.

Method 2a: Working from single papers for an author with two dissimilar surnames (eg maiden name "smith", married name "jones")

- Obtain a complete list of documents for each name using Method 1 as above

- After doing the second search, click on the *Search History* link



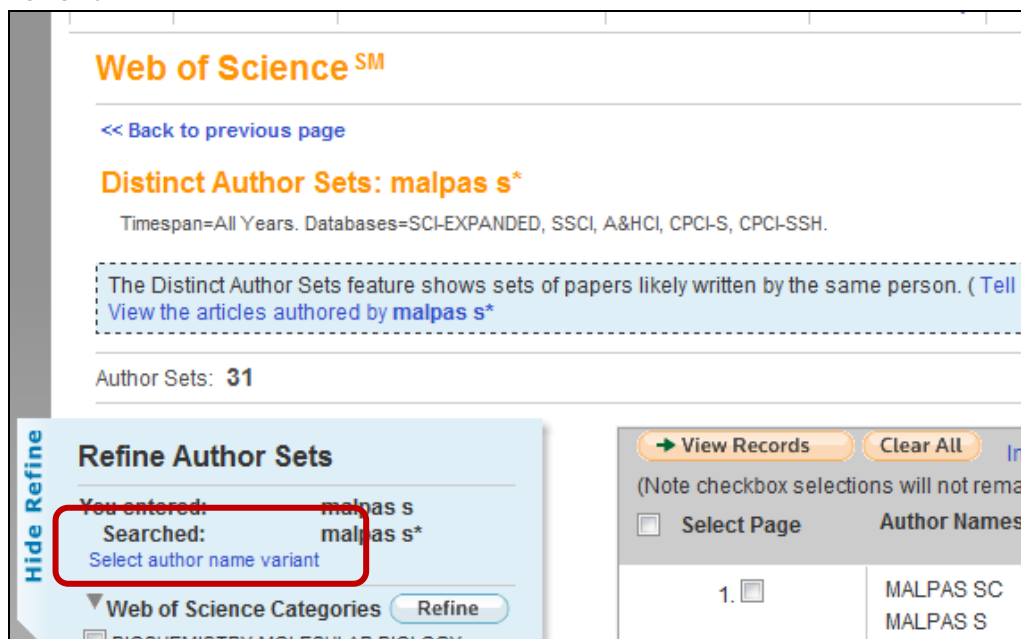
- On the Search History screen, select the searches for the two names by clicking in the tick boxes to the right of them in the Combine Sets column, click in the *OR* radio button at the top or bottom of the Combine column, and click on the *Combine* button:



- The resulting list of papers consolidates the results from both names. Find the h-index for this list by clicking on the *Create Citation Report* link.

Method 3: Using the Author Finder

- In the default search screen, click on the *Author Finder* link.
- Enter the last name of the author and the first initial.
- Click on the *Search by Name* button.
- In the resulting list of names, select the name that you feel best matches the author you are looking for.
- If you want to include other variations on the name, click on the *Select author name variant*.



6. Further refine your author set by using the categories in the Refine Author Sets box eg choose one or more institutions from Author and Coauthor Institutions to include authors that have been affiliated with multiple institutions, or to distinguish between authors with similar names. (NB: not all institutions shown are actually affiliated with a given author – they are simply those institutions that appear in one or more papers with that author; they may in reality be affiliated with another author on a given paper). Click the *Refine* button.
7. Select the author names you are interested in by clicking in the tick boxes beside them.
8. Click on the *View Records* button to see a consolidated list of publications by all of the name variants you have selected
9. Click on the *Create Citation Report* link (top right, just above the list of papers) to see the h-index for this list of publications.
10. The Citation Report screen shows various citation statistics for the list of papers, including the h-index, average number of citations per item. (It also displays the list of papers sorted by number of citations; a green line passes under the last record where the number of citations for the paper [to the right] is equal to or greater than the record number [to the left of the paper title] – the record number of this paper is the h-value.)
11. When you look through the list of papers, you may find that some are “aliens” – ie they are by another researcher with the same name. This is easiest to spot when you are looking at a list of your own papers, as you will recognise ones that you did not author. Such papers can be removed from the list one at a time as follows:
 - Click in the check box beside an “alien” paper
 - Click the Go button at the top of the list where it says “Use the checkboxes to remove individual items from this Citation Report”
 - The checked record is removed, all subsequent records are renumbered, and the Results total goes down by one
 - Repeat for any other “alien” papers in the list

h-index considerations:

- Researchers in specialist areas of research may have lower h-indexes than those in more popular or currently-topical areas.
- Researchers who produce a small number of influential papers with high citation rates will have low h-indexes if citations to their other papers are low, even though their contribution to a discipline may be high.
- Researchers with short publishing careers might appear disadvantaged by low h-indexes, even though their impact in a discipline may be high.
- Researchers may boost their h-indexes by manually noting citations to their work that have not been recorded by *Web of Science* or *Scopus*. Some New Zealand titles may fall into this field.
- Average h-indexes may vary significantly between disciplines.
- Self citations may increase h-indexes.
- Researcher metrics describe the number of citations to your publications (or those of

your department or institution), rather than describing the journals in which they are published. Authors may have high h-indexes for items published in low impact journals, and vice versa.

- Neither the h-index nor g-index decreases with time, so they may appear to undervalue the work of younger authors, but in context, a g-index is a measure of an author's contribution to the research environment.
- It is unfair to compare g or h-indexes of two researchers working in different disciplines eg a discipline that uses more references per paper will be expected to have higher indexes.

University of Auckland General Library, Science Subject Librarians. (2010). *Measuring and evaluating science research*. Retrieved from <http://www.library.auckland.ac.nz/docs/helpsheets/Bibliometrics.pdf>

h-index variants:

For information on the m-quotient, g-index, contemporary h-index, individual h-index and normalisation for fields see:

- Harzing, Anne-Wil. *Reflections on the h-index*. http://www.harzing.com/pop_hindex.htm
- Measuring your Research Impact <http://www.ndlr.ie/myri/>

Journal h-index

See:

Google Scholar metrics

<http://googlescholar.blogspot.com.au/2012/04/google-scholar-metrics-for-publications.html>

SCImago – Use either the Journal Rankings or Journal Search.

<http://www.scimagojr.com/>

Thanks to Simon C. Malpas, University of Auckland, who has given permission for the use of his details for demonstration purposes.
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Journal Metrics: Journal Impact Factors

Journal Impact Factors are calculated on a yearly basis by the Journal Citation Reports database. The Impact Factor of a journal is the average number of times that articles published in that journal in a two year period have been cited in the following "JCR year".

A "JCR year" is one year of citation data; you can choose which JCR year you wish to examine. For example, when you search for the 2009 journal Impact Factor for a particular journal, you are looking at the citations made in 2009 to papers published in that journal in 2007 and 2008.

$$\text{2009 Impact factor} = \frac{\text{total citations made in 2009 to papers published in the journal in 2007 \& 2008}}{\text{total papers published in the journal in 2007 and 2008}}$$

The Journal Impact factor is used as a proxy for the general quality/significance/influence of the papers published in a journal.

However, it is worth noting that:

- The Journal Impact Factor is a retrospective metric, eg the 2009 Impact Factor looks at citations to papers from 2007/2008, but is not available until 2010 (after all the citations for 2009 have been made).
- Not all journals have Impact Factors as calculated by JCR
 - For comparison, JCR indexes over 8,000 journals while SCOPUS indexes over 15,000.
 - As a minimum of three years' data are required, new journals do not have Journal Impact Factors.
 - Non-English language journals are only included if they include at least a table of contents in English.
- Journal Impact Factors can be influenced by factors other than the quality of the publications:
 - Self-citation can distort low Journal Impact Factors (but the degree of legitimate self-citation varies with subject area).
 - Journals publishing a large proportion of non-citable items (such as editorials) can have lower Journal Impact Factors, regardless of the quality of the material, if these items are considered "articles" by JCR.
 - Journals vary in the kinds of papers they publish – review articles are often highly cited, so journals can raise their Journal Impact Factor by publishing more of these.
- Citations to a paper may not reflect its quality or significance.

- The Impact Factor of a journal does not necessarily reflect the quality of papers published by a particular author in that journal.
- Journal Impact Factors vary wildly between and even within academic disciplines, depending on how popular a particular topic is, or how narrowly a journal is focussed.
- A Journal Impact Factor carries little meaning without comparison to Impact Factors of other journals centred on the same topic.

Note that JCR does index open source journals, and non-English journals that include a table of contents in English.

Finding Journal Impact Factors using Journal Citation Reports

Searching by Subject Category

1. In the Welcome screen, select the JCR edition and year you want (the default is Science and the latest year). Make sure the dot is next to View a group of journals by Subject Category.

Note the 2 Editions: Science OR Social Sciences.

Select a JCR edition and year: <input checked="" type="radio"/> JCR Science Edition 2010 ▾ <input type="radio"/> JCR Social Sciences Edition 2010 ▾	Select an option: <input checked="" type="radio"/> View a group of journals by Subject Category ▾ <input type="radio"/> Search for a specific journal <input type="radio"/> View all journals
<input type="button" value="SUBMIT"/>	

2. Click on the *Submit* button.
3. In the Subject Category Selection screen, choose the category you want from the drop-down list. (You can use the *Subject Category Scope Notes* link to find out more about what a category means. You can also select more than one category using Ctrl-click in Windows® or Command-click in Macintosh®.)
4. To view data for individual journals:

1) Select one or more categories from the list. (How to select more than one)	AGRICULTURAL ECONOMICS & POLICY AGRICULTURAL ENGINEERING AGRICULTURE, DAIRY & ANIMAL SCIENCE AGRICULTURE, MULTIDISCIPLINARY AGRONOMY ALLERGY ANATOMY & MORPHOLOGY ANDROLOGY ANESTHESIOLOGY
2) Select to view Journal data or aggregate Category data.	<input checked="" type="radio"/> View Journal Data - sort by: Journal Title ▾ <input type="radio"/> View Category Data - sort by: Category Title ▾
<input type="button" value="SUBMIT"/>	

- Beside the *View Journal Data* radio button, choose a sort option from the drop-down box (journal title is usually the most useful)
- Click on the *Submit* button.
- The Journal Summary List can be re-sorted using the *Sort Again* button and the drop-down list, eg sort by impact factor.

Journal Summary List

Journals from: **subject categories ANESTHESIOLOGY** [NEW CATEGORY SUMMARY LIST](#)

Sorted by: Journal Title

Journals 1 - 20 (of 26)

Ranking is based on your journal and sort selections.

Mark	Rank	Abbreviated Journal Title <i>(linked to journal information)</i>	ISSN	JCR Data ⁱ			
				Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index
<input type="checkbox"/>	1	ACTA ANAESTH SCAND	0001-5172	5410	2.196	2.069	0.569
<input type="checkbox"/>	2	ANAESTH INTENS CARE	0310-057X	1827	1.128	1.061	0.426
<input type="checkbox"/>	3	ANAESTHESIA	0003-2409	6365	3.008	2.645	0.981
<input type="checkbox"/>	4	ANAESTHESIST	0003-2417	1143	0.729	0.799	0.301
<input type="checkbox"/>	5	ANASTH INTENSIV NOTE	0939-2661	307	0.232	0.178	0.060
<input type="checkbox"/>	6	ANASTH INTENSIVMED	0170-5334	300	0.774	0.608	0.485
<input type="checkbox"/>	7	ANESTH ANALG	0003-2999	20925	3.274	2.948	1.180
<input type="checkbox"/>	8	ANESTHESIOLOGY	0003-3022	21603	5.486	5.264	1.175

- To view aggregated data for the selected category/categories:

1) Select one or more categories from the list.
[\(How to select more than one\)](#)

AGRICULTURE, DAIRY & ANIMAL SCIENCE
 AGRICULTURE, MULTIDISCIPLINARY
 AGRONOMY
 ALLERGY
 ANATOMY & MORPHOLOGY
 ANDROLOGY
 ANESTHESIOLOGY
 ASTRONOMY & ASTROPHYSICS
 AUTOMATION & CONTROL SYSTEMS

2) Select to view Journal data or aggregate Category data.

View Journal Data - sort by: Journal Title

View Category Data - sort by: Median Impact Factor

- Click in the *View Category Data* radio button
- Choose a sort option from the drop-down box
- Click on the *Submit* button
- The Subject Category Summary List can be re-sorted using the *Sort Again* button and the drop-down list.

- To return to the welcome screen, click on the *Welcome* button.

Searching by individual journal title

1. In the Welcome screen, click in the *Search for a specific journal* radio button.

Note the 2 Editions: Science OR Social Sciences.

A journal such as Health Psychology is listed in the Psychology category in the JCR Science Edition and in the Psychology, Clinical category of the JCR Social Sciences edition. In the Science edition the journal is ranked 9th out of 73 journals for impact factor. In the Social Sciences edition it is 8th out of 104 journals

Select a JCR edition and year:	Select an option:
<input checked="" type="radio"/> JCR Science Edition 2010 <input type="button" value="v"/> <input type="radio"/> JCR Social Sciences Edition 2010 <input type="button" value="v"/>	<input type="radio"/> View a group of journals by Subject Category <input type="button" value="v"/> <input checked="" type="radio"/> Search for a specific journal <input type="radio"/> view all journals
<input type="button" value="SUBMIT"/>	

2. Click on the *Submit* button.
3. Choose a search option from *the Search by* drop-down box.
4. If searching by Full Journal Title (the default option):
 - a. *Either* type in the full title (or truncated title of the journal (see the examples below the search box));
 - b. *Or* click on the *list of full journal titles* link, then copy and paste the title from the list (this option means you are definitely searching for the exact title used in the JCR database)

1) Search by:	2) Type search term:
Full Journal Title <input type="button" value="v"/>	Enter words from journal title or ISSN (view list of full journal titles) health psychology <input type="button" value="SEARCH"/>
<p>Search Examples:</p> <p>Full Journal Title: Enter JOURNAL OF CELLULAR PHYSIOLOGY or JOURNAL OF CELL* (more examples)</p> <p>Abbreviated Journal Title: Enter J CELL PHYSIOL or J CELL * (more examples)</p> <p>Title Word: Enter CELLULAR or CELL* (more examples)</p> <p>ISSN: Enter 0021-9541 or other ISSN (more examples)</p>	

5. You can also search by abbreviated title, title word, or ISSN (see the examples below the search box).
6. Click on the *Search* button.
7. If you have searched for the full journal title, the resulting Journal Summary List should only display the information, including the impact factor, for a single journal.

Mark	Rank	Abbreviated Journal Title <i>(linked to journal information)</i>	ISSN	JCR Data <input type="button" value="i"/>			
				Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index
<input type="checkbox"/>	1	HEALTH PSYCHOL	0278-6133	7148	3.982	4.612	0.541

8. To see more information about this journal click the journal name.

Journal Summary List							
Journals from: search Full Journal Title for 'HEALTH PSYCHOLOGY'							
Sorted by: Journal Title [SORT AGAIN]							
Journals 1 - 1 (of 1)				Ranking is based on your journal and sort selections.			
Mark	Rank	Abbreviated Journal Title (linked to journal information)	ISSN	JCR Data ⁱ			
				Total Cites	Impact Factor	5-Year Impact Factor	Immediacy Index
<input type="checkbox"/>	1	HEALTH PSYCHOL	0278-6133	7148	3.982	4.612	0.541

9. To see where the journal fits in the list of journals in the subject category click *View Journal Summary List*. The default results list is ordered alphabetically by journal title. The Journal Summary List can be re-sorted using the *Sort Again* button and the drop-down list, eg sort by impact factor.

Mark	Journal Title	ISSN	Total Cites	Impact Factor	5-Year Impact Factor
<input type="checkbox"/>	HEALTH PSYCHOL	0278-6133	7148	3.982	4.612

[Cited Journal](#) [Citing Journal](#) [Source Data](#) [Journal Self Cites](#)
[CITED JOURNAL DATA](#) [CITING JOURNAL DATA](#) [IMPACT FACTOR TREND](#) [RELATED JOURNALS](#)

Journal Information
 Full Journal Title: HEALTH PSYCHOLOGY
 ISO Abbrev. Title: Health Psychol.
 JCR Abbrev. Title: HEALTH PSYCHOL
 ISSN: 0278-6133
 Issues/Year: 6
 Language: ENGLISH
 Journal Country/Territory: UNITED STATES
 Publisher: AMER PSYCHOLOGICAL ASSOC
 Publisher Address: 750 FIRST ST NE, WASHINGTON, DC 20002-4242
 Subject Categories: PSYCHOLOGY
[SCOPE NOTE](#) [VIEW JOURNAL SUMMARY LIST](#) [VIEW CATEGORY DATA](#)
 Journal Rank in Categories: [JOURNAL RANKING](#)

10. To see data for the subject Category eg the median impact factor and if Health Psychology has a higher impact factor click the *View Category Data* button.

Scopus Journal Analyzer

JCR does not cover every journal eg the New Zealand Medical Journal is not included. Scopus uses the **SCImago Journal Rank** (SJR). This measure covers a wider range of journals than JCR, and weighs the prestige of the journal in which the citations appear.

Scopus also has a **Source-Normalized Impact per Paper** (SNIP) which 'measures contextual citation impact by weighting citations based on the total number of citations in a subject field.'
<http://info.scopus.com/journalmetrics/snip.html>

Use the *Analytics* link in Scopus to view data. For information about the calculations and for rankings see: Reality is more than just a number <http://info.scopus.com/journalmetrics/search2.php>

Finding Impact Factors using an Internet search engine

Searching the Internet with a search engine such as Google will often find the Impact Factor of a journal, often on the home page of the journal (eg, search for the journal name and "impact factor"). However:

- Journals are not obliged to advertise their Impact Factor.

- The Impact Factor found for a journal may not be the latest:
 - If it is from a web site other than the journal home page.
 - If the journal has not updated the information on its home page.

Information Sheets:

- *Journal Impact Factors:*
<http://www.library.auckland.ac.nz/docs/helpsheets/journalimpactfactors.pdf>
- *Measuring and evaluating science research.*
<http://www.library.auckland.ac.nz/docs/helpsheets/Bibliometrics.pdf>

Journal impact factor & citation databases available through the library:

Journal Citation Reports (JCR); Web of Science; Scopus; Google Scholar

Journal Impact Factor & Citation Websites:

- Measuring your Research Impact <http://www.ndlr.ie/myri/>
- [Citation Impact Center](http://science.thomsonreuters.com/citationimpactcenter/) from Thomson Reuters. Blog and comments, including the H index
<http://science.thomsonreuters.com/citationimpactcenter/>
- eigenfactor.org uses the same citation data as Journal Citation Reports.
- [Harzing.com](http://harzing.com) for Publish or Perish software and white papers on citation analysis, the h-index and the g-index
- [SCImago Journal & Country Rank](http://www.scimagojr.com/) uses citation data from Scopus. Includes an SJR for journal titles not in the JCR eg NZMJ.
<http://www.scimagojr.com/>
- [Article-level metrics](http://article-level-metrics.plos.org/) from PLoS 'articles should be considered on their own merits, and ... the impact of an individual article should not be determined by the journal in which it happened to be published'
<http://article-level-metrics.plos.org/>
- [Journal Evaluation Tool](http://www.uow.edu.au/health/chi/jet/index.html) for nursing and midwifery journals.
<http://www.uow.edu.au/health/chi/jet/index.html>
- [F1000 – Faculty of 1000](http://f1000.com/) has post-publication peer review of articles. Most of the rankings pages require a subscription.
<http://f1000.com/>