

**KAMJE & Google Scholar:
Collaborating to Increase the
Visibility of Korean Medical Content**

Darcy Dapra
(Google Scholar)

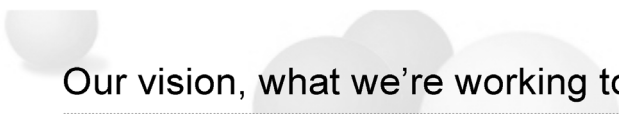


KAMJE and Google Scholar:
Collaborating to Increase the Visibility of
Korean Medical Content

*Korean Association of Medical Journal Editors
Symposium and Workshop
July 17, 2012*



<http://scholar.google.co.kr>
<http://scholar.google.com>



Our vision, what we're working towards

- A single place to find scholarly literature and its authors
 - All areas, all languages, all time
- A resource that is available to all users everywhere
 - Find all relevant research no matter where you live
- The ability to provide worldwide visibility to ALL research
 - People should be able to find research done anywhere
- Indexing of full scholarly articles, not just abstracts
 - Much of the magic of Science lies in serendipity
- Content that is discoverable for free!
 - Solving problems should not be tied to one's ability to pay

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Google



Content coverage

- Scholarly articles from ALL major and mid-size publishers/societies, and most smaller publishers and journals
 - Elsevier, Springer, Wiley, *Science* (AAAS), Nature Publishing Group, Oxford University Press, Cambridge University Press...
 - KSI, DBPIA, Synapse
- Abstract collections
 - PubMed, INIST, ADS, AGRIS, WHO, AGRICOLA, Science-East, KoreaMed, CHERIC, MathNet Korea, and many others
- Research articles anywhere on the web
- Institutional repositories around the world
- Scholarly books and monographs from Google Books
- US/CAN/EU/WO patents
- United States Federal and state case law

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Google

Languages

- All major languages with scholarly content
 - Latin and Cyrillic languages
 - Korean, Japanese
 - Simplified/Traditional Chinese
- All regions with a significant number of articles
 - U.S., China, UK, Brazil, Germany, France, Japan, South Korea, Australia, India, Italy, Spain, Canada, Turkey, Mexico, Netherlands, Latin America, Scandinavia, South Africa...
- Automated indexing of all languages
 - Citation extraction
 - Similar articles
 - Rank like researchers do

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Google

KAMJE's Synapse Platform

The Synapse platform interface displays search results for various medical journals. The top section shows a search bar and navigation links. Below, a list of journals is shown, including 'Electrolyte & Blood Pressure', 'Electrolytes & Blood Pressure', 'Endocrinology and Metabolism', and 'Environmental Health and Toxicology'. A callout box highlights the platform's features:

- In 2007, KAMJE opened its members' journal content to Google for full-text indexing
- KAMJE built an indexable browse using HTTP GET links
- KAMJE worked with Google to embed machine-readable bibliographic metadata into its article pages

A bar chart shows the traffic from Google, with a significant increase over time. A callout box states: 'The Synapse platform now receives a significant amount of its traffic from Google'. Another callout box says: 'Synapse indexing works very well, and coverage of its journals is GREAT!'.

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Google

The image displays three examples of web pages from the Journal of Korean Medical Science, demonstrating how their unique URLs are captured for indexing. Each page features the Synapse logo and navigation links.

- Page 1 (Top):** Journal of Korean Medical Science. URL: `synapse.koreamed.org/search.php?where=jvolume&id=63&code=0063JKMS`. Page type: Issue Table of Contents Page.
- Page 2 (Middle):** Journal of Korean Medical Science. URL: `synapse.koreamed.org/search.php?where=asummary&id=2049&code=0063JKMS`. Page type: Article Page.
- Page 3 (Bottom):** Journal of Korean Medical Science. URL: `synapse.koreamed.org/search.php?where=aview&id=10.33462Fjkms.2011.26.1.1&code=0063JKMS&vmode=AR`. Page type: Article Page.

Every page that leads to the article, has a unique URL, in basic GET HTML, that is easily understood by robots!

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[synapse.koreamed.org/search.php?where=view&id=10.33464%2Fj.kms.2011.26.1.16&code=00633KMS&vcode=0R](#)

Journal of Korean Medical Science

www.jkms.org

About the Journal | Information for Contributors | eSubmission

About Synapse

Overview

Help

Preprint

Journal List > J Korean Med Sci > v.26(1); Jan 2011



[AboutKJ](#)
[AboutJST](#)
[Full Text](#)
[HTML](#)
[PDF](#)
[Links](#)
[KJHTML](#)
[Journal web](#)
[Facebook](#)
[Twitter](#)
[Support Citation](#)

```

<meta name="citation_journal_title" content="Journal of Korean Medicine"/>
<meta name="citation_title" content="Prevalence of the Major Mental Disorders among the Korean Elderly"/>
<meta name="citation_author" content="Cho, Maeng Je"/>
<meta name="citation_author_institution" content="Department of Psychiatry & Behavioral Science, Seoul National University College of Medicine, Seoul, Korea"/>
<meta name="citation_author_institution" content="Department of Neuropsychiatry, Seoul National University Hospital, Seoul, Korea"/>
<meta name="citation_author_email" content="jecho@snu.ac.kr"/>
<meta name="citation_author" content="Lee, Jun Young"/>
<meta name="citation_author_institution" content="Department of Psychiatry & Behavioral Science, Seoul National University College of Medicine, Seoul, Korea"/>
<meta name="citation_author_institution" content="Department of Psychiatry, Seoul Metropolitan Borame Medical Center, Seoul, Korea"/>
<meta name="citation_author" content="Kim, Byung-soo"/>
<meta name="citation_author_institution" content="Department of Neuropsychiatry, Seoul National University Hospital, Seoul, Korea"/>
<meta name="citation_author" content="Lee, Hae Moo"/>
<meta name="citation_author_institution" content="Department of Neuropsychiatry, Seoul National University Hospital, Seoul, Korea"/>
<meta name="citation_author" content="Bohn, Jee Moon"/>
<meta name="citation_author_institution" content="Department of Neuropsychiatry, Seoul National University Hospital, Seoul, Korea"/>
<meta name="citation_date" content="2011/03/01"/>
<meta name="citation_volume" content="26"/>
<meta name="citation_issue" content="1"/>
<meta name="citation_firstpage" content="1-7"/>
<meta name="citation_lastpage" content="10"/>
<meta name="citation_doi" content="10.33464/jkms.2011.26.1.1"/>
<meta name="citation_isbn" content="1011-8934"/>
<meta name="citation_pdf_url" content="http://synapse.koreamed.org/Synapse/Data/PDFData/00633KMS/jkms-26-1.pdf"/>
<meta name="citation_language" content="English"/>
<meta name="citation_keywords" content="Aged; Mental health; Psychiatric Epidemiology; dementia; depressive disorder; Korea"/>
<meta name="citation_reference" content="citation_title=dementia among the elderly in a rural Korean community; citation_author=J Park; citation_author=H Jo; citation=H Park; citation_author=J Jung; citation_journal_title=J Psychiatry; citation_volume=16; citation_number=2; citation_page=794-807"/>

```

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[This paper has been cited by 2 articles in](#)



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Notable enhancements to KAMJE metadata

For the Synapse platform, KAMJE recently added metatags of machine readable metadata for

• Author affiliations

Provide another signal to our indexing systems when users have partial queries (which they do often!)

• Article References

Help Scholar indexing systems to understand article references better, which can help in ranking

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Google

Visibility for Korean research: Removing the barriers

Korean editors and authors are publishing highly valuable, impactful articles, but some sources are not available to Google for indexing

과학기술학회마을
국내 학술정보의 질과 양이
국내 과학기술 학계의 보금자리

society.kisti.re.kr/robots.txt

User-Agent: *
Disallow: /

This block precludes articles from being indexed in Google and Google Scholar, so people cannot find them there.



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Google

More barriers: Korea Science article structure

The Korea Science robots.txt file says "Allow" to search services, but...

The screenshot shows the 'JOURNAL BROWSE' page. A search bar at the top contains the text: `<th scope="row">Analytical Science and Technology`. Two callout boxes highlight issues:

- 1. Javascript in links cannot be executed by our crawler, which often stops them from indexing articles** (pointing to the `javascript:` link).
- 2. POST in links results in non-unique URLs, so one URL may look exactly the same as another to our crawler** (pointing to the `JournalBrowseForm` parameter in the href).

The page also displays a table of journals with columns for journal name, ISSN, publisher, year, volume, language, and checkmarks.

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Google

More barriers: Korea Science article structure (cont'd)

The screenshot shows an article page titled 'Kinetic and Mechanism of the Addition of Benzylamines to α -Phenyl- β -thiophenylacrylonitriles in Acetonitrile'. A callout box points to a PDF icon with the text: 'PDF links go to another site, <http://koix.kisti.re.kr> (not Korea Science), and there, Google is blocked from crawling and indexing articles.'

Below the article content, a browser window shows the `koix.kisti.re.kr/robots.txt` file with the following content:

```
User-agent: * Disallow: /
```

Another callout box states: 'Also, because the main site is different than the article hosting location, machine readable metadata, if put in place, will not work well.'

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Google

Korea Science: Summary of current barriers to indexing

In Korea Science and other sites, there are hidden problems that keep us from indexing...

정지

Most "browse" links on the site contain Javascript POSTback links (no discrete identifier for each page), which our crawler cannot navigate – for two different journals, they share the same URL

정지

Full-text PDF links on the abstract pages go to <http://koix.kisti.re.kr>, and this site blocks our crawler:

User-agent: * Disallow: /

정지

Because the article PDFs are on a different site (and not koreascience.co.kr), article-level metatags will not work well to help with indexing, as they usually do.

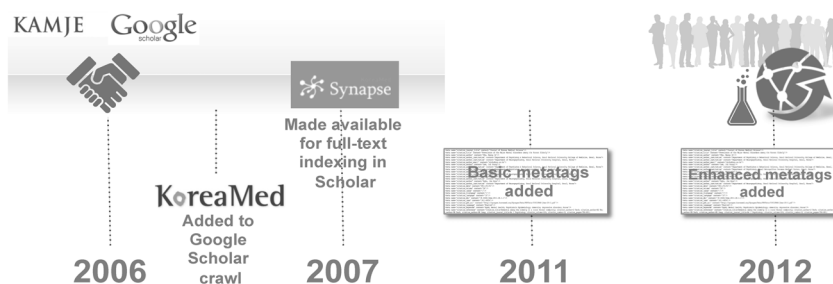


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Google

KAMJE's work with Scholar since 2006

Timeline for major milestones in the KAMJE and Google Scholar Cooperation:



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Google

Google™

Google Scholar Citations



My Citations Metrics Alerts Settings

Google
scholar

☒ Articles (☒ include patents) ☐ Legal documents

Stand on the shoulders of giants

New! Sort by date for legal search

Google Scholar Citations: An overview

- Google Scholar Citations provides an easy way for authors to keep track of citations to their scholarly articles and books
- Authors can check who is citing their publications, graph citations over time and compute several citation metrics
- Authors can also create an automatically maintained public profile that lists all of their articles
- A Citations profile can appear in Google Scholar results when someone searches for his or her name



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Google

Citations profile page



Sunghyun Choi
Seoul National University
Wireless Networking - WLAN
Verified email at snu.ac.kr
Homepage

Google scholar

Search Authors

My Citations - Help

Follow this author

Follow new articles
Follow new citations

Co-authors

Sung-Ju Lee
View all co-authors




Google

Citations profile search results

Google scholar [Advanced Scholar Search](#)

Scholar

1 **User profiles for Sunghyun Choi**

 **Sunghyun Choi**
Seoul National University
Verified email at snu.ac.kr
Cited by 6373

[PDF] [IEEE 802.11 e Wireless LAN for Quality of Service](#)
S Mangold, S Choi, P May, O Klein... - Proc. European ..., 2002 - ing.unipi.it
ABSTRACT In this paper, a comprehensive overview of the new features of an upcoming new standard IEEE 802.11 e to support Quality of Service (QoS) in Wireless Local Area Networks (WLANs) is presented. We address Medium Access Control (MAC) ...
Cited by 599 - Related articles - View as HTML - All 34 versions

[PDF] from unipi.it

2 **Goodput analysis and link adaptation for IEEE 802.11 a wireless LANs**

D Qiao, S Choi... - Mobile Computing, IEEE ..., 2002 - ieeexplore.ieee.org
Abstract Link adaptation to dynamically select the data transmission rate at a given time has been recognized as an effective way to improve the goodput performance of the IEEE 802.11 wireless local-area networks (WLANs). Recently, with the introduction of the new ...
Cited by 467 - Related articles - BL Direct - All 15 versions

[PDF] from liu.edu
e-Link @ Columbia

IEEE 802.11 e contention-based channel access (EDCF) performance evaluation

S Choi, J Del Prado... - ..., 2003. ICC'03. IEEE ..., 2003 - ieeexplore.ieee.org
Abstract IEEE 802.11 e medium access control (MAC) is an emerging supplement to the IEEE 802.11 wireless local area network (WLAN) standard to support quality-of-service (QoS). The 802.11 e MAC is based on both centrally-controlled and contention-based ...
Cited by 337 - Related articles - e-Link @ Columbia - BL Direct - All 7 versions

[PDF] from colorado.edu
e-Link @ Columbia

Analysis of IEEE 802.11 e for QoS support in wireless LANs

S Mangold, S Choi, GR Hiertz... - Wireless ..., 2003 - ieeexplore.ieee.org
Abstract The IEEE 802.11 e medium access control protocol is an emerging standard for wireless local area networks providing quality of service. An overview of this standard based on the current draft is presented on this article. We analyze the enhancements in 802.11 ...
Cited by 347 - Related articles - BL Direct - All 26 versions


[PDF] from psu.edu


19 **Link adaptation strategy for IEEE 802.11 WLAN via received signal strength measurement**
... S Choi - ..., ICC'03. IEEE International Conference on, 2003 - ieeexplore.ieee.org


Search of author profiles in Citations


Google scholar My Citations


Authors 1-10 Next >


 **Graham Colditz, MD, DrPH**
Professor, Dept. of Surgery, Washington University
School of Medicine, St. Louis
Verified email at wudosis.wustl.edu
Cited by 153032

 **Donald B Rubin**
John L. Loeb Professor of Statistics, Harvard University
Verified email at stat.harvard.edu
Cited by 100721

 **robert tibshirani**
Professor of Health Research and Policy, Statistics, Stanford University
Verified email at stanford.edu
Cited by 108126

 **Michael C. Jensen**
Jesse Isidor Straus Professor of Business, Harvard Business School
Verified email at hbs.edu
Cited by 94327

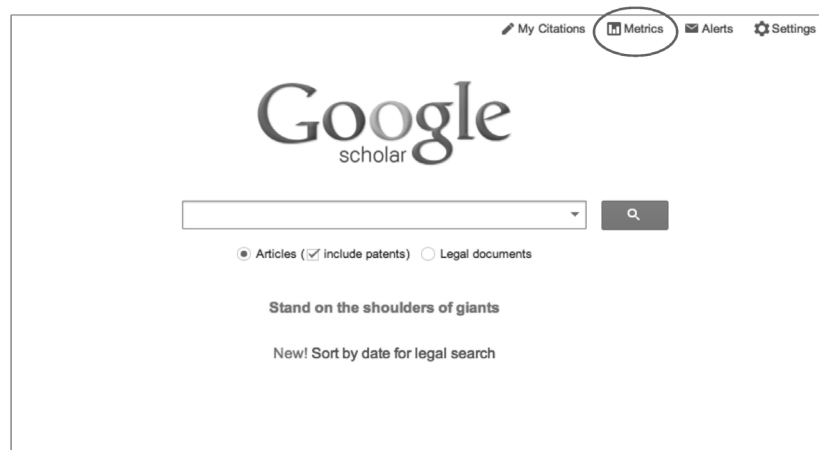
 **James Heckman**
Professor of Economics, University of Chicago
Verified email at uchicago.edu
Cited by 79344

 **Anil K. Jain**
Michigan State University
Verified email at cse.msu.edu
Cited by 78845

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Google™

Google Scholar Metrics



Google Scholar Metrics: An overview

- Google Scholar Metrics provides an easy way for authors to quickly gauge the visibility and influence of recent articles in scholarly publications
- Authors can browse the top 100 publications in several languages, ordered by their five-year h-index and h-median metrics
- Authors can also search for publications by their titles and then compare the publications that are of interest
- Authors can lastly see articles in a publication that were cited the most and who cited them

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Google

Top publications lists

Google Scholar Metrics			
Top publications		Learn more	
Language	Title	h5-index	h5-median
English	1. Nature	295	427
Chinese	2. New England Journal of Medicine	274	450
Portuguese	3. Science	265	388
German	4. arXiv	259	355
Spanish	5. The Lancet	256	367
French	6. Social Science Research Network	205	290
Italian	7. Cell	195	279
Japanese	8. Proceedings of the National Academy of Sciences	189	237
Dutch	9. Nature Genetics	174	268
Korean	10. Journal of Clinical Oncology	173	229
	11. JAMA: The Journal of the American Medical Association	171	246
	12. Physical Review Letters	162	213
	13. Circulation	159	251
	14. Chemical reviews	144	248
	15. Blood	141	192
	16. The Astrophysical Journal	140	181
	17. Journal of the American College of Cardiology	139	192
	18. Journal of the American Chemical Society	138	174
	19. Nucleic Acids Research	135	239
	20. Angewandte Chemie International Edition	133	190
	21. Nature Reviews Molecular Cell Biology	128	219
	22. Nature Medicine	127	191
	23. Nano Letters	127	177
	24. The Journal of Clinical Investigation	125	179
	25. Nature Reviews Cancer	123	199
	26. Nature Immunology	120	191
	27. Cancer Research	120	165
	28. Physical Review D	119	152
	29. Chemical Society reviews	117	174

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Google

Search in Metrics

Google Scholar Metrics

Journal of Korean Medical Science

h5-median: 28

Language	Title / Author	Cited by Year
English	One-year Outcome Evaluation after Interspinous Implantation for Degenerative Spinal Stenosis with Segmental Instability	67 2007
Chinese	Cancer Statistics in Korea: Incidence, Mortality and Survival in 2008-2007	61 2010
Portuguese	Cancer Statistics in Korea: Incidence, Mortality and Survival in 2005	47 2009
German	Diagnostic Value of Galectin-3, HBME-1, Cytokeratin 19, High Molecular Weight Cytokeratin, Cyclin D1 and p27kip1 in the Differential	43 2007
Spanish	Immunohistochemical Analysis of Non-Small Cell Lung Cancer: Correlation with Clinical Parameters and Prognosis	43 2007
French	Population-based Breast Cancer Statistics in Korea during 1989-2002: Incidence, Mortality, and Survival	42 2007
Italian	Cancer Survival in Korea 1989-2002: A Population-Based Study	42 2007
Japanese	Relationship of Serum Adiponectin and Resistin Levels with Breast Cancer Risk	34 2007
Dutch	Changes of Terminal Cancer Patients' Health-related Quality of Life after High Dose Vitamin C Administration	30 2007
Korean	Abnormal Integrity of Corticocortical Tracts in Mild Cognitive Impairment: A Diffusion Tensor Imaging Study	28 2008
	Increased sFlt-1 to PlGF Ratio in Women Who Subsequently Develop Preeclampsia	28 2007
	Transforming Growth Factor β 1 Induces Epithelial-to-Mesenchymal Transition of A549 Cells	27 2007
	Drug Resistance Rates of Mycobacterium tuberculosis at a Private Referral Center in Korea	27 2007
	Postoperative Changes in Paraspinal Muscle Volume: Comparison between Paramedian Interfacial and Midline Approaches for Lumbar Fusion	23 2007

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Thank you! 감사합니다.

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Biography

Darcy Daprais is a Partner Manager for Google Scholar, responsible for external relations with the scholarly publishing and library communities. Prior to her current post with Google and her now ten-year stint in the scholarly publishing arena, in roles both at the University of California Press and Stanford University's HighWire Press, Darcy traveled to Korea on a Fulbright grant in 1999, teaching English and American culture, and subsequently completed a Master's degree in Art History, at the University of California, Davis. In her free time, Darcy enjoys spending time with her family, reading as many online news articles as humanly possible, and experimenting in the kitchen.