

# GIS Literature Search Tips

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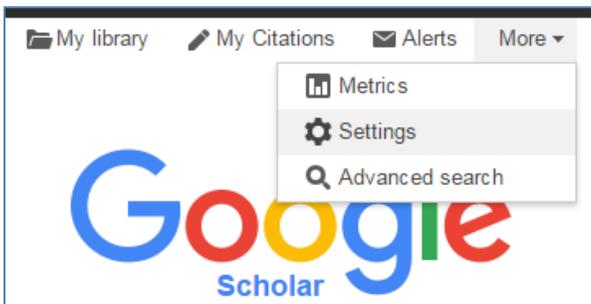
## Introduction

This exercise provides an overview of using Google Scholar to search for peer-reviewed GIS literature for a variety of applications. In order to begin thinking about a potential project, it is important to review existing literature in order to understand how GIS has been applied to your field of research. Peer-reviewed publications provide methods and techniques used, and often provide insight to potential data sources.

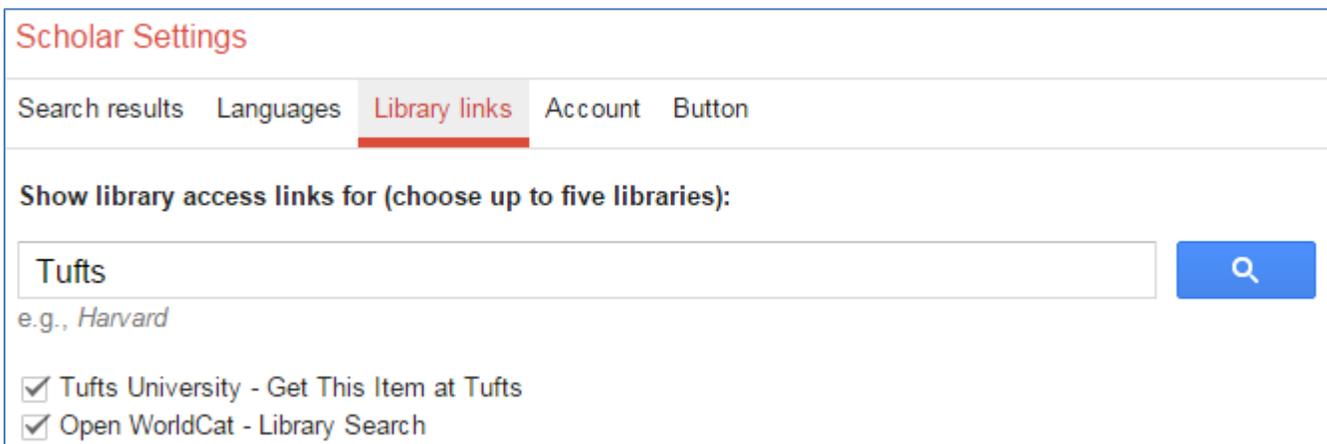
## Setting up Google Scholar

Google Scholar is a freely accessible web search engine that indexes the full text or metadata of scholarly literature across an array of publishing formats and disciplines. In order to set it up for this exercise:

1. Go to [Google Scholar \(https://scholar.google.com/\)](https://scholar.google.com/) and select settings



2. Click on Library links tab, type Tufts into search bar, check it when it appears in the list below, select save.



## Literature Search Tips

- Now use Google Scholar for an initial search pass.
- Use search terms for topics in which you are interested (e.g., climate change, renewable energy, school transportation, natural disasters, etc.) and add GIS-related terms such as GIS (there will be confusion with GIs, soldiers in US army), “geographic information”, geospatial, spatial, geographic, etc. Also, to find articles that are reviews, add review, meta-analysis, and lessons. Feel free to also set the time period as needed (ex. 2005 or later).
- Additional geospatial analysis terms:
  - Suitability
  - Siting
  - Site suitability
  - Pattern
  - Cluster
  - Density
  - Vulnerability
  - Proximity
  - Prioritize
  - Accessibility or access
  - Built environment
- Additional geographic region search terms:
  - Global
  - Continental (ex. Africa)
  - National (ex. Kenya)
- Make sure that you are using peer-reviewed articles that have been cited and referenced.
  - When evaluating articles review methods, limitations, references, citations, contact information.
- You can choose a custom year range
- Once you’ve found something, then click on “Get this item at Tufts”. This goes to the Tufts Library database.

The screenshot shows a Google Scholar search interface. The search bar contains "GIS social inequality" and shows "About 15,300 results (0.06 sec)". On the left sidebar, the "Custom range..." filter is set to "2008" to "2013". A red arrow points to this filter. The main results list includes several articles. A second red arrow points to the "Get This Item at Tufts" link for the article titled "The use of GIS and indicators to monitor intra-urban inequalities. A case study in Rosario, Argentina".

## Two examples of searches using a combination of geospatial analysis terms.

Google scholar   [Advanced Scholar Search](#)

Scholar

[HTML] [A case study in the misuse of GIS. Siting a low-level radioactive waste disposal facility in New York State](#) [HTML] from maine.edu  
 M Monmonier - Proceedings of Conference on Law and ..., 1994 - spatial.maine.edu  
 ... Unfortunately, the Nuclear Regulatory Commission (NRC), which advocated GIS in a ten-page pamphlet on LLRW siting, offered no guidance on spatial resolution or data quality (US Nuclear Regulatory Commission 1988, 7-8). In advertising for a contractor to carry out data ...  
[Cited by 12](#) - [Related articles](#) - [Cached](#) - [All 3 versions](#)

[Democratic input into the nuclear waste disposal problem: The influence of geographical data on decision making examined through a Web-based GIS](#) [PDF] from psu.edu  
[Get This Item at Tufts](#)  
 AJ Evans, R Kingston... - Journal of geographical systems, 2004 - Springer  
 ... and raw data; • a sequence of increasingly complex questions and tasks concerning radioactive waste management and the siting of storage ... In particular, users work through a GIS system that allows them to input where they believe a national nuclear waste repository ...  
[Cited by 21](#) - [Related articles](#) - [BL Direct](#) - [All 7 versions](#)

[Can we learn from failure? Examining US experiences with nuclear repository siting](#) [PDF] from escholarship.org  
[Get This Item at Tufts](#)  
 WR Freudenburg - Journal of Risk Research, 2004 - Taylor & Francis  
 ... TOP-DOWN SITING APPROACH Like essentially all nuclear waste siting efforts in the USA to date, the New York Siting Commission had ... of the effort to identify a site, particularly in light of the relatively limited capacities of the Geographic Information System (GIS) available at ...  
[Cited by 27](#) - [Related articles](#) - [BL Direct](#) - [All 7 versions](#)

[Developing and Testing an Online Tool for Teaching GIS Concepts Applied to Spatial Decision-making](#) [Get This Item at Tufts](#)  
 S Carver, A Evans... - Journal of Geography in Higher ..., 2004 - Taylor & Francis  
 ... The development and testing of a Web-based GIS e-learning resource is described. This focuses on the application of GIS for siting a nuclear waste disposal facility and the associated principles of spatial decision-making using Boolean and weighted overlay methods. ...  
[Cited by 23](#) - [Related articles](#) - [All 6 versions](#)

[Resolving the siting impasse: modeling social and environmental locational criteria with a geographic information system](#) [Get This Item at Tufts](#)  
 DJ Lober - Journal of the American Planning Association, 1995 - Taylor & Francis  
 ... For example, in siting a nuclear power plant, access to cooling water may be very important, and the slope of the land less so. ... Dueker 1987; Harris 1989; Levine and Lan-dis 1989; Tomlin 1990; Congalton and Green 1992; Green 1992).7 With regard to siting, a GIS can be ...  
[Cited by 41](#) - [Related articles](#) - [BL Direct](#) - [All 2 versions](#)

### Example 1: "nuclear siting GIS"

Google scholar   [Advanced Scholar Search](#)

Scholar

[A GIS-based framework for the evaluation of building façade performance and maintenance prioritization](#) [PDF] from nrc-cnrc.gc.ca  
 B Kyle, MA Lacasse... - ... on the Durability ..., 2010 - nparc.cisti-icist.nrc-cnrc.gc.ca  
 ... The net result provides for location specific designs and selections of façade materials and insulation that result in reduced energy consumption and ... T 72 A GIS-Based Framework for the Evaluation of Building Façade Performance and Maintenance Prioritization; Brian Kyle ...  
[Cited by 6](#) - [Related articles](#) - [All 3 versions](#)

[Using GIS-based distributed soil loss modeling and morphometric analysis to prioritize watershed for soil conservation in Bago river basin of Lower Myanmar](#) [Get This Item at Tufts](#)  
 KT Hlaing, S Haruyama... - Frontiers of Earth Science in China, 2008 - Springer  
 ... Morgan (1995) noted that when sufficient energy is no longer available to transport the particles, deposition ... complex or unattainable, it is relatively easy to understand, and it is compatible with GIS. ... The objective of our study is to prioritize sub-watersheds of the study area based ...  
[Cited by 2](#) - [Related articles](#) - [All 4 versions](#)

[PDF] [Integrated Community Energy Modelling: developing map-based models to support energy and emissions planning in Canadian communities](#) [PDF] from strait-highlands.ns.ca  
 J Webster, B Korteling, B Gilmour, K Margem... - strait-highlands.ns.ca  
 ... ICEMs) employ Geographical Information Systems (GIS) to integrate spatial information on a community's land use, building stock, transportation and energy systems and socio-economic characteristics. Using future scenarios, ICEMs support the prioritization of opportunities for ...  
[Related articles](#) - [View as HTML](#) - [All 2 versions](#)

[An Heuristic Approach to Renewable Energy Optimization](#)  
 A Walker - 2009 - link.aip.org  
 This paper describes a heuristic approach to identify and prioritize renewable energy ... The method rests upon the National Renewable Energy Laboratory's (NREL) capabilities in ... cost and performance of technologies; geographic information systems (GIS) resource assessment ...  
[Look for This at Tufts](#)

[CITATION] [EMAP GIS](#)  
 DM Shaw - ... of the twelfth annual ESRI User ..., 1992 - Environmental Systems Research ...

[PDF] [PROPOSAL FOR A NETWORK ASSET MANAGEMENT SYSTEM THROUGH THE INTEGRATION OF AN ASSET MANAGEMENT DATABASE AND EMERGING ...](#) [PDF] from iie.org.mx  
 ..., H Suzuki, GE Energy - b-dig.iie.org.mx  
 ... is a new surge of interest towards increasing the proportion of renewable energy supplies to ... This combination between object-oriented GIS and the database, named the network asset ... very granular analysis of asset performance and a flexible mechanism to prioritize work and ...  
[Related articles](#) - [View as HTML](#)

[Soil erosion modeling using MMF model-A remote sensing and GIS perspective](#) [Get This Item at Tufts](#)  
 P Behera, KHV Durga Rao... - Journal of the Indian Society of ..., 2005 - Springer

### Example 2: "prioritizing energy GIS"

# Sometimes it is helpful to add the term “review” to find published literature reviews (bibliographies) on a specific topic.

**Google Scholar** About 13,600 results (0.03 sec)

Articles

Legal documents

Any time

Since 2013

Since 2012

Since 2009

Custom range...

2008 — 2013

Search

Sort by relevance

Sort by date

include patents

include citations

Create alert

[\[PDF\] Social vulnerability to climate variability hazards: a review of the literature](#)  
 SL Cutter, CT Emrich, JJ Webb... - Final Report to Oxfam ... 2009 - adapt.oxfamamerica.org  
 ... "A strategic approach to climate change impacts and adaptation." Applied GIS 2(3) ... pastoralism under climate change: Applying a generalized framework for vulnerability studies to a sub-arctic social-ecological system ... Institutional Pathways to Equity: Addressing Inequality Traps ...  
 Cited by 29 Related articles Cite More

[\[PDF\] from oxfamamerica.org](#)

[Assessing health system performance in developing countries: a review of the literature](#)  
 ME Kruk, LP Freedman - Health Policy, 2008 - Elsevier  
 ... GIS is a promising approach to pinpointing areas where geographic barriers to access are highest ... Achieving the MDGs: health systems as core social institutions. ... DA Leon, G Walt (Eds.), Poverty, inequality and health: an international perspective, Oxford University Press, Oxford ...  
 Cited by 60 Related articles All 10 versions Cite

[\[PDF\] from ppmrn.net](#)  
[Get This Item at Tufts](#)

[The role of GIS for health utilization studies: literature review](#)  
 G Higgs - Health Services and Outcomes Research Methodology, 2009 - Springer  
 ... of geo-analytical techniques with which to study individual (point) level data based around GIS means that ... the need for inter-disciplinary research efforts to assess the respective roles for social and environmental ... (2004), for example, found that areal inequalities in admission ...  
 Cited by 20 Related articles All 5 versions Cite

[\[PDF\] from ppmrn.net](#)  
[Get This Item at Tufts](#)

[Geographic information systems \(GIS\) for health promotion and public health: a review](#)  
 CJ Nykforuk, LM Flaman - Health Promotion Practice, 2011 - hpp.sagepub.com  
 ... transmission can play a critical role in the geography of human rights and social inequalities ... risk information to population distribution, environmental data, and basic health and social infrastructure and (b ... the Internet and advise on ways to avoid pitfalls with this GIS application. ...  
 Cited by 23 Related articles All 3 versions Cite

[\[PDF\] from ppmrn.net](#)  
[Get This Item at Tufts](#)

[The impact of Fair Trade on social and economic development: a review of the literature](#)  
 A Le Mare - Geography Compass, 2008 - Wiley Online Library  
 ... For example, one of the earliest studies on the benefits of environmentally and socially focused trade, fairtrade organic coffee from ... There are continued calls for FTOs to be more proactive in tackling the social, cultural and economic basis of gender inequality (Hopkins 2000 ...  
 Cited by 35 Related articles Cite More

## Example 1: “GIS social inequality review”

**Google scholar** vulnerability gis humanitarian review Search Advanced Scholar Search

**Scholar** Articles and patents since 2005 include citations Create email alert

[\[PDF\] Social vulnerability to climate variability hazards: A review of the literature](#)  
 SL Cutter, CT Emrich... - Final report to Oxfam ... 2009 - adapt.oxfamamerica.org  
 ... National Research Council (NRC) (2007). Tools and Methods for Estimating Populations at Risk from Natural Disasters and Complex Humanitarian Crises. ... (2007). "An integrative GIS and remote sensing model for place-based urban vulnerability analysis". ...  
 Cited by 5 - Related articles - View as HTML

[\[PDF\] from oxfamamerica.org](#)

**[CITATION] GIS and emergency management**  
 CT Emrich, SL Cutter... - SAGE Handbook of GIS and Society, London, ..., 2011  
 Cited by 1 - Related articles - All 2 versions

[A natural-disaster management DSS for Humanitarian Non-Governmental Organisations](#)  
 J Tinguaro Rodriguez, B Vitoriano... - Knowledge-Based Systems, 2010 - Elsevier  
 ... as response to every possible natural disaster at any place; second, their sophistication and requirements usually exceed those available in NGOs and countries requiring humanitarian aid. ... [6]. In this way, GIS should allow a more precise vulnerability and possible ...  
 Cited by 6 - Related articles - All 4 versions

[\[PDF\] from ppmrn.net](#)  
[Get This Item at Tufts](#)

[Putting vulnerability to climate change on the map: a review of approaches, benefits, and risks](#)  
 BL Preston, EJ Yuen... - Sustainability Science, 2011 - Springer  
 ... For example, in a review of geospatial data and tools for disaster management, the National Research ... Despite evidence of the benefits of vulnerability mapping, there is also evidence that the power of ... "There is an implicit, sometimes explicit, assumption that using GIS at this ...  
 Related articles - All 5 versions

[\[PDF\] from ppmrn.net](#)  
[Get This Item at Tufts](#)

[GIS-based method for the environmental vulnerability assessment to volcanic ashfall at Etna Volcano](#)  
 S Rapicetta... - Geoinformatica, 2009 - Springer  
 ... 5. Birkmann J (editor) (2006) Measuring Vulnerability to Natural Hazards—Towards Disaster Resilient Societies. ... (2000) Young Author GIS Prize, Federazione ... in volcanology, at the "La Sapienza" University of Rome, where also he obtained a master on Humanitarian Aids in ...  
 Related articles - All 4 versions

[\[PDF\] Participatory Mapping and Participatory GIS \(PGIS\) for CRA, Community DRR and Hazard Assessment](#)  
 MK McCall - Geneva: ProVention, 2008 - itc.nl  
 ... They review a number of standard DRR methodologies including PRA; Vulnerability & Capacity assessment, and CRA, but do make much use of geospatial tools like PGIS. ... (Douglas-Bate 2003). Cf Applying GIS in a humanitarian crisis in Kosovo (Smith 2000). ...  
 Cited by 3 - Related articles - View as HTML - All 2 versions

[\[PDF\] from itc.nl](#)

## Example 2: “vulnerability GIS humanitarian review”

## Sometimes you will get results on GIs and will need to expand your search terms to “geographic information systems, geospatial, etc.”

Google scholar   [Advanced Scholar Search](#)

Scholar

[History and philosophy of geography: real wars, theory wars](#) [Get This Item at Tufts](#)  
 N Smith - *Progress in Human Geography*, 1992 - [phg.sagepub.com](#)  
 ... Neil Smith Department of Geography, Rutgers University, New Brunswick, NJ 08903, USA |  
 GIS uber Alles The war against Iraq in 1990-91 was the first full-scale GIS war. ... Openshaw and  
 the Iraq war notwithstanding, the GIS hoopla has cooled even as GIS  
[Cited by 132](#) - [Related articles](#) - [All 2 versions](#)

[CITATION] Female **GIs** Report Rapes in Iraq War  
 M Moffeit... - *Denver Post*, 2004  
[Cited by 4](#) - [Related articles](#) - [Look for This at Tufts](#)

[CITATION] For female **GIs** combat is a fact: Many duties in Iraq put women at risk despite restrictive policy  
 AS Tyson - *Washington Post*, 2005  
[Cited by 4](#) - [Related articles](#) - [Look for This at Tufts](#)

[Application of remote sensing and GIS to the study of land use/cover change and urbanization expansion in Basrah province, southern Iraq](#) [Get This Item at Tufts](#)  
 AS Hadeel, MT Jabbar... - *Geo-spatial Information Science*, 2009 - Springer  
 Abstract In recent years, land use/cover dynamic change has become a key subject that  
 needs to be dealt with in the study of global environmental change. In this paper, remote  
 sensing and geographic information systems (GIS) are integrated to monitor, map, and ...  
[Cited by 3](#) - [Related articles](#) - [All 6 versions](#)

Example 1: “Iraq gis” search returning articles on GIs.

Google scholar   [Advanced Scholar Search](#)

Scholar

Did you mean: [Iraq "geographical information systems"](#)

[The application of geographic information systems and global positioning systems in humanitarian emergencies: lessons learned, programme implications and future ...](#) [Get This Item at Tufts](#)  
 R Kaiser, PB Spiegel, AK Henderson... - *Disasters*, 2003 - [Wiley Online Library](#)  
 ... The last decades have seen the introduction of geographic information systems (GIS) in diverse  
 public health settings. ... Service (AIMS) (UNAMA, 2002) and the Humanitarian Information Centers  
 (HIC) established by OCHA in several countries surrounding Iraq (OCHA, 2003). ...  
[Cited by 54](#) - [Related articles](#) - [BL Direct](#) - [All 6 versions](#)

[Participatory mapping and geographic information systems: whose map? Who is empowered and who disempowered? Who gains and who loses?](#) [\[PDF\] from ejisdc.org](#)  
 R Chambers - *The Electronic Journal of Information Systems in ...*, 2006 - [ejisdc.org](#)  
 ... Much has happened since the workshop to discuss participatory research and the potential for  
 participatory Geographic Information Systems convened at the University of ... in the South where  
 I have never heard of anything called PRA being used are Algeria, Iraq, North Korea ...  
[Cited by 55](#) - [Related articles](#) - [Look for This at Tufts](#) - [All 8 versions](#)

Example 2: “GIS” search expanded to “geographic information systems”

Try using the keywords provided. Use the *References* to discover earlier articles and *Cited by/Citations* to discover later articles.

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 FORGOTTEN PASSWORD  
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Home > Development Studies > General & Introductory Development Studies > Journal Home > Vol 27 Issue 2 > Abstract

**Disasters**

**The Application of Geographic Information Systems and Global Positioning Systems in Humanitarian Emergencies: Lessons Learned, Programme Implications and Future Research**

Reinhard Kaiser<sup>1</sup>, Paul B. Spiegel<sup>2</sup>, Alden K. Henderson<sup>2</sup>, Michael L. Gerber<sup>2</sup>

Article first published online: 29 MAY 2003  
 DOI: 10.1111/1467-7717.00224

Disasters  
 Volume 27, Issue 2, pages 127–140, June 2003

**Keywords:**  
 geographic information; global positioning systems; remote sensing; satellite imagery; humanitarian emergencies

**For earlier articles...** → **References**

**For later articles ...** → **Cited By**

**Note keywords used**

Example 1: Keywords used from Tufts University journal *Disasters*.

### References

Barcellos, C. and P.C. Sabroza (2001) The Place Behind the Case: Leptospirosis Risks and Associated Environmental Conditions in a Flood-related Outbreak in Rio de Janeiro. *Cadernos de Saude Publica* **17** (Suppl): 59–67.  
[PubMed](#)

Becker, K.M., G.E. Glass, W. Brathwaite and J.M. Zenilman (1998) Geographic Epidemiology of Gonorrhoea in Baltimore, Maryland, Using a Geographic Information System. *American Journal of Epidemiology* **147**(7): 709–16.  
[PubMed](#), [Web of Science®](#)

Binkin, N., K. Sullivan, N. Staehling and P. Nieburg (1995) Rapid Nutrition Surveys: How Many Clusters Are Enough? *Disasters* **16**(2): 96–9.

### This article has been cited by:

- Gregory S. Stone, Alden K. Henderson, Stephanie I. Davis, Michael Lewin, Iris Shimizu, Ramesh Krishnamurthy, Kris Bisgard, Robin Lee, Aisha Jumaan, Erin Marziale, Miranda Bryant, Clayton Williams, Karen Mason, Maria Sirois, Makiko Hori, Jonathan Chapman, David J. Bowman, Lessons from the 2006 Louisiana Health and Population Survey, *Disasters*, 2012, **36**, 1  
[Abstract](#) | [PDF\(294K\)](#) | [References](#)
- Aurelie Charles, Matthieu Lauras, An enterprise modelling approach for better optimisation modelling: application to the humanitarian relief chain coordination problem, *OR Spectrum*, 2011, **33**, 3, 815  
[Cross Ref](#)
- JunPing Zhao, Xuan Zhang, Bing Zheng, YuBin Zhou, Hao Song, Wei Song, MeiKui Zhang, TongZe Liu, Li Zhou, Design of a search and rescue terminal based on the dual-mode satellite and CDMA network, *Science China Physics, Mechanics and Astronomy*, 2010, **53**, 12, 2312  
[Cross Ref](#)

Example 2: Other articles referenced and articles citing the publication.

Google Scholar search for "GIS social inequality".

Articles

Legal documents

Any time

Since 2013

Since 2012

Since 2009

Custom range... 2008 — 2013

Search

Sort by relevance

Sort by date

include patents

include citations

Create alert

[\[book\] Rural Economic Development](#)  
D Storey - 2009 - eprints.worc.ac.uk  
... Abstract. Within 'developed' countries, current economic development strategies for rural areas are concerned with reshaping rural economies in the context of agricultural restructuring and associated economic and **social** change. ...  
Cited by 33 Related articles All 3 versions Cite More

[\[book\] Geographies of health: an introduction.](#)  
AC Gatrell, SJ Elliott - 2009 - cabdirect.org  
... out the debates and reviewing the evidence that links health outcomes with **social** and physical ... Part II covers **inequalities** in health outcomes and provision/utilization of health services, impact of ... Other updated sections include qualitative methods, Bayesian mapping, and **GIS** ...  
Cited by 305 Related articles All 6 versions Cite More

[The use of GIS and indicators to monitor intra-urban inequalities. A case study in Rosario, Argentina](#)  
J Martínez - Habitat International, 2009 - Elsevier  
... For that reason, targeting priority areas can be used as a complement for other **socially** sensitive policies. ... Following a **social** justice perspective, **GIS**-based indicators should facilitate equity in local government investments. ...  
Cited by 16 Related articles Cite

[Cancer survival in New Zealand: ethnic, social and geographical inequalities](#)  
R Haynes, J Pearce, R Barnett - Social science & medicine, 2008 - Elsevier  
... Article outline is loading... JavaScript required for article outline. **Social** Science & Medicine. Volume 67, Issue 6, September 2008, Pages 928-937. Cover image. Cancer survival in New Zealand: Ethnic, **social** and geographical **inequalities**. ...  
Cited by 50 Related articles All 8 versions Cite

[Regional and urban-rural variations in the association of neighbourhood deprivation with community resource access: a national study](#)  
J Pearce, K Witten, R Hiscock, T Blakely - Environment and planning. A, 2008 - envplan.com  
... to food shopping facilities There has been considerable focus upon whether **socially** deprived neighbourhoods ... has highlighted the crucial role of schools in neighbourhood **social** relations

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[PDF] from wnmuds.ac.nz  
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Example 3: Check “include citations” to discover later articles.