Literature Survey using scopus™

NPTEL Course Module

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Department of MME, IIT Madras

Disclaimer

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Check list before you start

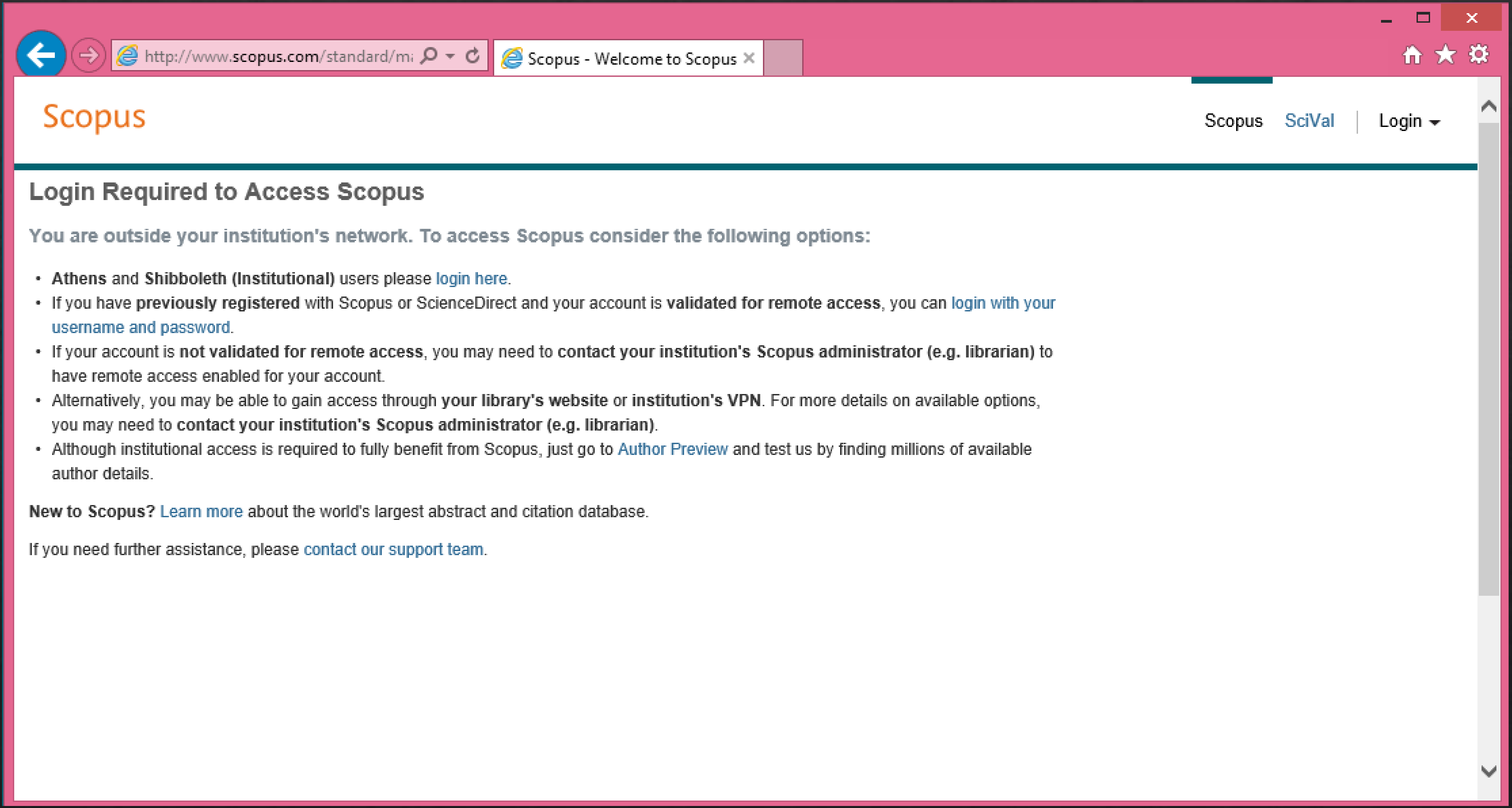
- Ask your librarian if you have a subscription for Scopus
- If yes, is the access via IP address or roaming login?
- If access is through IP, what is the proxy you need to go through while using your browser? Does the proxy need authentication? If yes, can you get one for yourself?
- If access is through roaming login, can you get the username and password for your use?

URL – open in a new tab in your browser

http://www.scopus.com/

In case the URL has moved to a different location, do an internet search of Elsevier, Scopus etc. to pick the correct URL

If you do not have access



Login Required to Access Scopus

You are outside your institution's network. To access Scopus consider the following options:

- **Athens** and **Shibboleth (Institutional)** users please login here.
- If you have **previously registered** with Scopus or ScienceDirect and your account is **validated for remote access**, you can login with your username and password.
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- Alternatively, you may be able to gain access through **your library's website** or **institution's VPN**. For more details on available options, you may need to **contact your institution's Scopus administrator (e.g. librarian)**.
- Although institutional access is required to fully benefit from Scopus, just go to Author Preview and test us by finding millions of available author details.

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If you need further assistance, please contact our support team.

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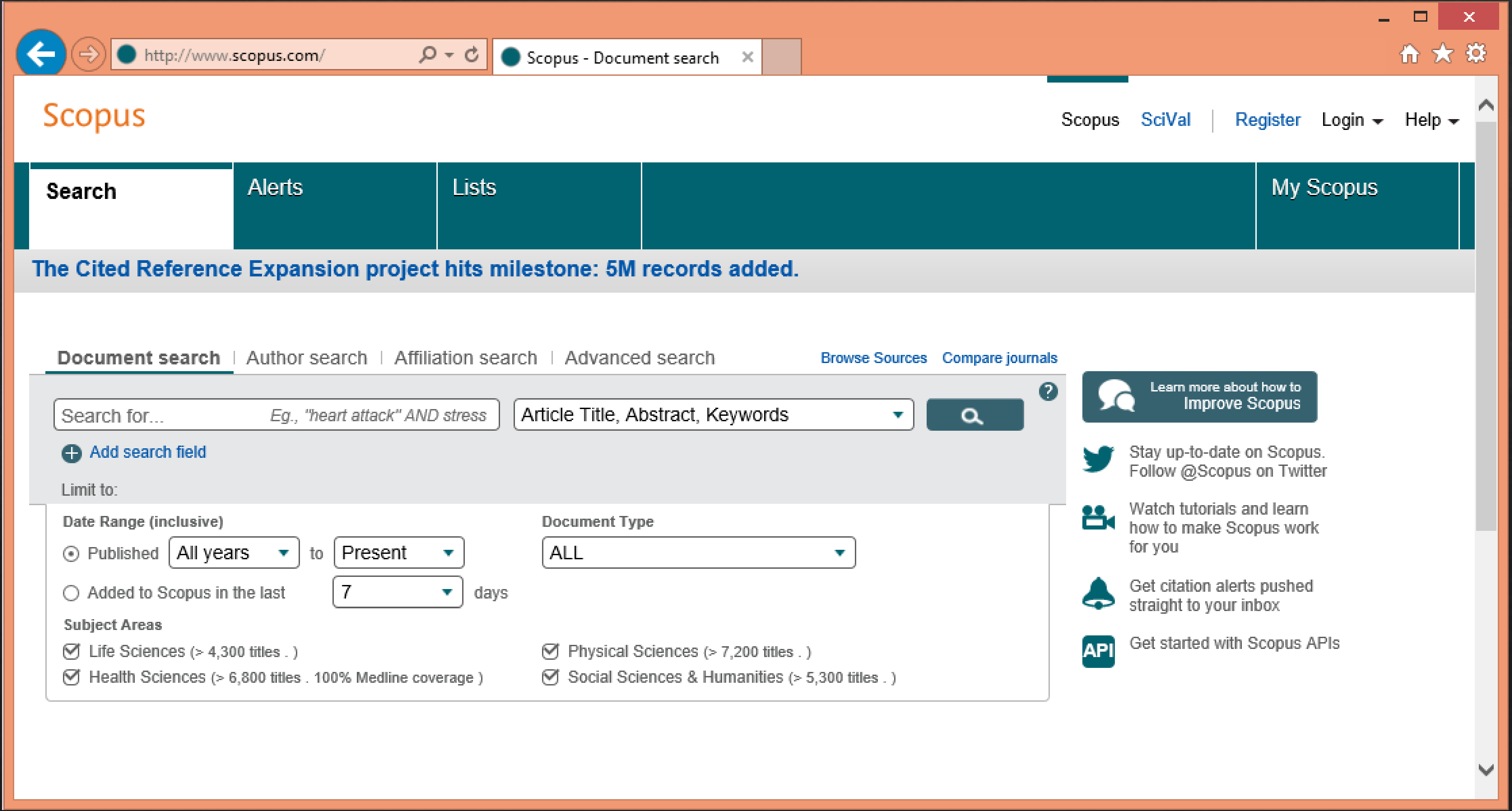
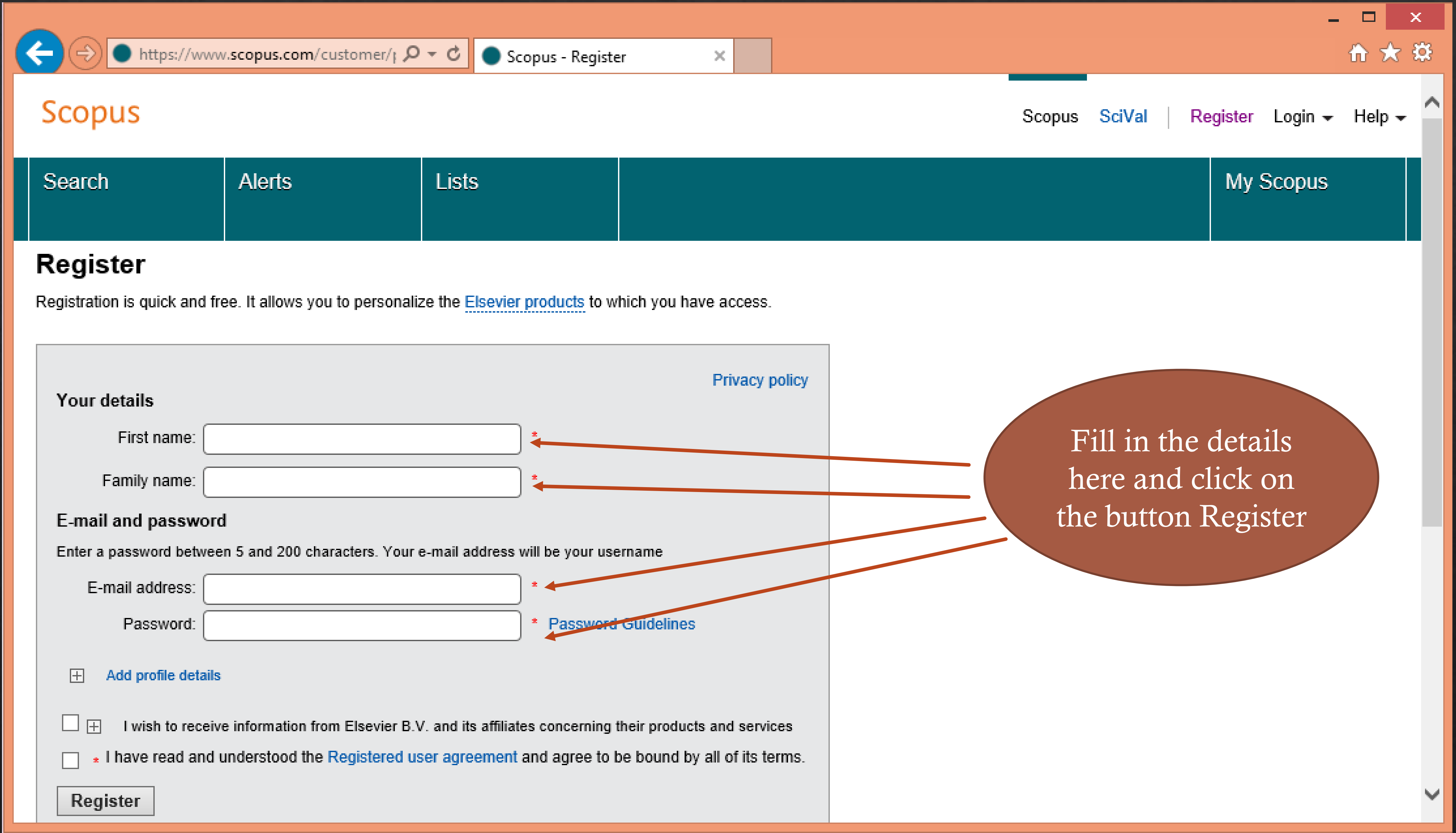


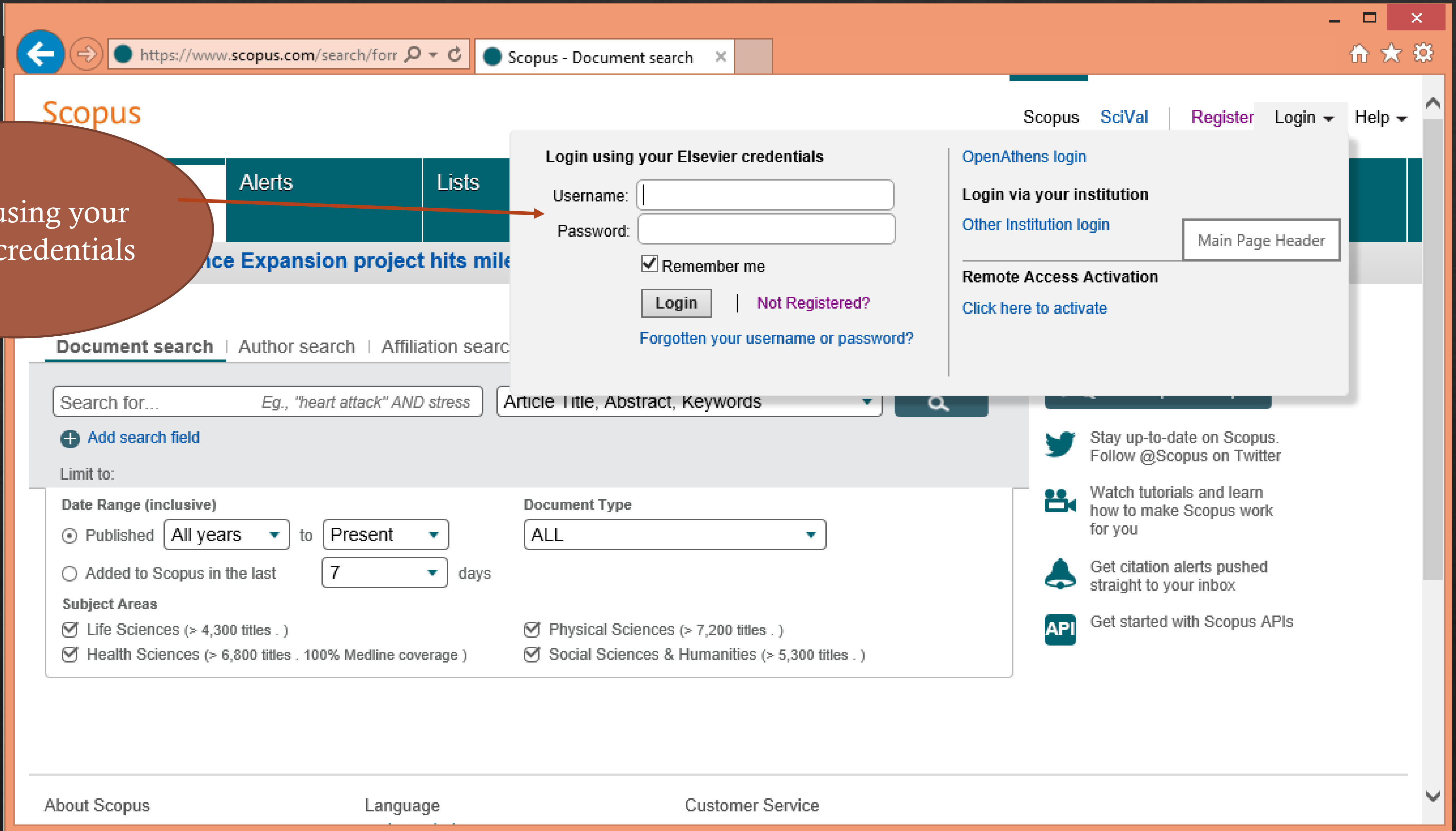
Check list if you have access

- Register yourself and obtain a login and password on scopus. Prefer your official email address for your profile.
- Keep the credentials handy and login to the scopus portal.
- Once logged in, you can save your searches and search history.

Register yourself on the portal



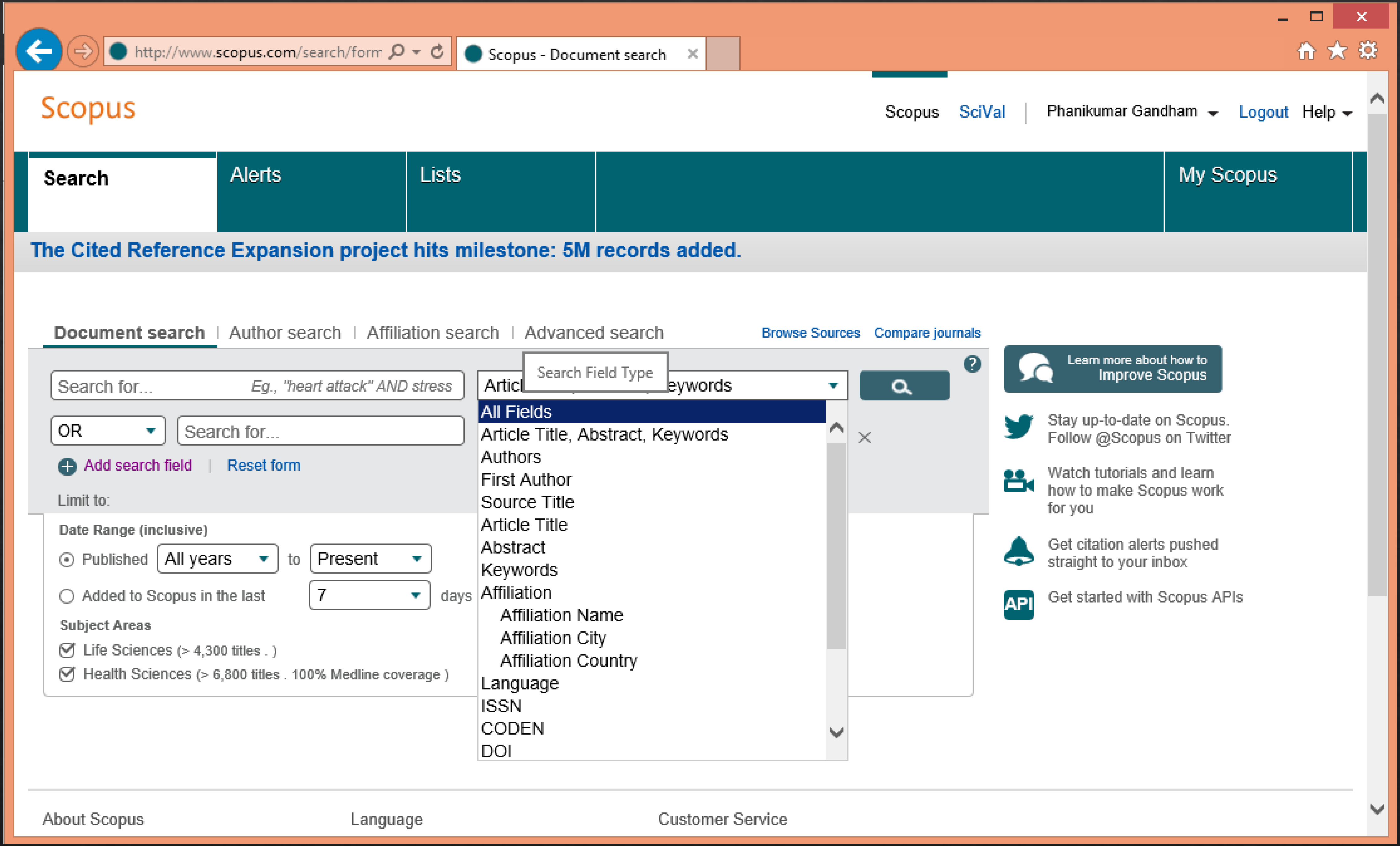
Login to the site



Login using your scopus credentials

Keyword based search

- Choose alternate keywords with "OR" combination
- Choose the fields carefully : Article Title Abstract Keywords / Authors / First Author / Source Title / Article Title/ Abstract / Keywords / Affiliation (Name, City, Country) / Language / ISSN / DOI / References / Conferences etc.
- Choose the timespan :
  - Published from YYYY/All Years to YYYY/Present
- Pick the Subject Areas as appropriate
- Use advanced search features to construct a search string combining different fields, values and Boolean operators / parentheses.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Affiliation search
Advanced search
Browse Sources
Compare journals
Search for...
Eg., "heart attack" AND stress
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Abstract
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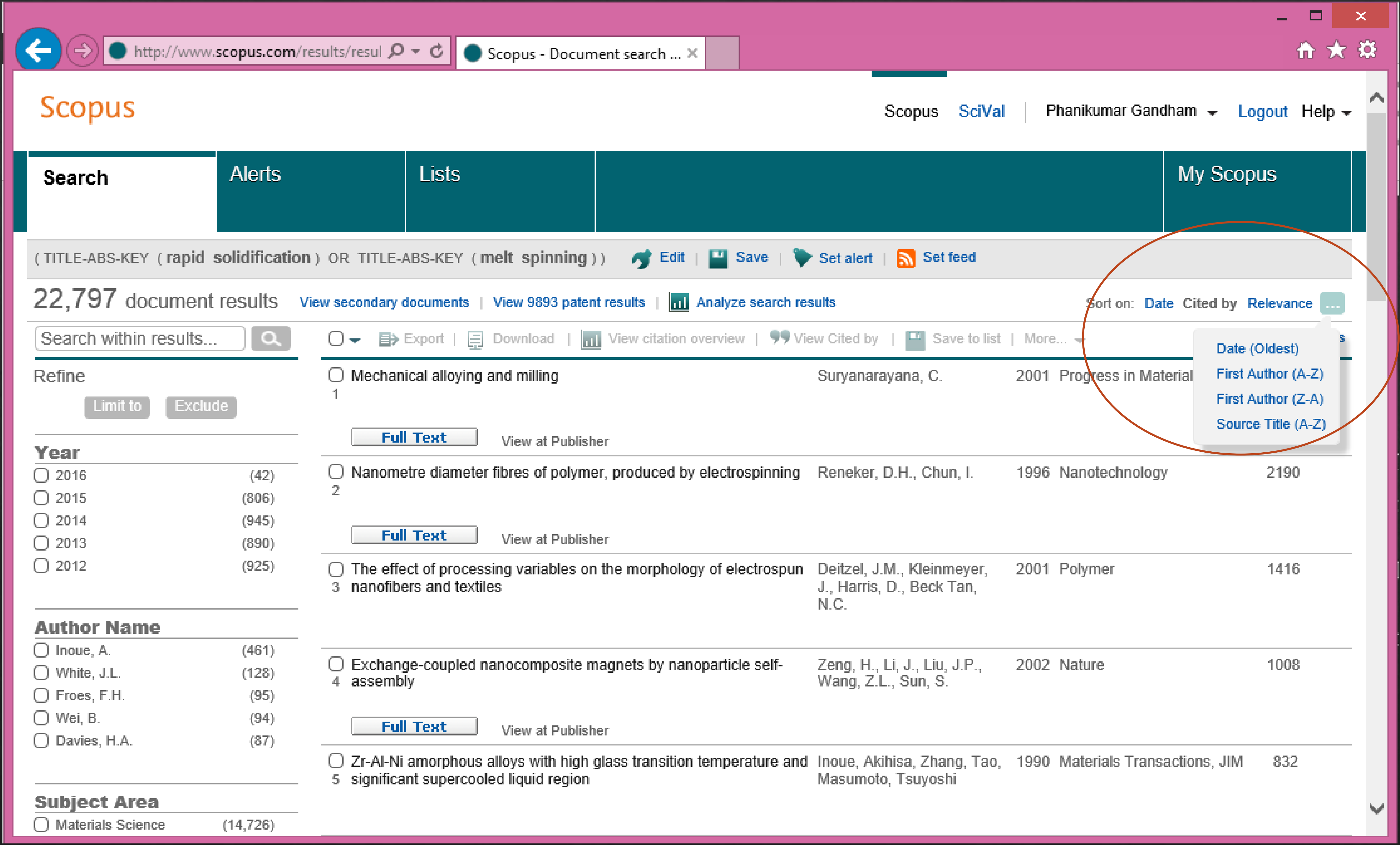
Looking at the search results

- Date (latest on top) : What is the latest in this area?
- Date (oldest on top) : What are the early publications in this area?
- Cited by (highest on top) : What are the most referred publications in this area?
- Relevance – What publications match the search criteria closest?
- First Author – A to Z / Z to A
- Source Title – Sorted according to the source of the publication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(TITLE-ABS-KEY (rapid solidification) OR TITLE-ABS-KEY (melt spinning))
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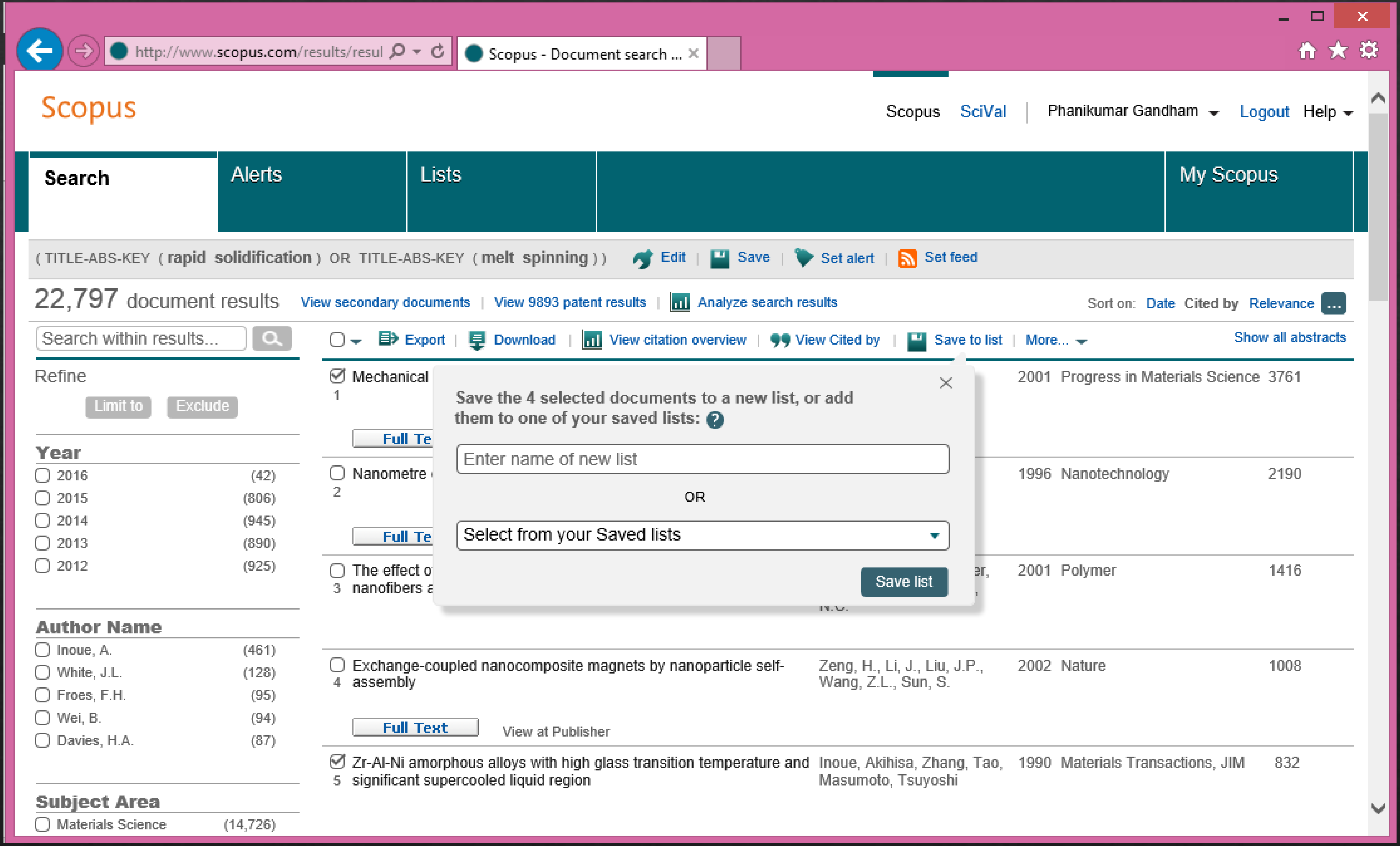
22,797 document results
View secondary documents | View 9893 patent results | Analyze search results
Sort on: Date Cited by Relevance
Search within results...
Export | Download | View citation overview | View Cited by | Save to list | More...
Date (Oldest)
First Author (A-Z)
First Author (Z-A)
Source Title (A-Z)
Refine
Limit to
Exclude
Year
2016 (42)
2015 (806)
2014 (945)
2013 (890)
2012 (925)
Author Name
Inoue, A. (461)
White, J.L. (128)
Froes, F.H. (95)
Wei, B. (94)
Davies, H.A. (87)
Subject Area
Materials Science (14,726)
1 Mechanical alloying and milling Suryanarayana, C. 2001 Progress in Material
Full Text View at Publisher
2 Nanometre diameter fibres of polymer, produced by electrospinning Reneker, D.H., Chun, I. 1996 Nanotechnology 2190
Full Text View at Publisher
3 The effect of processing variables on the morphology of electrospun nanofibers and textiles Deitzel, J.M., Kleinmeyer, J., Harris, D., Beck Tan, N.C. 2001 Polymer 1416
4 Exchange-coupled nanocomposite magnets by nanoparticle self-assembly Zeng, H., Li, J., Liu, J.P., Wang, Z.L., Sun, S. 2002 Nature 1008
Full Text View at Publisher
5 Zr-Al-Ni amorphous alloys with high glass transition temperature and significant supercooled liquid region Inoue, Akihisa, Zhang, Tao, Masumoto, Tsuyoshi 1990 Materials Transactions, JIM 832

Collecting the reference items

- Under each method of sorting the search results, “select” those you feel are important for your literature survey by “checking the box” against those items.
- Click on the button “Save to list” to add these to your list.
- “Enter name of a new list” if you wish to create a new name of this list. Else, add them to an existing list by picking it from the drop down menu below.
- The number of items added to your list are shown in a box along with a link to “View or manage your saved lists”.
- Once you are done collecting, click on the link “View or manage your saved lists” to proceed to the 3 step process of collecting the data.
  - Step 1: Select records (within this Marked List – usually all)
  - Step 2: Select content (choose abstract also, helps in identifying which publications to find the full text of)
  - Step 3: Select destination (choose Save to EndNote online)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22,797 document results
View secondary documents
View 9893 patent results
Analyze search results
Sort on: Date Cited by Relevance
Search within results...
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Save to list
More...
Show all abstracts
Refine
Limit to
Exclude
Year
2016 (42)
2015 (806)
2014 (945)
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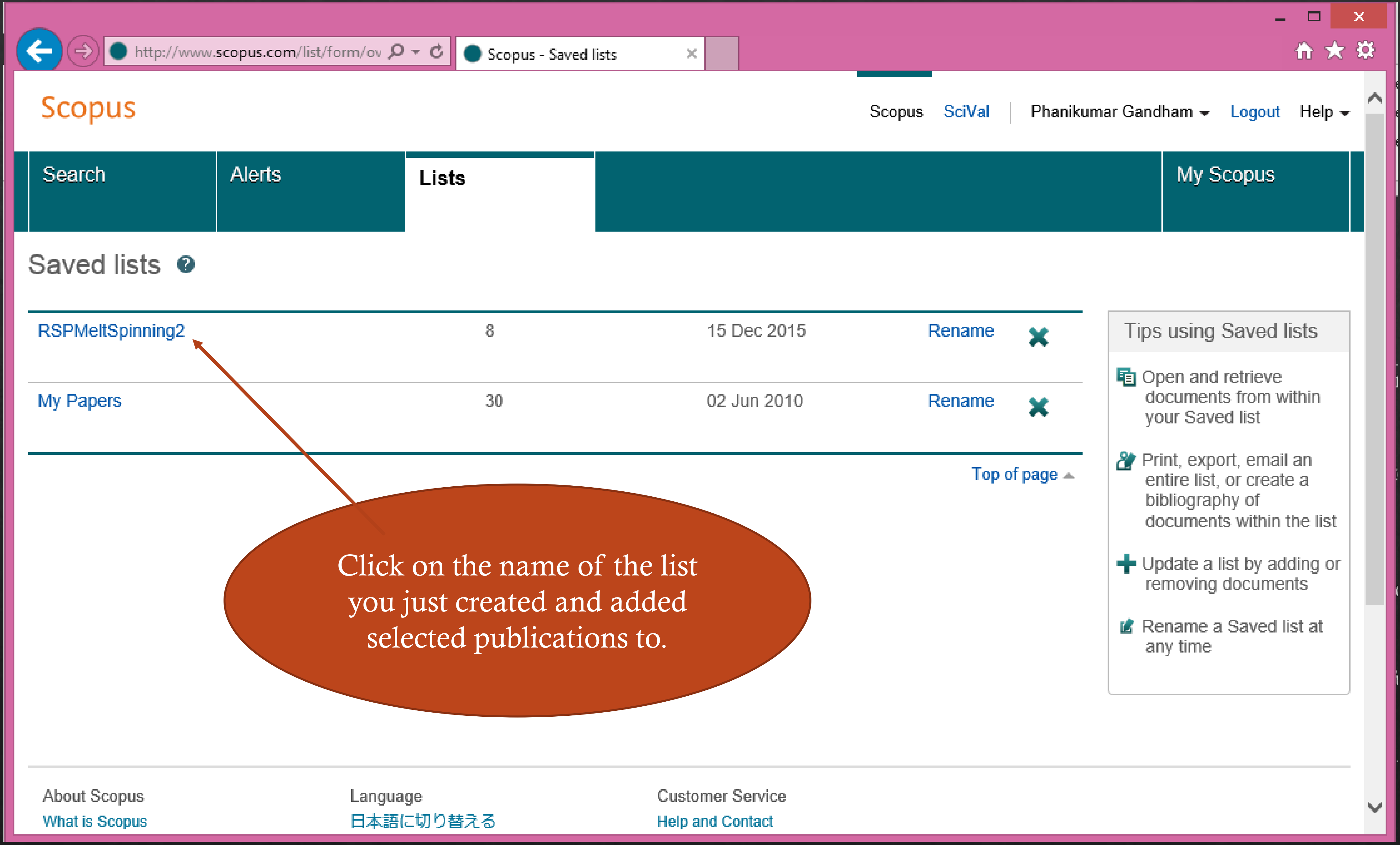
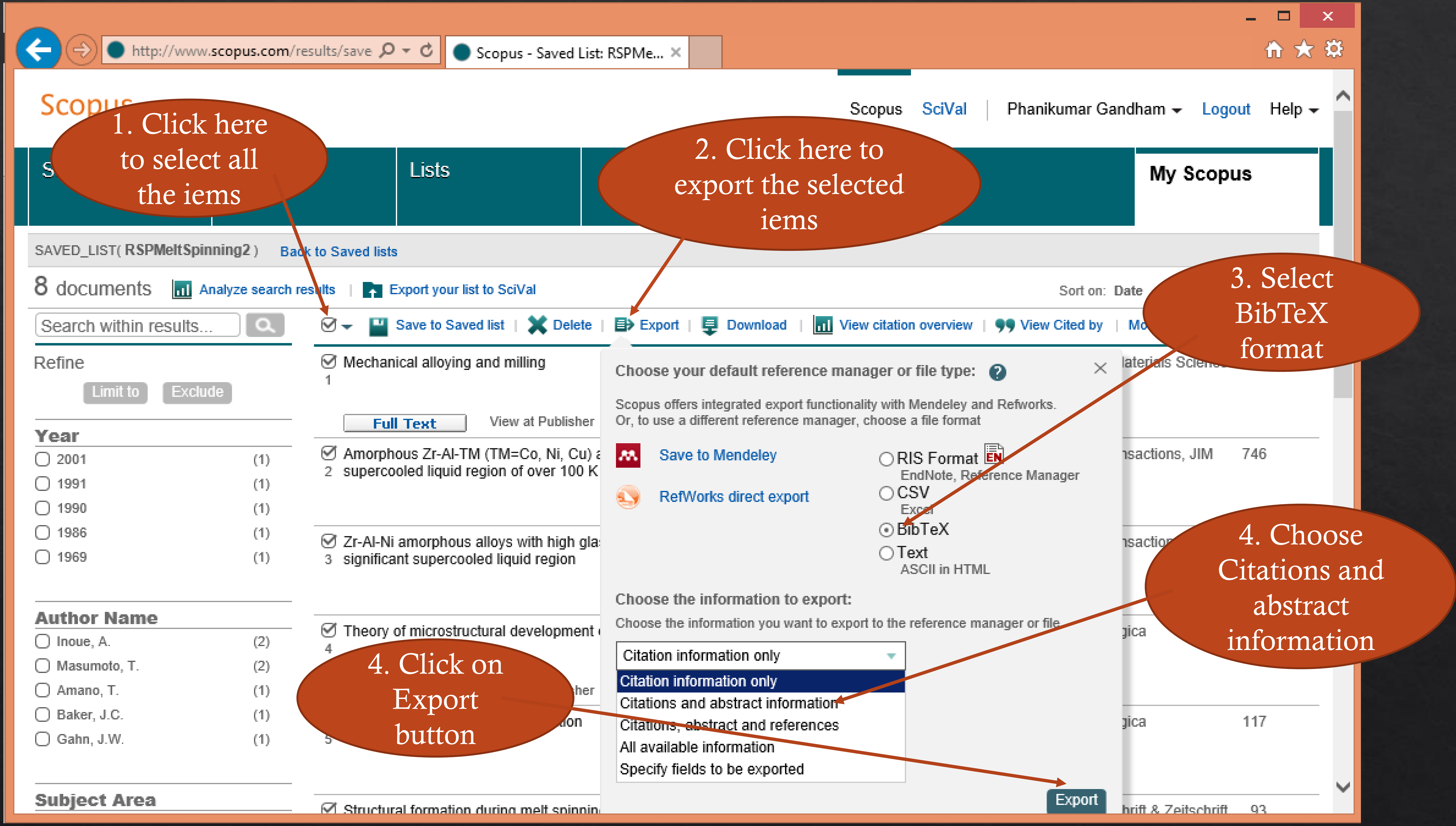
Author Name
Inoue, A. (461)
White, J.L. (128)
Froes, F.H. (95)
Wei, B. (94)
Davies, H.A. (87)
Subject Area
Materials Science (14,726)
Save the 4 selected documents to a new list, or add them to one of your saved lists:
Enter name of new list
OR
Select from your Saved lists
Save list
1 Mechanical
2001 Progress in Materials Science 3761
Full Te
2 Nanometre
1996 Nanotechnology 2190
Full Te
3 The effect o nanofibers a
2001 Polymer 1416
4 Exchange-coupled nanocomposite magnets by nanoparticle self-assembly
Zeng, H., Li, J., Liu, J.P., Wang, Z.L., Sun, S.
2002 Nature 1008
Full Text
View at Publisher
5 Zr-Al-Ni amorphous alloys with high glass transition temperature and significant supercooled liquid region
Inoue, Akihisa, Zhang, Tao, Masumoto, Tsuyoshi
1990 Materials Transactions, JIM 832



Click on the name of the list you just created and added selected publications to.


1. Click here to select all the iems
2. Click here to export the selected iems
3. Select BibTeX format
4. Choose Citations and abstract information
4. Click on Export button
http://www.scopus.com/results/save
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Lists
My Scopus
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8 documents Analyze search results | Export your list to SciVal
Sort on: Date
Search within results...
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Refine
Limit to Exclude
Year
2001 (1)
1991 (1)
1990 (1)
1986 (1)
1969 (1)
Author Name
Inoue, A. (2)
Masumoto, T. (2)
Amano, T. (1)
Baker, J.C. (1)
Gahn, J.W. (1)
Subject Area
Mechanical alloying and milling
Full Text View at Publisher
Amorphous Zr-Al-TM (TM=Co, Ni, Cu) a supercooled liquid region of over 100 K
Zr-Al-Ni amorphous alloys with high gla significant supercooled liquid region
Theory of microstructural development
Structural formation during melt spinnin
Choose your default reference manager or file type:
Scopus offers integrated export functionality with Mendeley and Refworks.
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Save to Mendeley
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Choose the information to export:
Choose the information you want to export to the reference manager or file
Citation information only
Citation information only
Citations and abstract information
Citations, abstract and references
All available information
Specify fields to be exported
Export

Save the list and export

- Click on the name of the list to view all the items you selected and saved.
- Click on the checkbox at the top of the first column of all the items to select all the items
- Click on the link “Export” to open the pop-up dialogue.
- Choose “BibTeX” format, “Citations and Abstracts” and click on the button “export” to save the results as a file named “scopus.bib”.
- Go to your Downloads folder to rename the file to something meaningful, say, after the name of the list you had in your profile on scopus itself.

How does this file look like?

In notepad:

scopus.bib - Notepad

File Edit Format View Help

```
ScopusEXPORT DATE: 15 December 2015

@ARTICLE{Suryanarayana20011,author={Suryanarayana C.},title={Mechanical alloying and
milling},journal={Progress in Materials Science},year={2001},volume={46},number={1-2},
pages={1-184},doi={10.1016/S0079-6425(99)00010-9},note={cited By 3761},url=
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0034742774&partnerID=40&md5=0a69ba5b55d3963d947cc70f77a2ed11},affiliation={Department of
Metallurgical Eng., Colorado School of Mines, Golden, CO 80401-1887, United States},
abstract={Mechanical alloying (MA) is a solid-state powder processing technique involving
repeated welding, fracturing, and rewelding of powder particles in a high-energy ball mill.
Originally developed to produce oxide-dispersion strengthened (ODS) nickel- and iron-base
superalloys for applications in the aerospace industry, MA has now been shown to be capable
of synthesizing a variety of equilibrium and non-equilibrium alloy phases starting from
blended elemental or prealloyed powders. The non-equilibrium phases synthesized include
supersaturated solid solutions, metastable crystalline and quasicrystalline phases,
nanostructures, and amorphous alloys. Recent advances in these areas and also on
disordering of ordered intermetallics and mechanochemical synthesis of materials have been
critically reviewed after discussing the process and process variables involved in MA. The
often vexing problem of powder contamination has been analyzed and methods have been
suggested to avoid/minimize it. The present understanding of the modeling of the MA process
has also been discussed. The present and potential applications of MA are described.
Wherever possible, comparisons have been made on the product phases obtained by MA with
those of rapid solidification processing, another non-equilibrium processing technique. ©
2001 Elsevier Science Ltd. All rights reserved.},document_type={Review},source={Scopus},}

@ARTICLE{Zhang19911005,author={Zhang Tao and Inoue Akihisa and Masumoto Tsuyoshi},title=
{Amorphous Zr-Al-TM (TM=Co, Ni, Cu) alloys with significant supercooled liquid region of
over 100 K},journal={Materials Transactions, JIM},year={1991},volume={32},number={11},
pages={1005-1010},note={cited By 746},url={http://www.scopus.com/inward/record.url?eid=2-
s2.0-0026255146&partnerID=40&md5=c8a43a39d38ea184f616e5ca41d4af46},affiliation={Tohoku
Univ, Sendai, Japan},abstract={Amorphous alloys exhibiting a wide supercooled liquid region
above 100 K were found to form in a compositional range from 0 to 3%Co, 0 to 15%Ni and 10
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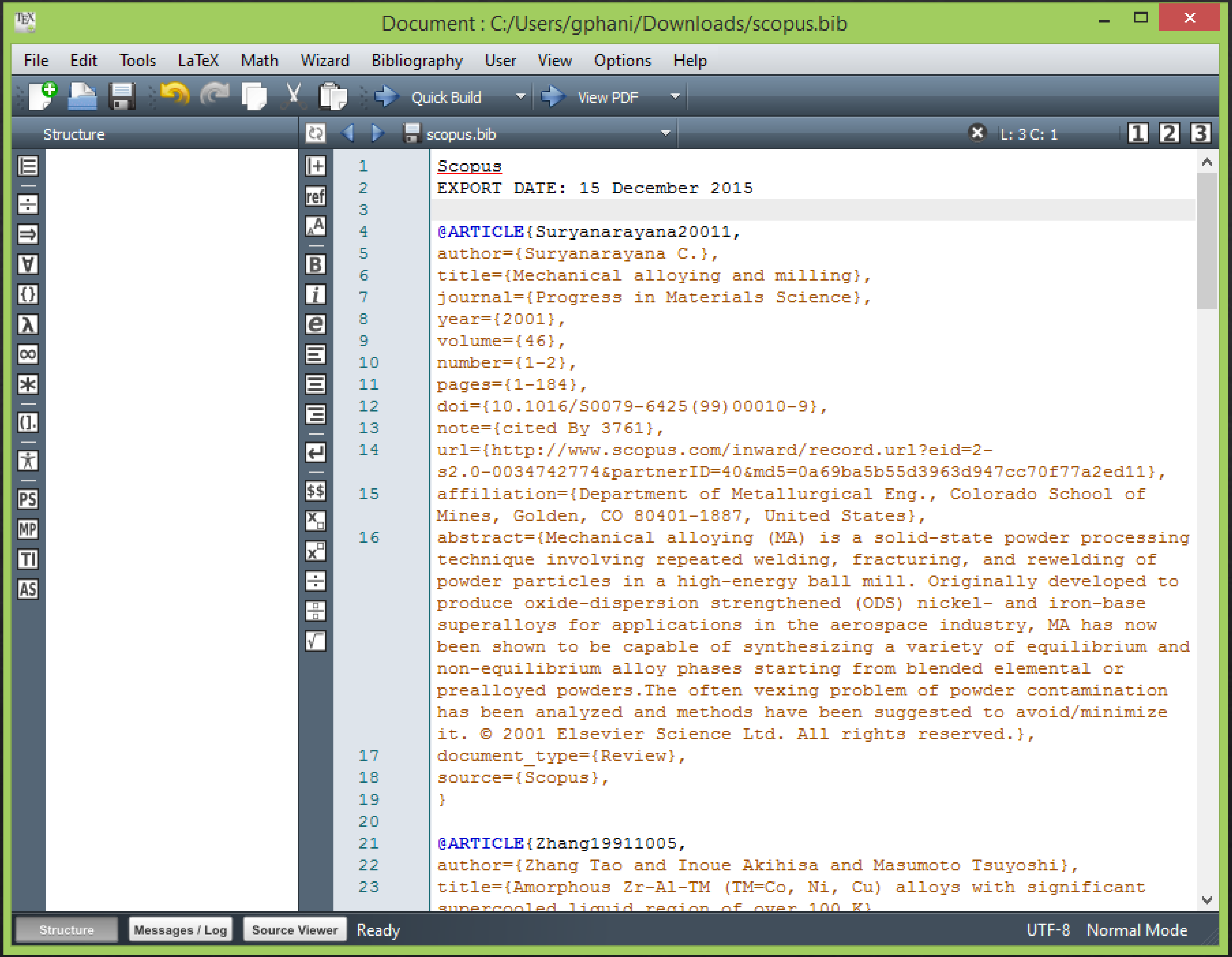
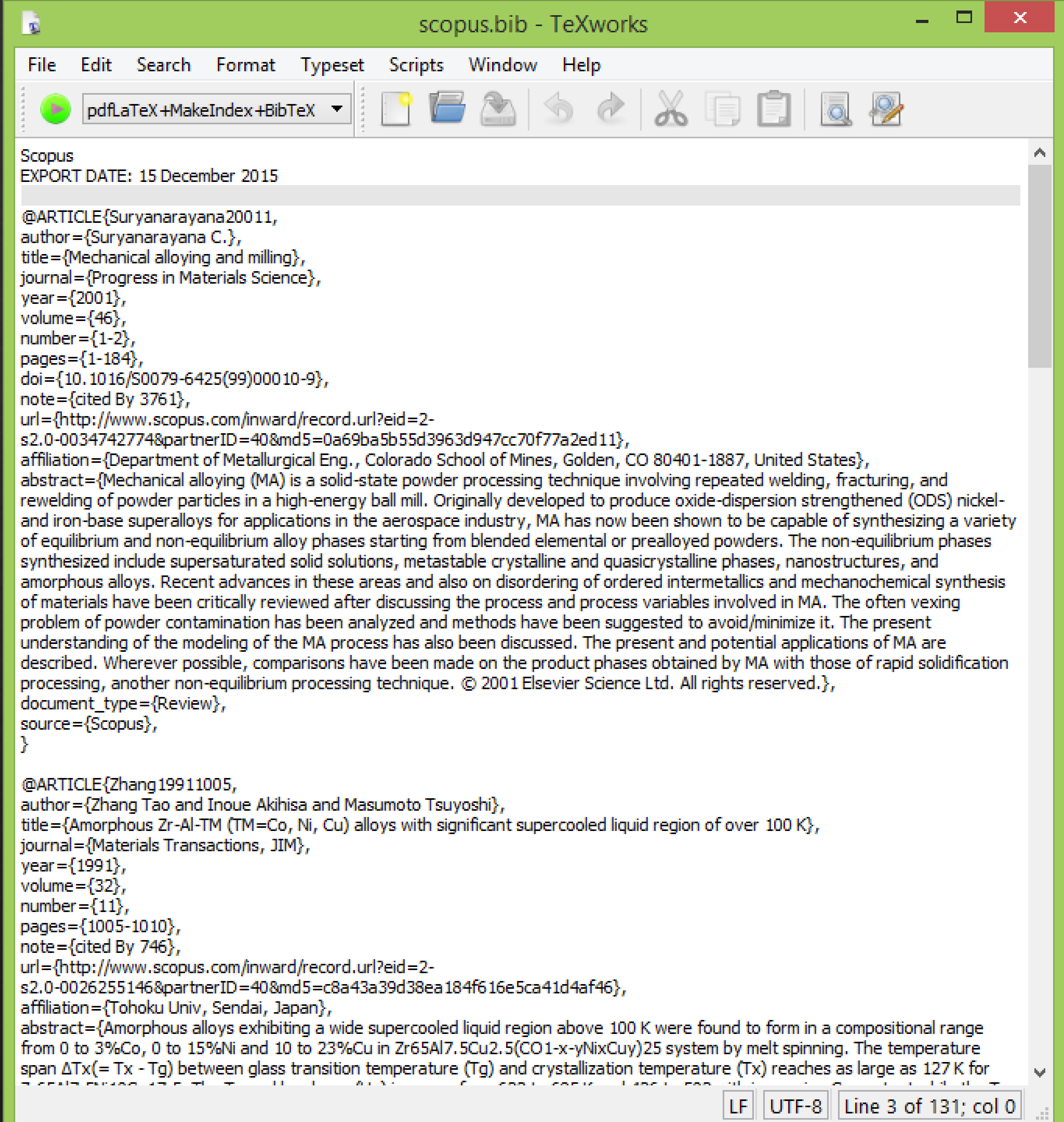
How does this file look like? In TeXmaker:



How does this file look like?
In TeXworks:

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Scopus
EXPORT DATE: 15 December 2015

@ARTICLE{Suryanarayana20011,
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title={Mechanical alloying and milling},
journal={Progress in Materials Science},
year={2001},
volume={46},
number={1-2},
pages={1-184},
doi={10.1016/S0079-6425(99)00010-9},
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affiliation={Department of Metallurgical Eng., Colorado School of Mines, Golden, CO 80401-1887, United States},
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understanding of the modeling of the MA process has also been discussed. The present and potential applications of MA are
described. Wherever possible, comparisons have been made on the product phases obtained by MA with those of rapid solidification
processing, another non-equilibrium processing technique. © 2001 Elsevier Science Ltd. All rights reserved.},
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source={Scopus},
}

@ARTICLE{Zhang19911005,
author={Zhang Tao and Inoue Akihisa and Masumoto Tsuyoshi},
title={Amorphous Zr-Al-TM (TM=Co, Ni, Cu) alloys with significant supercooled liquid region of over 100 K},
journal={Materials Transactions, JIM},
year={1991},
volume={32},
number={11},
pages={1005-1010},
note={cited By 746},
url={http://www.scopus.com/inward/record.url?eid=2-
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affiliation={Tohoku Univ, Sendai, Japan},
abstract={Amorphous alloys exhibiting a wide supercooled liquid region above 100 K were found to form in a compositional range
from 0 to 3%Co, 0 to 15%Ni and 10 to 23%Cu in Zr65Al7.5Cu2.5(CO1-x-yNixCuy)25 system by melt spinning. The temperature
span ΔTx(= Tx - Tg) between glass transition temperature (Tg) and crystallization temperature (Tx) reaches as large as 127 K for
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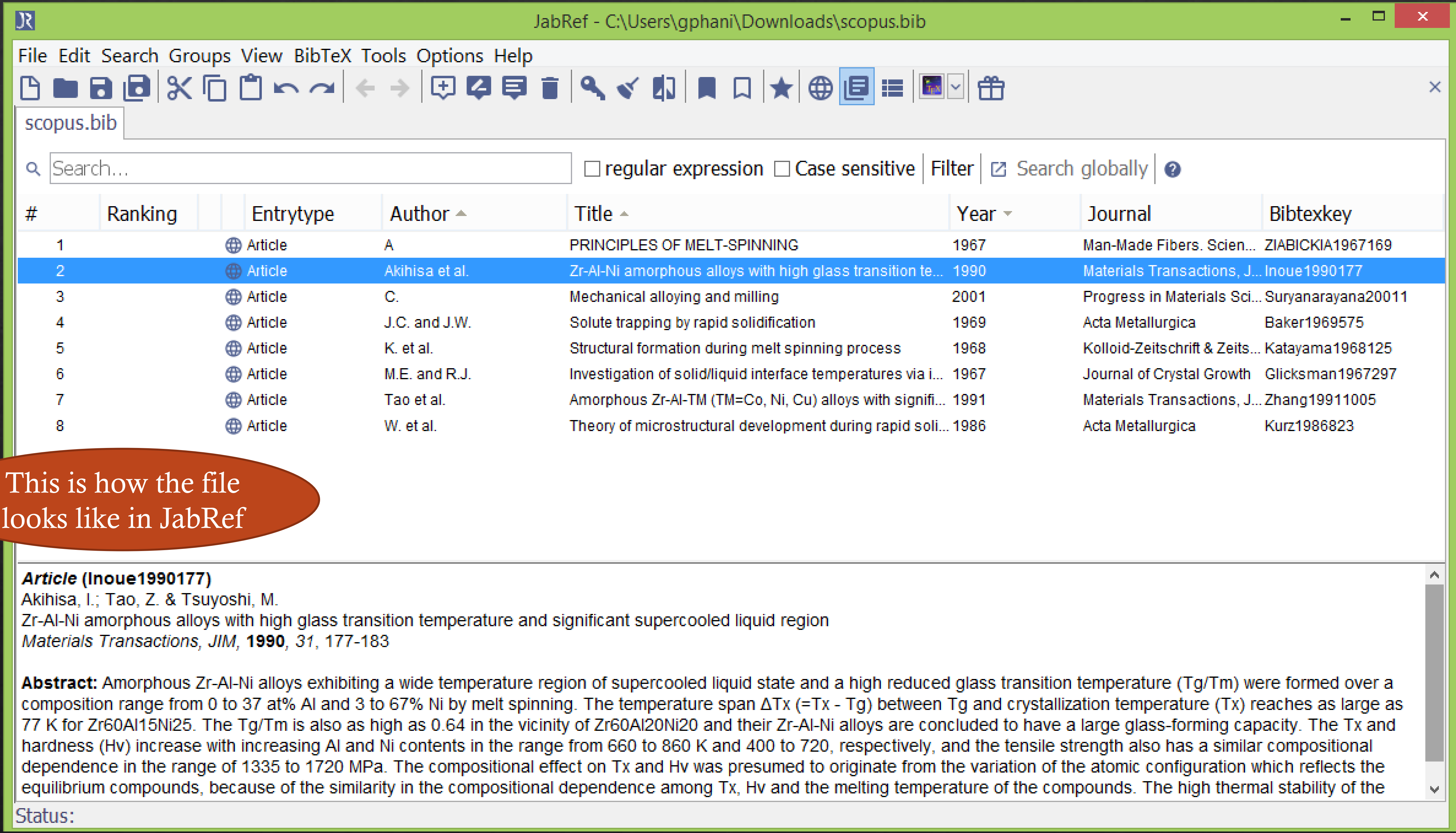


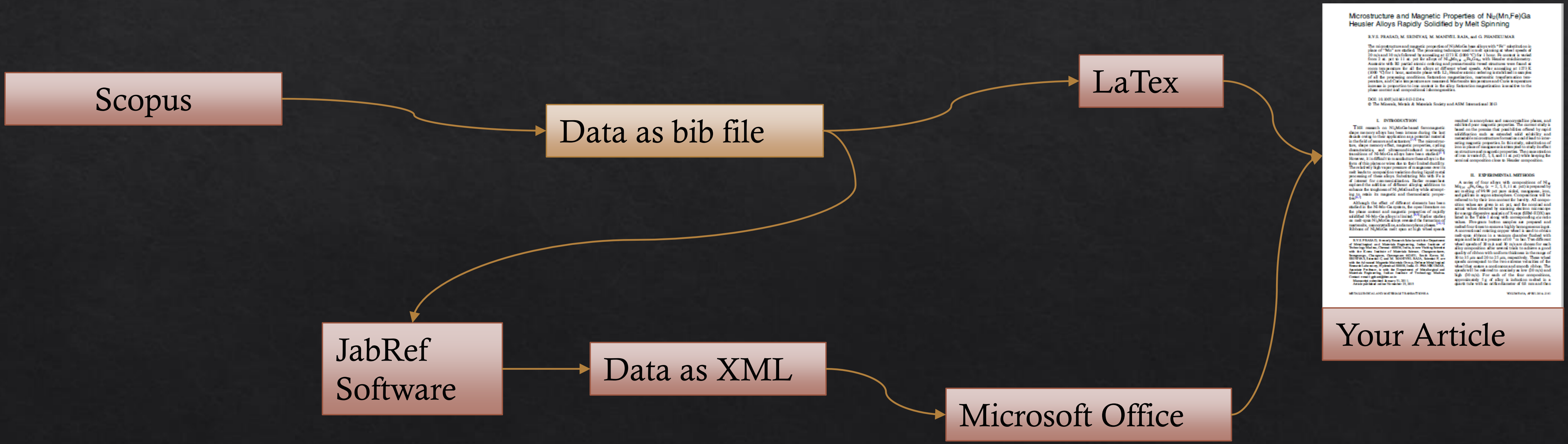
This is how the file looks like in JabRef

How to edit this .bib file?

- Use a Reference Manager like **JabRef** (opensource and free)
- Spreadsheet like appearance
- Possibility to add notes, split and merge similar files, export to different formats
- The file resides on your desktop – go through the items at your pace, offline, identify those you need to have the full text of and so on.

Why export bibliographic data?

- We need our literature survey results in BibTeX format (.bib file) for use in LaTeX documents to typeset an article and cite the references
- We can use JabRef to convery BibTeX data into XML format (.xml file) for use in Microsoft Office™ to typeset an article and cite the references



End of Module