

Literature Survey using scopusTM

NPTEL Course Module

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Disclaimer

- ◇ This module is one of the many to illustrate usage of different online tools for literature survey. In this module, ScopusTM is being demonstrated.
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- ◇ ScopusTM, ElsevierTM are trademarks of RELX TM Group
- ◇ For simplicity, the TM symbol is being omitted for the rest of the presentation.

Check list before you start

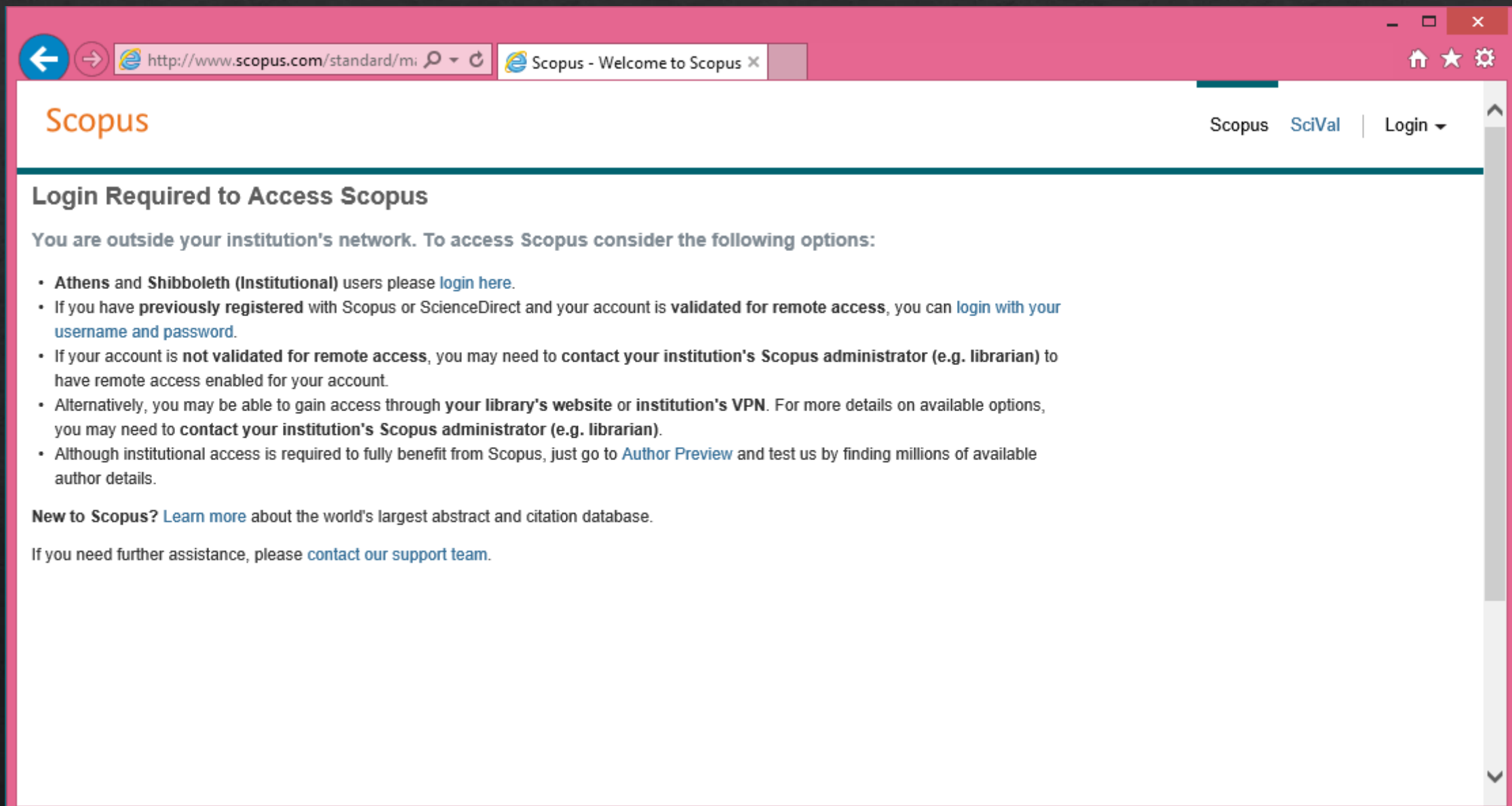
- ◆ Ask your librarian if you have a subscription for Scopus
- ◆ If yes, is the access via IP address or roaming login?
- ◆ If access is through IP, what is the proxy you need to go through while using your browser? Does the proxy need authentication? If yes, can you get one for yourself?
- ◆ If access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



The screenshot shows a web browser window with the URL <http://www.scopus.com/standard/mi>. The page title is "Scopus - Welcome to Scopus". The Scopus logo is in the top left, and navigation links for "Scopus", "SciVal", and "Login" are in the top right. The main content area has a heading "Login Required to Access Scopus" and a message: "You are outside your institution's network. To access Scopus consider the following options:". Below this is a bulleted list of options for accessing Scopus from outside the institution's network.

Scopus | Scopus | SciVal | Login ▾

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](#).
- If your account is not validated for remote access, you may need to contact your institution's Scopus administrator (e.g. librarian) to have remote access enabled for your account.
- 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.

New to Scopus? [Learn more](#) about the world's largest abstract and citation database.

If you need further assistance, please [contact our support team](#).

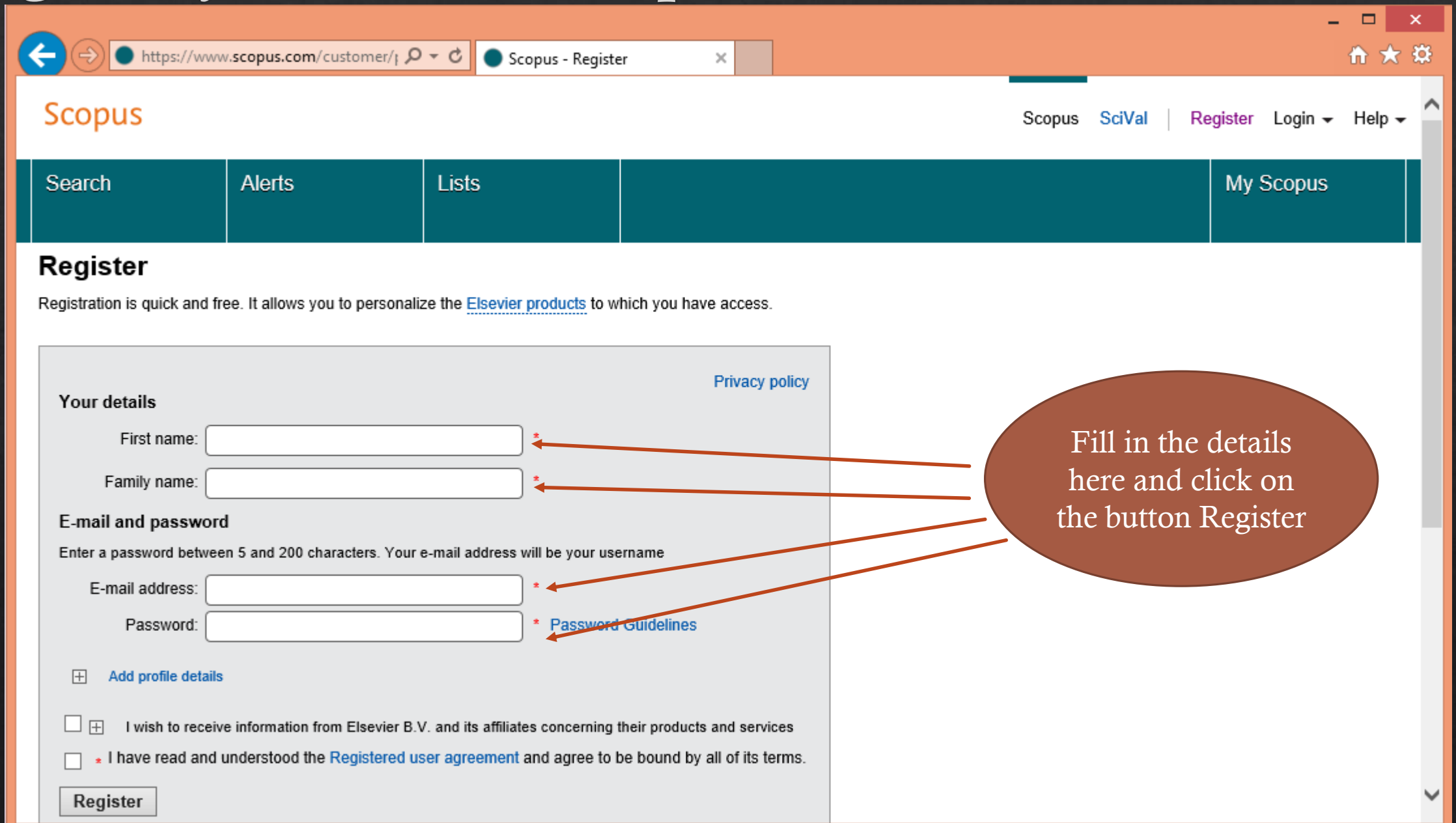
If you have access

The screenshot displays the Scopus website interface. At the top, the browser address bar shows <http://www.scopus.com/> and the page title is "Scopus - Document search". The Scopus logo is on the left, and navigation links for "Scopus", "SciVal", "Register", "Login", and "Help" are on the right. A teal navigation bar contains "Search", "Alerts", "Lists", and "My Scopus". A blue banner below the navigation bar reads "The Cited Reference Expansion project hits milestone: 5M records added." The main content area features a "Document search" section with tabs for "Document search", "Author search", "Affiliation search", and "Advanced search". The search input field contains "Search for..." with a placeholder example "Eg., 'heart attack' AND stress". A dropdown menu is set to "Article Title, Abstract, Keywords". Below the search field, there are options to "Add search field" and "Limit to:". The "Limit to:" section includes "Date Range (inclusive)" with radio buttons for "Published" (selected) and "Added to Scopus in the last" (7 days), and "Document Type" set to "ALL". There are also checkboxes for "Subject Areas": Life Sciences (> 4,300 titles), Health Sciences (> 6,800 titles, 100% Medline coverage), Physical Sciences (> 7,200 titles), and Social Sciences & Humanities (> 5,300 titles). On the right side, there are four promotional cards: "Learn more about how to Improve Scopus", "Stay up-to-date on Scopus. Follow @Scopus on Twitter", "Watch tutorials and learn how to make Scopus work for you", and "Get citation alerts pushed straight to your inbox". At the bottom right, there is a card for "API Get started with Scopus APIs".

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



The image shows a browser window with the URL <https://www.scopus.com/customer/> and the page title "Scopus - Register". The page features a navigation bar with "Scopus", "SciVal", "Register", "Login", and "Help". Below this is a menu with "Search", "Alerts", "Lists", and "My Scopus". The main heading is "Register", followed by a sub-heading: "Registration is quick and free. It allows you to personalize the [Elsevier products](#) to which you have access." A "Privacy policy" link is located in the top right of the registration form area.

Your details

First name: *

Family name: *

E-mail and password

Enter a password between 5 and 200 characters. Your e-mail address will be your username

E-mail address: *

Password: * [Password Guidelines](#)

[Add profile details](#)

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A callout box on the right contains the text: "Fill in the details here and click on the button Register". Four orange arrows point from this box to the "First name", "Family name", "E-mail address", and "Password" input fields.

Login to the site

Login using your scopus credentials

The screenshot shows the Scopus website interface. At the top, the Scopus logo is on the left, and navigation links for Scopus, SciVal, Register, Login, and Help are on the right. Below the logo are links for Alerts and Lists. A search bar is prominently displayed with the text "Search for..." and an example "Eg., 'heart attack' AND stress". Below the search bar are filters for Date Range (inclusive), Document Type, and Subject Areas. A login form overlay is centered on the page, titled "Login using your Elsevier credentials". It contains fields for Username and Password, a "Remember me" checkbox, a "Login" button, and links for "Not Registered?", "Forgotten your username or password?", "OpenAthens login", and "Login via your institution".

Scopus - Document search

Scopus SciVal Register Login Help

Alerts Lists

Document search | Author search | Affiliation search

Search for... *Eg., "heart attack" AND stress* Article Title, Abstract, Keywords

+ Add search field

Limit to:

Date Range (inclusive)
 Published All years to Present
 Added to Scopus in the last 7 days

Document Type
ALL

Subject Areas
 Life Sciences (> 4,300 titles .)
 Health Sciences (> 6,800 titles . 100% Medline coverage)
 Physical Sciences (> 7,200 titles .)
 Social Sciences & Humanities (> 5,300 titles .)

OpenAthens login

Login using your Elsevier credentials

Username:

Password:

Remember me

Login | Not Registered?

Forgotten your username or password?

Login via your institution

Other Institution login

Remote Access Activation

Click here to activate

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Watch tutorials and learn how to make Scopus work for you

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About Scopus Language Customer Service

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.

The Cited Reference Expansion project hits milestone: 5M records added.

Document search | Author search | Affiliation search | Advanced search

Search for... Eg., "heart attack" AND stress

OR Search for...

Add search field | Reset form

Limit to:

Date Range (inclusive)

Published All years to Present

Added to Scopus in the last 7 days

Subject Areas

- Life Sciences (> 4,300 titles .)
Health Sciences (> 6,800 titles . 100% Medline coverage)

Search Field Type dropdown menu with options: All Fields, Article Title, Abstract, Keywords, Authors, First Author, Source Title, Affiliation, Language, ISSN, CODEN, DOI.

Learn more about how to Improve Scopus


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Watch tutorials and learn how to make Scopus work for you

Get citation alerts pushed straight to your inbox

API Get started with Scopus APIs

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

Search

Alerts

Lists

My Scopus

(TITLE-ABS-KEY (rapid solidification) OR TITLE-ABS-KEY (melt spinning)) Edit Save Set alert Set feed

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...

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)

<input type="checkbox"/>	Mechanical alloying and milling 1	Suryanarayana, C.	2001	Progress in Material	
	Full Text	View at Publisher			
<input type="checkbox"/>	Nanometre diameter fibres of polymer, produced by electrospinning 2	Reneker, D.H., Chun, I.	1996	Nanotechnology	2190
	Full Text	View at Publisher			
<input type="checkbox"/>	The effect of processing variables on the morphology of electrospun nanofibers and textiles 3	Deitzel, J.M., Kleinmeyer, J., Harris, D., Beck Tan, N.C.	2001	Polymer	1416
<input type="checkbox"/>	Exchange-coupled nanocomposite magnets by nanoparticle self-assembly 4	Zeng, H., Li, J., Liu, J.P., Wang, Z.L., Sun, S.	2002	Nature	1008
	Full Text	View at Publisher			
<input type="checkbox"/>	Zr-Al-Ni amorphous alloys with high glass transition temperature and significant supercooled liquid region 5	Inoue, Akihisa, Zhang, Tao, Masumoto, Tsuyoshi	1990	Materials Transactions, JIM	832

- Date (Oldest)
- First Author (A-Z)
- First Author (Z-A)
- Source Title (A-Z)

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)

(TITLE-ABS-KEY (rapid solidification) OR TITLE-ABS-KEY (melt spinning)) Edit Save Set alert Set feed

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... Show all abstracts

Refine

Limit to Exclude

Year

- 2016 (42)
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- Davies, H.A. (87)

Subject Area

- Materials Science (14,726)

Mechanical 1

Nanometre 2

The effect of nanofibers 3

Exchange-coupled nanocomposite magnets by nanoparticle self-assembly 4

Zr-Al-Ni amorphous alloys with high glass transition temperature and significant supercooled liquid region 5

Full Text View at Publisher

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

2001	Progress in Materials Science	3761
1996	Nanotechnology	2190
2001	Polymer	1416
2002	Nature	1008
1990	Materials Transactions, JIM	832

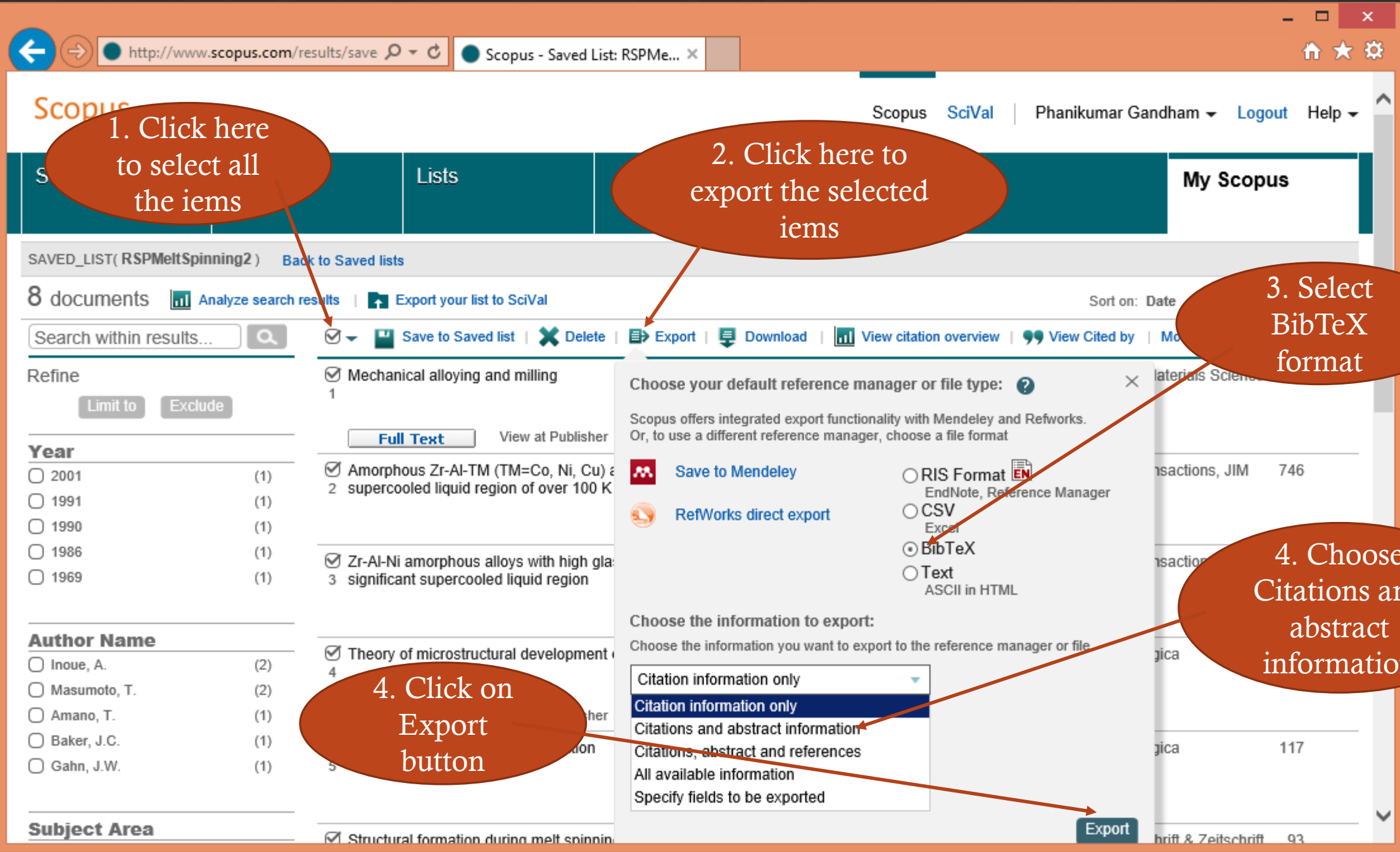
Saved lists

RSPMeltSpinning2	8	15 Dec 2015	Rename	X
My Papers	30	02 Jun 2010	Rename	X

Tips using Saved lists

- Open and retrieve documents from within your Saved list
- Print, export, email an entire list, or create a bibliography of documents within the list
- Update a list by adding or removing documents
- Rename a Saved list at any time

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



1. Click here to select all the items

2. Click here to export the selected items

3. Select BibTeX format

4. Choose Citations and abstract information

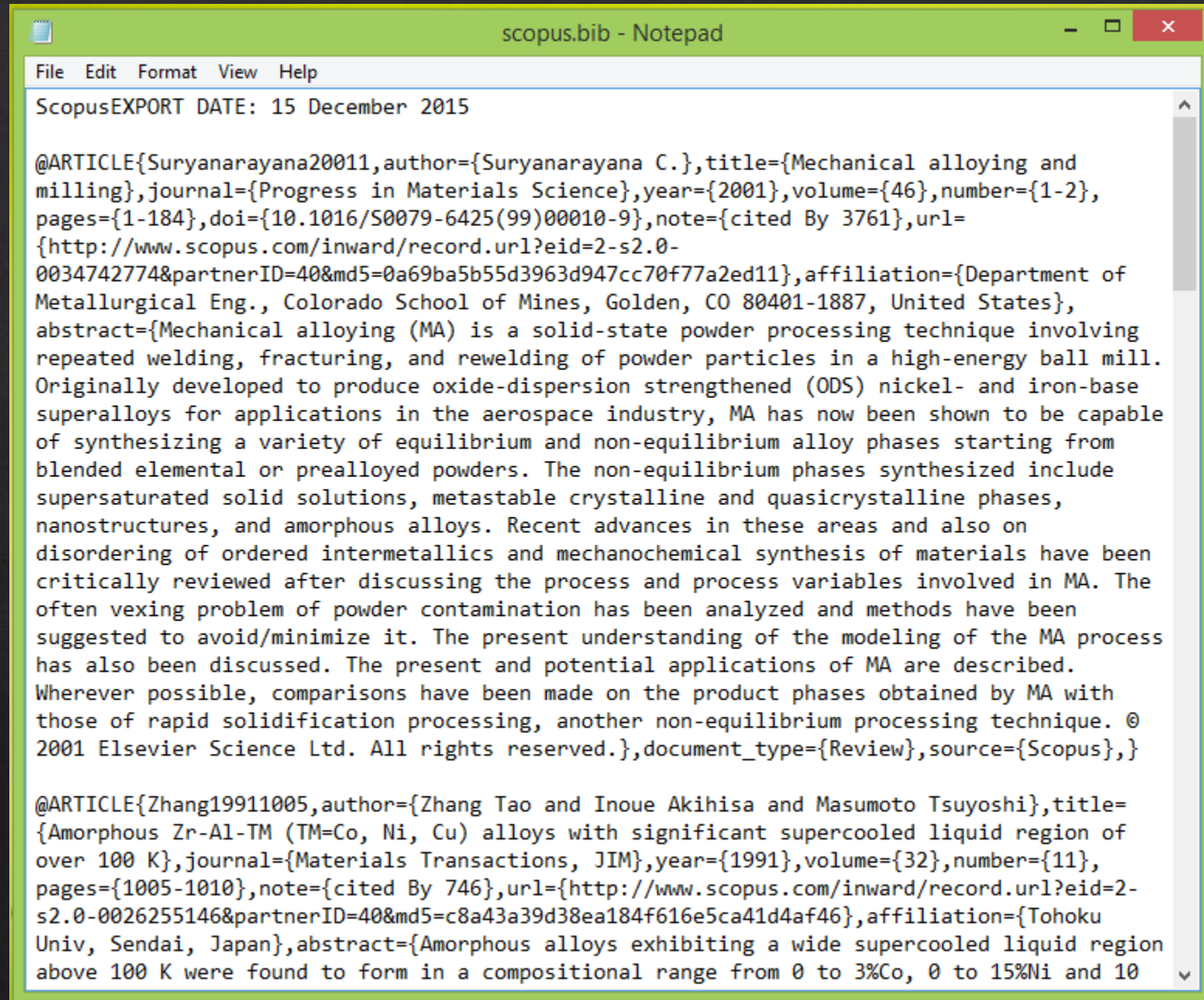
4. Click on Export button

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=
{http://www.scopus.com/inward/record.url?eid=2-s2.0-
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
```

How does this
file look like?
In TeXmaker:

Document : C:/Users/gphani/Downloads/scopus.bib

File Edit Tools LaTeX Math Wizard Bibliography User View Options Help

Quick Build View PDF

Structure scopus.bib L: 3 C: 1

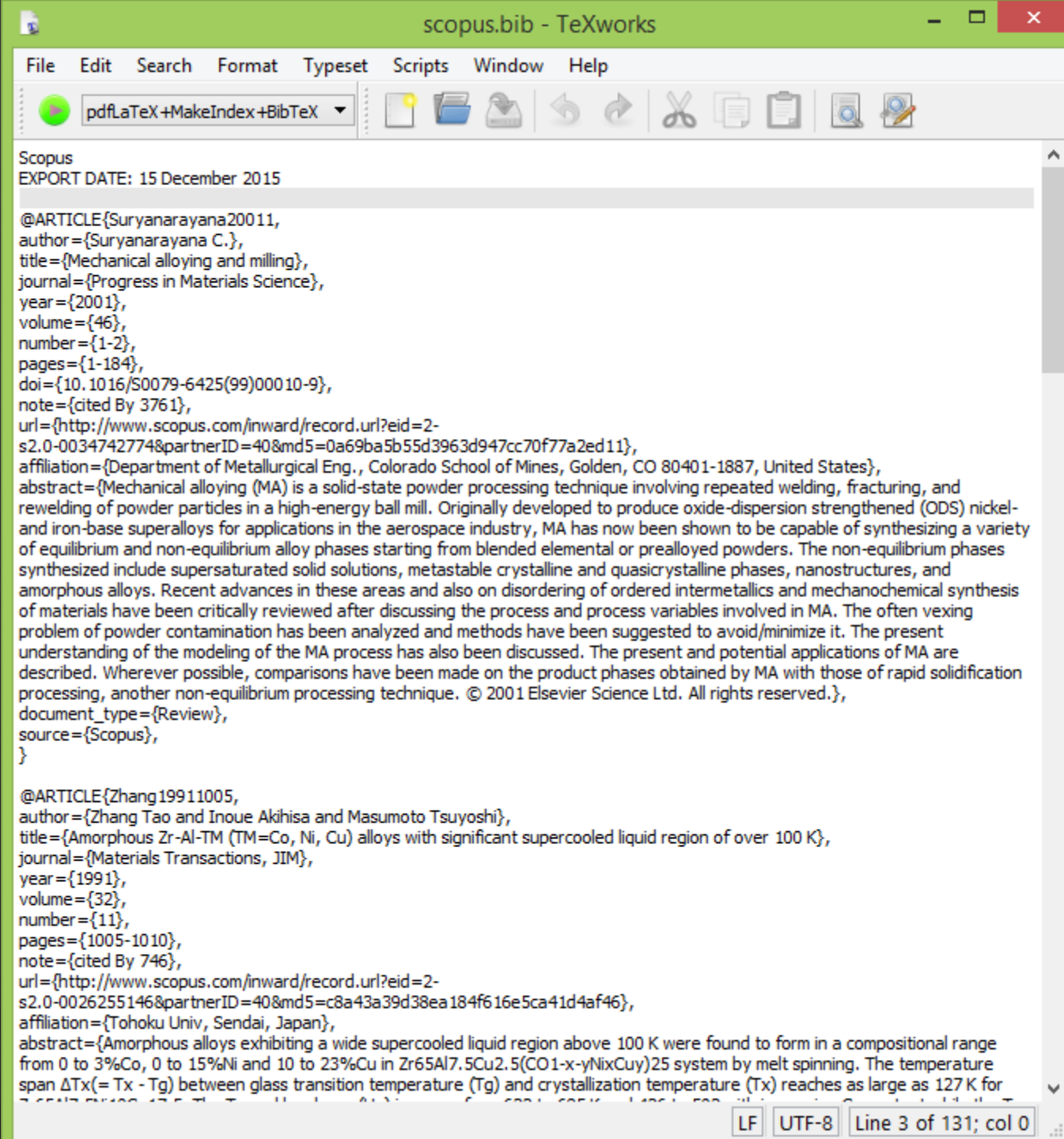
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1 Scopus
2 EXPORT DATE: 15 December 2015
3
4 @ARTICLE{Suryanarayana20011,
5 author={Suryanarayana C.},
6 title={Mechanical alloying and milling},
7 journal={Progress in Materials Science},
8 year={2001},
9 volume={46},
10 number={1-2},
11 pages={1-184},
12 doi={10.1016/S0079-6425(99)00010-9},
13 note={cited By 3761},
14 url={http://www.scopus.com/inward/record.url?eid=2-
15 s2.0-0034742774&partnerID=40&md5=0a69ba5b55d3963d947cc70f77a2ed11},
16 affiliation={Department of Metallurgical Eng., Colorado School of
17 Mines, Golden, CO 80401-1887, United States},
18 abstract={Mechanical alloying (MA) is a solid-state powder processing
19 technique involving repeated welding, fracturing, and rewelding of
20 powder particles in a high-energy ball mill. Originally developed to
21 produce oxide-dispersion strengthened (ODS) nickel- and iron-base
22 superalloys for applications in the aerospace industry, MA has now
23 been shown to be capable of synthesizing a variety of equilibrium and
non-equilibrium alloy phases starting from blended elemental or
prealloyed powders. The often vexing problem of powder contamination
has been analyzed and methods have been suggested to avoid/minimize
it. © 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}
```

Structure Messages / Log Source Viewer Ready UTF-8 Normal Mode

How does this file look like?

In TeXworks:



JabRef - C:\Users\gphani\Downloads\scopus.bib

File Edit Search Groups View BibTeX Tools Options Help

scopus.bib

Search... regular expression Case sensitive | Filter | Search globally | ?

#	Ranking	Entrytype	Author ^	Title ^	Year v	Journal	Bibtexkey
1		Article	A	PRINCIPLES OF MELT-SPINNING	1967	Man-Made Fibers. Scien...	ZIABICKIA1967169
2		Article	Akihisa et al.	Zr-Al-Ni amorphous alloys with high glass transition te...	1990	Materials Transactions, J...	Inoue1990177
3		Article	C.	Mechanical alloying and milling	2001	Progress in Materials Sci...	Suryanarayana20011
4		Article	J.C. and J.W.	Solute trapping by rapid solidification	1969	Acta Metallurgica	Baker1969575
5		Article	K. et al.	Structural formation during melt spinning process	1968	Kolloid-Zeitschrift & Zeits...	Katayama1968125
6		Article	M.E. and R.J.	Investigation of solid/liquid interface temperatures via i...	1967	Journal of Crystal Growth	Glicksman1967297
7		Article	Tao et al.	Amorphous Zr-Al-TM (TM=Co, Ni, Cu) alloys with signifi...	1991	Materials Transactions, J...	Zhang19911005
8		Article	W. et al.	Theory of microstructural development during rapid soli...	1986	Acta Metallurgica	Kurz1986823

Article (Inoue1990177)
 Akihisa, I.; Tao, Z. & Tsuyoshi, M.
 Zr-Al-Ni amorphous alloys with high glass transition temperature and significant supercooled liquid region
Materials Transactions, JIM, **1990**, 31, 177-183

Abstract: Amorphous Zr-Al-Ni alloys exhibiting a wide temperature region of supercooled liquid state and a high reduced glass transition temperature (T_g/T_m) were formed over a composition range from 0 to 37 at% Al and 3 to 67% Ni by melt spinning. The temperature span $\Delta T_x (=T_x - T_g)$ between T_g and crystallization temperature (T_x) reaches as large as 77 K for Zr60Al15Ni25. The T_g/T_m is also as high as 0.64 in the vicinity of Zr60Al20Ni20 and their Zr-Al-Ni alloys are concluded to have a large glass-forming capacity. The T_x and hardness (H_v) increase with increasing Al and Ni contents in the range from 660 to 860 K and 400 to 720, respectively, and the tensile strength also has a similar compositional dependence in the range of 1335 to 1720 MPa. The compositional effect on T_x and H_v was presumed to originate from the variation of the atomic configuration which reflects the equilibrium compounds, because of the similarity in the compositional dependence among T_x , H_v and the melting temperature of the compounds. The high thermal stability of the

Status:

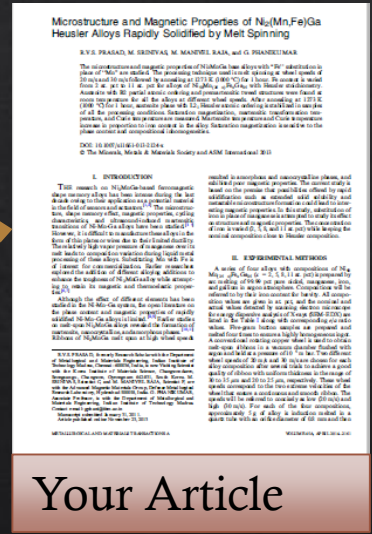
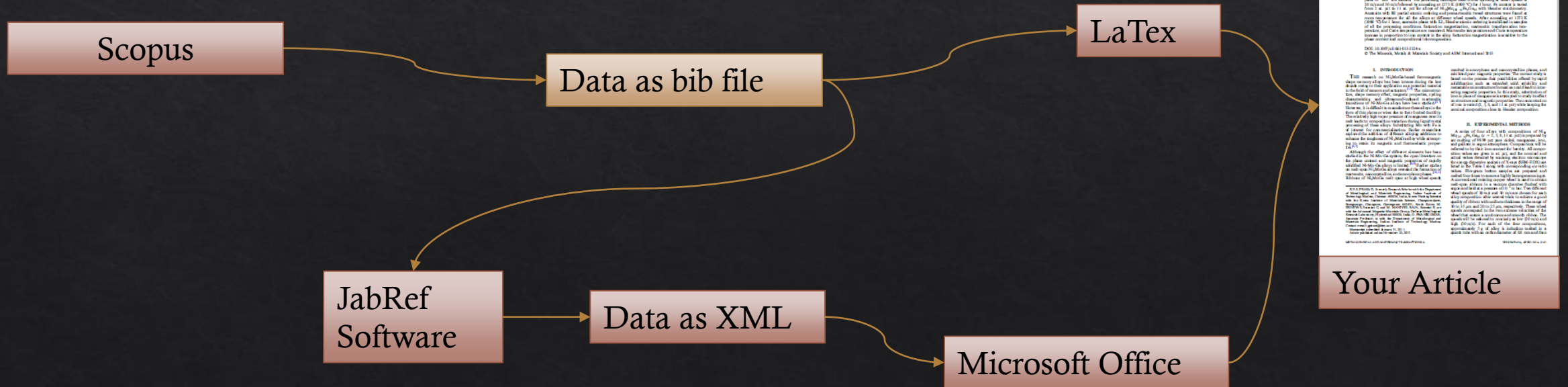
This is how the file looks like in JabRef

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 convert BibTeX data into XML format (.xml file) for use in Microsoft Office™ to typeset an article and cite the references



End of Module