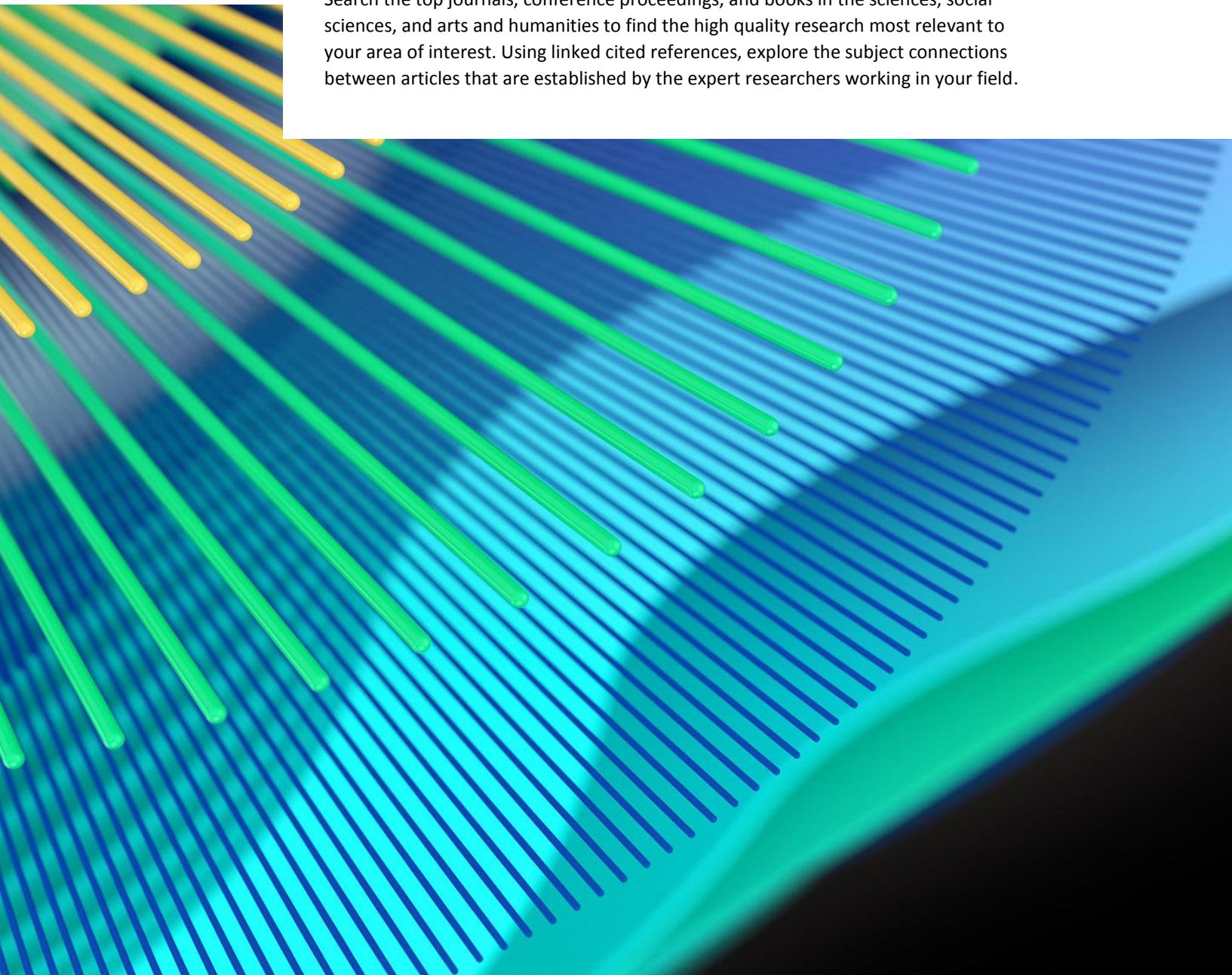


Quick Reference Guide

Web of Science Core Collection

What is the Web of Science Core Collection?

Search the top journals, conference proceedings, and books in the sciences, social sciences, and arts and humanities to find the high quality research most relevant to your area of interest. Using linked cited references, explore the subject connections between articles that are established by the expert researchers working in your field.



Basic search

The screenshot shows the Web of Science search interface. At the top, there is a navigation bar with links to Web of Science, InCites, Journal Citation Reports, Essential Science Indicators, EndNote, Publons, and Kopernio. On the right, there are links for Sign In, Help, and English. Below this is the 'Web of Science' header and the Clarivate Analytics logo. A secondary navigation bar contains 'Tools', 'Searches and alerts', 'Search History', and 'Marked List'. The main search area includes a 'Select a database' dropdown menu (callout 5) currently set to 'Web of Science Core Collection'. Below this are tabs for 'Basic Search' (callout 1), 'Author Search', 'Cited Reference Search', 'Advanced Search', and 'Structure Search'. A search input field (callout 4) contains the text 'Example: oil spill* mediterranean'. To the right of the input field is a 'Topic' dropdown menu (callout 7) and a 'Search' button. Below the input field is a 'Timespan' dropdown menu (callout 2) set to 'All years (1900 - 2019)'. A 'More settings' link is also present. A 'Claim your publications' button is located in the top right corner. Callout 3 points to the top navigation bar, and callout 6 points to the '+ Add row | Reset' link below the search button.

1

Choose a search option:

- Basic Search
- Author Search
- Cited Reference Search
- Advanced Search
- Structure Search

2

Limit your search:

Change your timespan limits or limit the indexes you wish to search. Click **More Settings** to see the list of all the indexes included in your *Web of Science Core Collection* subscription.

3

Tools

Use **Tools** and **Searches & Alerts** to move to your Saved Searches, *EndNote* online account, *Kopernio* or *Publons*.

4

Search

Combine words and phrases to search across the source records in the *Web of Science Core Collection*.

5

Select a database

Use the dropdown to select another content set on the *Web of Science*

6

Add another search field

7

Select your search field

Use the drop down to select your search field or choose **All Fields** to search any field in the *Web of Science Core Collection* record.

Search operators

- Use **AND** to find records containing all of your search terms
- Use **OR** to find records containing any of your search terms
- Use **NOT** to exclude records containing certain words from your search
- Use **NEAR/n** to find records containing all terms within a certain number of words (n) of each other (stress NEAR/3 sleep)
- Use **SAME** in an Address search to find terms in the same line of the address (Tulane SAME Chem)

Wild card characters

Use truncation for more control of the retrieval of plurals and variant spellings

* zero to many characters

? one character

\$ zero or one character

Phrase Searching

To search exact phrases in Topic or Title searches, enclose a phrase in quotation marks. For example, the query “energy conservation” finds records containing the exact phrase energy conservation.

Author name

Enter the last name first, followed by a space and up to five initials.

- Use truncation and search alternative spelling to find name variants:
- Driscoll C finds Driscoll C, Driscoll CM, Driscoll Charles, and so on.
- Driscoll finds all authors with the last name Driscoll.
- Search variant forms of names containing particles. For example, De la Cruz F OR Delacruz F finds Delacruz FM, De La Cruz FM, and so on.

Your Web of Science Profile

- Save records to EndNote online
- Integrate with Publons
- Claim your Author Records and provide author feedback
- Save search histories and alerts
- Save your custom search settings
- Save Marked Lists



Search results

The screenshot shows the Web of Science search results interface. The top navigation bar includes links to Web of Science, InCites, Journal Citation Reports, Essential Science Indicators, EndNote, Publons, and Kopernio. The main header displays 'Web of Science' and 'Clarivate Analytics'. The search bar shows 'You searched for: TOPIC: (microbio me) ...More'. The results section lists several articles, with the first one titled 'Biofilm as a risk factor in implant treatment'. The right sidebar contains 'Analyze Results' and 'Create Citation Report' options. A 'Citation report for 4,897 results from Web of Science Core Collection' is displayed, showing various metrics and a line graph of 'Sum of Times Cited per Year'.

Numbered callouts on the screenshot:

- 1: Article title
- 2: Results
- 3: Sort results
- 4: View Abstract
- 5: Refine your results
- 6: Export search results
- 7: Create Citation Report

1

Article title

Click the article title to move to the full record. Links to full text may also be available (subscription required).

2

Results

Click **More** to view your full search statement. Click **Create Alert** to save this search statement as a search alert.

3

Sort results

By Publication Date (default), Times Cited, Usage Count, Recently Added, Source, First Author or Conference name.

4

View Abstract

Click **View Abstract** to open the abstract on this page.

5

Refine your results

Use Refine Results to mine your full set of results to find Hot & Highly Cited Papers, top Subject Categories, Publication Years, and more. Click **View All Options** to see the complete list of fields.

6

Export search results

Export to bibliographic management tools like *EndNote*, send to *InCites* for analysis, save as text, email, or add up to 50,000 to Marked List. Save up to 50 Marked Lists containing up to 50,000 records per list.

7

Create Citation Report

Click **Create Citation Report** to see a citation overview for any set of results with fewer than 10,000 records.

Full record

Web of Science

Clarivate Analytics

Search Search Results

Tools Searches and alerts Search History Marked List

Look Up Full Text Full Text Options

Save to EndNote online Add to Marked List

11

1 of 1

1

2

3

4

5

6

7

Cleaning of Oil Fouling with Water Enabled by Zwitterionic Polyelectrolyte Coatings: Overcoming the Imperative Challenge of Oil-Water Separation Membranes

By: He, K (He, Ke)^[1,2]; Duan, HR (Duan, Haoran)^[1,1]; Chen, GY (Chen, George Y.)^[1,1]; Liu, XK (Liu, Xiaokong)^[1,1]; Yang, WS (Yang, Wensheng)^[2,1]; Wang, DY (Wang, Dayang)^[1,1]

View ResearcherID and ORCID

ACS NANO

Volume: 9 Issue: 9 Pages: 9188-9198

DOI: 10.1021/acsnano.5b03791

Published: SEP 2015

Document Type: Article

View Journal Impact

Abstract

Herein we report a self-cleaning coating derived from zwitterionic poly(2-methacryloyloxyethyl phosphorylcholine) (PMPC) brushes grafted on a solid substrate. The PMPC surface not only exhibits complete oil repellency in a water-wetted state (i.e., underwater superoleophobicity), but also allows effective cleaning of oil fouled on dry surfaces by water alone. The PMPC surface was compared with typical underwater superoleophobic surfaces realized with the aid of surface roughening by applying hydrophilic nanostructures and those realized by applying smooth hydrophilic polyelectrolyte multilayers. We show that underwater superoleophobicity of a surface is not sufficient to enable water to clean up oil fouling on a dry surface, because the latter circumstance demands the surface to be able to strongly bond water not only in its pristine state but also in an oil-wetted state. The PMPC surface is unique with its described self-cleaning performance because the zwitterionic phosphorylcholine groups exhibit exceptional binding affinity to water even when they are already wetted by oil. Further, we show that applying this PMPC coating onto steel meshes produces oil water separation membranes that are resilient to oil contamination with simply water rinsing. Consequently, we provide an effective solution to the oil contamination issue on the oil water separation membranes, which is an imperative challenge in this field. Thanks to the self-cleaning effect of the PMPC surface, PMPC-coated steel meshes can not only separate oil from oil water mixtures in a water-wetted state, but also can lift oil out from oil water mixtures even in a dry state, which is a very promising technology for practical oil-spill remediation. In contrast, we show that oil contamination on conventional hydrophilic oil water separation membranes would permanently induce the loss of oil water separation function, and thus they have to be always used in a completely water-wetted state, which significantly restricts their application in practice.

Keywords

Author Keywords: self-cleaning; oil-water separation; oil spill remediation; oil cleaning; zwitterionic surface; polymer brush; thin film

KeyWords Plus: TRANSFER RADICAL POLYMERIZATION; SELF-ASSEMBLED MONOLAYERS; OIL/WATER SEPARATION; HYDROPHOBIC SURFACES; PROTEIN ADSORPTION; PVDF MEMBRANE; LARGE-SCALE; HYDRATION; BRUSHES; MESH

Author Information

Reprint Address: Liu, XK (reprint author)

Univ S Australia, Ian Wark Res Inst, Mawson Lakes, SA 5095, Australia.

Organization-Enhanced Name(s)

University of South Australia

Addresses:

[1] Univ S Australia, Ian Wark Res Inst, Mawson Lakes, SA 5095, Australia

[2] Jilin Univ, Coll Chem, State Key Lab Supramol Struct & Mat, Changchun 130012, Peoples R China

[3] Univ S Australia, Laser Phys & Photon Devices Labs, Mawson Lakes, SA 5095, Australia

E-mail Addresses: xiaokong.liu@unisa.edu.au

Funding

Funding Agency	Grant Number
State Government of South Australia	
ITEK Ventures Pty Ltd.	RC44943
Australian Research Council	DP120102959

Close funding text

X. L. thanks the State Government of South Australia and ITEK Ventures Pty Ltd. for the Research Connections Grant (RC44943); D. W. thanks the Australian Research Council (DP120102959).

8

9

10

Citation Network

In Web of Science Core Collection

90

Times Cited

Create Citation Alert

All Times Cited Counts

90 in All Databases

See more counts

58

Cited References

View Related Records

Most recently cited by:

Li, Hui; Zhu, Lei; Zhang, Jianqiang; et al.

High-efficiency separation performance of oil-water emulsions of polyacrylonitrile nanofibrous membrane decorated with metal-organic frameworks.

APPLIED SURFACE SCIENCE (2019)

Liang, Bang; Zhang, Guangyu; Zhong, Zhensheng; et al.

Substrate-independent polyzwitterionic coating for oil/water separation membranes.

CHEMICAL ENGINEERING JOURNAL (2019)

View All

Use in Web of Science

Web of Science Usage Count

28 307

Last 180 Days Since 2013

Learn more

This record is from:

Web of Science Core Collection

Science Citation Index Expanded

Suggest a correction

If you would like to improve the quality of the data in this record, please suggest a correction.

Fields included in a Topic Search:

1

Title

All titles are indexed as published.
Foreign language titles are translated into US English.

2

Abstract

All abstracts are indexed as provided by the journal (1991 to present).

3

Author Keywords and KeyWords Plus

Author Keywords are indexed from the original article and are searchable.
KeyWords Plus are words and phrases harvested from the titles of the cited articles. Click on the Keyword or Phrase to perform a search on the terms.

4

Additional fields:

4

Author names

All authors are indexed. Search using last names and initials (e.g. Garfield e).

5

Author Identifiers

Web of Science ResearcherIDs and ORCID IDs are searchable and displayed when available. Web of Science ResearcherIDs are associated with *Publons* profiles at publons.com. ORCID data is harvested from orcid.org.

6

Addresses and Organization Enhanced Names

All author addresses are indexed and searchable. Reprint author e-mail addresses are listed when available. Organization Enhanced Names are used to help identify institutions with complex names, or with many address variations.

7

Funding Information

Funding agency, grant numbers, and the funding acknowledgement text is searchable (availability varies by index).

8

Citation Network

- Cited References
- Times Cited Counts
- Related Record Search
- Citation Alerts

Times cited counts for the *Web of Science Core Collection* and the *Web of Science* platform (including *Web of Science Core Collection*, *Biosis Citation Index*, *Chinese Science Citation Database*, *Data Citation Index*, *Russian Science Citation index* and *SciELO Citation Index*) are displayed on each record. Counts reflect all correct citations and are not limited by your subscription.

9

Cited References

All cited references are indexed and searchable via Cited Reference Search. Click the “Cited References” link in the Citation Network to move to the cited reference view.

10

Usage count

See the number of full text click-throughs or bibliographic exports for this item in the last 180 days or since 2013.

11

Look Up Full Text

Link to full text, library holdings or Google Scholar. Or use Kopernio for one-click access to full text subscription and open access content from anywhere.

Cited Reference Search

Step One

- Navigate to Cited Reference Search.
- Search by Cited Title, Cited Author, Cited Work, Cited Year, Volume, Issue, or Page.
- Use the Journal Abbreviations List for help with abbreviations.

Step Two

Select the references, including variants, to include in your search, then click “Finish Search” to display your search results.

Basic Search
Author Search BETA
Cited Reference Search
Advanced Search
Structure Search

Find the articles that cite a person's work.

Step 1: Enter information about the cited work. Fields are combined with the Boolean AND operator.

✕

Cited Author

Select from Index

✕

Cited Work

Select from Index
View abbreviation list

✕

Cited Year(s)

Search

[+ Add row](#) | [Reset](#)

1
2

* "Select All" adds the first 1000 matches to your cited reference search, not all matches.

Select Page
Select All *
Clear

Select	Cited Author	Cited Work <small>[Expand Titles]</small>	Title <small>[Expand Titles]</small>	Early Access Year <small>***</small>	Year	Volume	Issue	Page	Identifier <small>[i]</small>	Citing Articles <small>**</small>
<input type="checkbox"/>	Anand, K <small>±: [Show all authors]</small>	SCIENCE	Coronavirus main proteinase (3CL(pro)) structure...		2023	300	5626	1763	DOI: 10.1126/science.1085658	465
<input type="checkbox"/>	ANAND K	SCIENCE			2003	300		1463		1
<input type="checkbox"/>	ANAND K	SCIENCE			2003	13		13		1
<input type="checkbox"/>	ANAND K	SCIENCE			2003					3
<input type="checkbox"/>	ANAND K	SCIENCE								1
<input type="checkbox"/>	ANAND K	SCIENCE 0513			2003					2
<input type="checkbox"/>	ANAND K	SCIENCE 1305			2003					1
<input type="checkbox"/>	ANAND K	SCIENCEEXPRESS			2003					1
<input type="checkbox"/>	van Geen, Alexander <small>±: [Show all authors]</small>	SCI TOTAL ENVIRON	Field testing of over 30,000 wells for arsenic...		2019	654		1358	DOI: 10.1016/j.scitotenv.2018.11.201	2

Select Page
Select All *
Clear

[Export Table](#) | [Finish Search](#)

* "Select All" adds the first 1000 matches to your cited reference search, not all matches.
 ** Citing Article counts are for all editions and all years, not just for your current editions and year limits.
 *** Early Access Year is when a work is fully peer-reviewed, citable, and published but has not been assigned a volume/issue/page number.

Cited reference search tips:

- Use wild card characters (see page 2) on Cited Authors and Cited Work.
- Look for variants (sometimes papers are cited incorrectly) before finishing your search.
- The “Citing Articles” count reflects citations from all years and all editions of the Web of Science Core Collection – even those years and editions you don’t subscribe to.
- All cited references are indexed and searchable, including references to books, patents, government documents, etc. Secondary cited authors, full source titles, and non-standard source abbreviations are automatically searched across all source records in the Web of Science. Keep in mind that a search of this sort may only return partial results.
- Since 2012, all references to ‘non source’ items (books, newspaper items, etc.) are fully indexed (full list of authors, full title, etc.) as published. Click “Show Expanded Titles” to see the full reference information.

Getting Help

Click the Help button on any page to get detailed help on features as well as detailed search tips and examples.

Stay Informed about Web of Science at:
clarivate.com/webofsciencegroup/solutions/web-of-science/

Contact the Technical Help Desk for your region at:
support.clarivate.com/s/

LibGuides: clarivate.libguides.com

About the Web of Science Group

The *Web of Science Group*, a Clarivate Analytics company, organizes the world's research information to enable academia, corporations, publishers and governments to accelerate the pace of research. It is powered by the *Web of Science* – the world's largest publisher-neutral citation index and research intelligence platform. Its many well-known brands also include *Converis*, *EndNote*, *Kopernio*, *Publons*, *ScholarOne* and the *Institute for Scientific Information (ISI)*. The 'university' of the Web of Science Group, ISI maintains the knowledge corpus upon which the index and related information and analytical content and services are built; it disseminates that knowledge externally through events, conferences and publications and it carries out research to sustain, extend and improve the knowledge base. For more information, please visit webofsciencegroup.com.

Contact our experts today:

+1 215 386 0100 (U.S.)

+44 (0) 20 7433 4000 (Europe)

webofsciencegroup.com