



Politechnika
Wroclawska

Searching for scientific knowledge

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Faculty of Civil Engineering

Department of Materials Engineering and Construction Processes

Knowledge sources

- **Scientific publications:**
 - Journals from the JCR (Journal Citation Report) list with the Impact Factor,
 - Other journals,
 - Books or chapters in books.
- **Conference presentations,**
- **Reports, doctoral dissertations, master's theses,**
- **Pages of scientists, research projects,**
- **Patents,**
- **R&D company websites,**
- **Training, schools for PhD students.**

School for PhD students

- Materials engineering – from modeling to application (MEMO):

- <https://k82.pwr.edu.pl/dydaktyka/memo---szkola-zimowa/introducing-memo-2.html>

Research
Publishing
Properties optimization
Designing of materials
Development of new materials

NAWA ONSITE 17-21 October 2022 Wrocław University of Science and Technology

Materials Engineering - from modelling to application (MEMO)
NAWA STER WUST summer/winter school program, school chair: Adrian Chojec

How to prepare scientific papers?

17.10.2022 Day 1

8:00 - 8:30 Registration
8:30 - 8:45 Opening ceremony - prof. Danuta Bryja, Dean of the Civil Engineering Faculty, WUST
8:45 - 9:05 Getting funding in materials engineering: challenges and perspectives - prof. Lukasz Sadowski, WUST

1st lecturer: Prof. John Provis, University of Sheffield

Scientific papers in materials engineering

9:05 - 10:35 Significance of background of publishing - lecture part I (1x1,5h)
10:35 - 11:00 Break
11:00 - 12:30 Significance of background of publishing - lecture part II (1x1,5h)
12:30 - 13:30 Break
13:30 - 14:00 Guest lecturer: Dr Andrzej Żak, WUST

How are materials engineering papers reviewed and published?

14:00 - 15:30 Publishing process from submitting to publishing - lecture (1x1,5h)
15:30 - 16:00 Break
16:00 - 17:30 How your paper is good? - lecture (1x1,5h)

Modelling of materials

18.10.2022 Day 2

2nd lecturer: Dr Leonardo Leonetti, University of Calabria

Computational models for geometric nonlinear analysis

9:00-11:00 Fundamental theory and models implementations - lecture part I (1x2,0h)
11:00 - 11:30 Break
11:30 - 12:00 Guest lecturer: Machine learning in evaluation of the properties of cementitious composites - Dr Sławomir Czarnecki, WUST
12:00 - 14:00 Fundamental theory and models implementations - lecture part II (1x2,0h)
14:30 - 16:00 1st and 11nd grade Student Event - poster session (NewWay student research club)

19.10.2022 Day 3

2nd lecturer: Dr Leonardo Leonetti, University of Calabria

9:00 - 11:00 FEM code implementation in practise - FEM training - lecture (1x2,0h)
11:00 - 11:15 Break

Applications of materials

19.10.2022 Day 3

3rd lecturer: Dr Bartłomiej Sawicki, TU Braunschweig

Ultra High Performance Fibre Reinforced Cementitious composites

11:15 - 13:15 History and material formulation - lecture (1x2,0h)
13:15 - 14:00 Break
14:00 - 16:00 Material and structural properties - lecture (1x2,0h)
16:00 - 16:30 Guest lecturer: Using Oil Refinery Wastes as a supplement for Cement and Aggregate in Concrete - Dr Paweł Niewiadomski, WUST
16:30 - 16:45 Break
16:45 - 18:45 Application of material - lecture (1x2,0h)

Modelling of materials

20.10.2022 Day 4

4th lecturer: Dr Neven Ukrainczyk, TU Darmstadt

Numerical Methods for PDEs in Octave/Matlab

9:00 - 10:30 Fundamental theory - lecture part I (1x1,5h)
10:30 - 11:00 Break
11:00 - 12:30 Fundamental theory - lecture part II (1x1,5h)
12:30 - 13:00 Break
13:00 - 14:30 Case study and implementations - lecture part I (1x1,5h)
14:30 - 15:30 Break
15:30 - 17:00 Case study and implementations - lecture part II (1x1,5h)
17:00 - 17:30 Guest lecturer: Practical Hints and Tips for a MSCA Postdoctoral Fellowships applications - prof. Paweł Sikora, ZUT Szczecin
17:30 - 18:00 Guest lecturer: Graphene-engineered cementitious composites - Dr Murugan Muthu, WUST

Applications of materials

21.10.2022 Day 5

5th lecturer: Prof. Mohamed Abd Elrahman, Mansoura University

Sustainable construction materials

9:00 - 10:30 Ultra-lightweight materials - lecture part I (1x1,5h)
10:30 - 11:00 Break
11:00 - 12:30 Ultra-lightweight materials - lecture part II (1x1,5h)
12:30 - 13:00 Break
13:00 - 14:30 Utilization of industrial solid wastes - lecture part I (1x1,5h)
14:30 - 15:30 Break
15:30 - 16:00 Guest lecturer: Development and characterization of Eco-friendly ultra high performance mortar using recycled steel fiber and spent catalyst - Dr Hassan Abdolpour, WUST
16:00 - 17:30 Utilization of industrial solid wastes - lecture part II (1x1,5h)

Visit our website!
<https://k82.pwr.edu.pl/dydaktyka/memo---szkola-zimowa>
Any questions? Please feel free to ask: adrian.chojec@pwr.edu.pl

Sign in on our event!
<https://forms.gle/MSvPgNVLZVp6Y3mw7>

SIGN UP NOW

Scientific publication

Definition of a scientific publication:

„An article in a scientific journal or book that meets specific, strict validity criteria, describing original research and its conclusions, or gathering conclusions from previously published work in a review. Scientific publications are usually the scientific primary source”

Source: https://pl.wikipedia.org/wiki/Publikacja_naukowa

Searching for scientific publications

Scientific profiles:

- <http://scholar.google.pl/>,
- <https://www.researchgate.net>.

Scopus:

- <https://www.scopus.com>,

Databases of publishers of scientific journals (e.g. Elsevier, Springer):

- <http://www.sciencedirect.com/>,
- <http://www.link.springer.com/>,

Databases available after logging in from the website of the Wrocław University of Science and Technology library:

- <http://biblioteka.pwr.edu.pl/e-zasoby/bazy-danych>,
- Remote access: <http://biblioteka.pwr.edu.pl/e-zasoby/zdalny-dostep-proxy>.

Searching for scientific publications

An example based on: <http://www.sciencedirect.com/>:

ScienceDirect books

Keyword: „concrete” Author name: „Sadowski”

Search for peer-reviewed journal articles and book chapters (including open access content)

Keywords Author name Journal/book title Volume Issue Page

Advanced search

66 results

Set search alert

Article type

Publication title

Refine by:

Years

2021 (4)

2020 (9)

2019 (7)

Review articles (1)

Research articles (60)

Encyclopedia (3)

Book chapters (1)

Construction and Building Materials (11)

Composite Structures (5)

Archives of Civil and Mechanical Engineering (4)

Searching for scientific publications

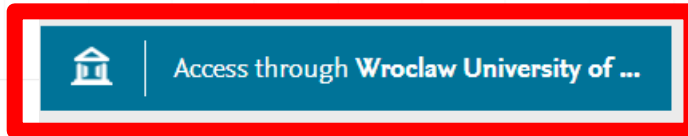
An example based on: <http://www.sciencedirect.com/>:

Research article

New paradigm in the metrology of concrete surface morphology: Methods, parameters and applications

Measurement, 28 September 2020, ...

Łukasz Sadowski, Jerzy Hoła, ... Thomas G. Mathia



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Access from WUST e-mail



Measurement

Volume 169, February 2021, 108497



New paradigm in the metrology of concrete surface morphology: Methods, parameters and applications ☆

Łukasz Sadowski ^a , Jerzy Hoła ^a , Lech Czarnecki ^b , Thomas G. Mathia ^c

Recommended articles

Performance of swarm intelligence bas...
Measurement, Volume 169, 2021, Article 108...

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Electrical analogy approach to estimate ...
Measurement, Volume 169, 2021, Article 108...

Purchase PDF View details

A novel coordinated detection method f...
Measurement, Volume 169, 2021, Article 108...



Patent search

Google patents:

- <https://patents.google.com/>,

Database of the Patent Office of the Republic of Poland:

- <https://ewyszukiwarka.pue.uprp.gov.pl/>,

Database of the European Patent Office:

- <https://www.epo.org/searching-for-patents.html>,

International databases:

- <https://worldwide.espacenet.com/>,
- <https://www.wipo.int/patentscope/en/>,
- <https://depatisnet.dpma.de/>,
- <http://patft.uspto.gov/>,
- <https://register.epo.org/regviewer>.

Patent search

An example based on: <https://www.epo.org/searching-for-patents.html>:

Kryteria wyszukiwania

Wpisz frazę - min. 3 znaki Uwzględnij polskie znaki **SZUKAJ**

WYSZUKIWARKA ZAAWANSOWANA

Wyszukaj w typach:
Znaki Towarowe, Wynalazki, Patenty Europejskie, Dodatkowe Prawa Ochronne, Wzory Użytkowe, Wzory Przemysłowe, Topografia Układów Scalonych
oraz w kolekcjach:
BUP, WUP, E-rejestr, Opisy patentowe, Skróty opisów patentowych, Opisy wzorów użytkowych, Opisy wzorów przemysłowych, Tłumaczenia patentów europejskich z uwzględnieniem polskich znaków

▼ Rodzaje PWP x

- Znaki Towarowe
- Wynalazki
- Patenty Europejskie
- Dodatkowe Prawa Ochronne
- Wzory Użytkowe
- Wzory Przemysłowe

Keyword: „beton”

Number of patents (155)

LISTA WYSZUKANYCH REKORDÓW

Wszystkie PWP (749)				
Znaki Towarowe (386)	Wynalazki (155)	Wzory Użytkowe (101)	Patenty Europejskie (96)	Wzory Przemysłowe (11)
Wszystkie kolekcje (10201)				
Opisy patentowe (3959)	E-rejestr (3857)	Tłumaczenia patentów europejskich (1224)	Skróty opisów patentowych (519)	
Opisy wzorów użytkowych (331)	Opisy wzorów przemysłowych (202)	WUP (82)	BUP (27)	

Search trends analysis

How to find out what Internet users from around the world are looking for?:

- <https://trends.google.com>

Dowiedz się, czego
szukają internauci
z całego świata

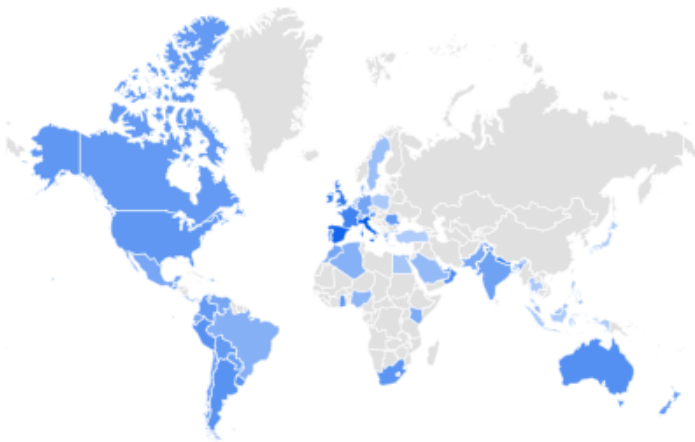
coronavirus



Search trends analysis

How to find out what Internet users from around the world are looking for?:

- <https://trends.google.com>




1	Włochy	100	<div style="width: 100%;"></div>
2	Hiszpania	90	<div style="width: 90%;"></div>
3	Katar	85	<div style="width: 85%;"></div>
4	Wielka Brytania	72	<div style="width: 72%;"></div>
5	Nepal	71	<div style="width: 71%;"></div>

Search trends analysis

How to find out what Internet users from around the world are looking for?:

- <https://trends.google.com>

 Zobacz tematy, które zyskały popularność w 2021 roku – **cały świat** ↕

Searches	News	Actors
1 Australia vs India	1 Afghanistan	1 Alec Baldwin
2 India vs England	2 AMC Stock	2 Pete Davidson
3 IPL	3 COVID Vaccine	3 Aryan Khan
4 NBA	4 Dogecoin	4 Gina Carano
5 Euro 2021	5 GME Stock	5 Armie Hammer

Tasks to be performed for the next class

1. Characterize your research using 4 keywords and list the 10 most cited articles in your field found in Scopus.
2. Provide the addresses of 3 researchers' websites in your field.
3. List 3 doctoral dissertations in your field.
4. List 3 patents in your field.