

#### TRAINING IN RESEARCH AND RESULTS TRANSFER

#### **YOUR DOCTORAL THESIS:**

# VISIBILITY AND IMPACT INDICATORS











#### Your doctoral tesis pathway

### YOUR DOCTORAL THESIS

















- 1.1. Signature and institutional affiliation
- 1.2. Authors identifiers: ORCID, ResearcherID, Scopus Author ID
- 1.3. Repositories and FUTUR
- 1.4. Social media and academic networks for research

#### 2. Evaluation and impact of scientific activity

- 2.1. Authors and articles impact indicators: citations, *h*-index
- 2.2. Alternative metrics: use, downloads, visits, social networks
- 2.3. Assessment and accreditation

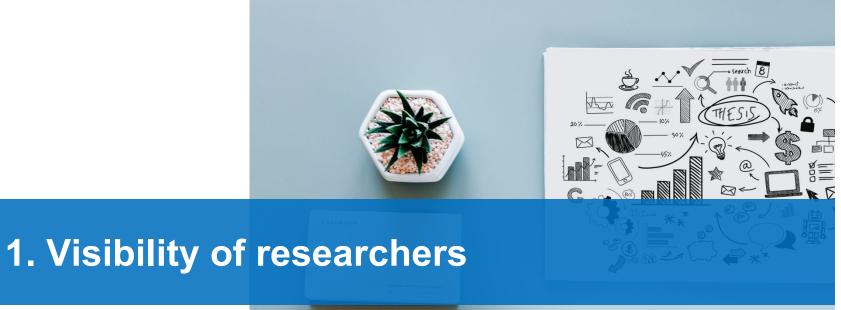




#### At the end of the workshop, participants will know:

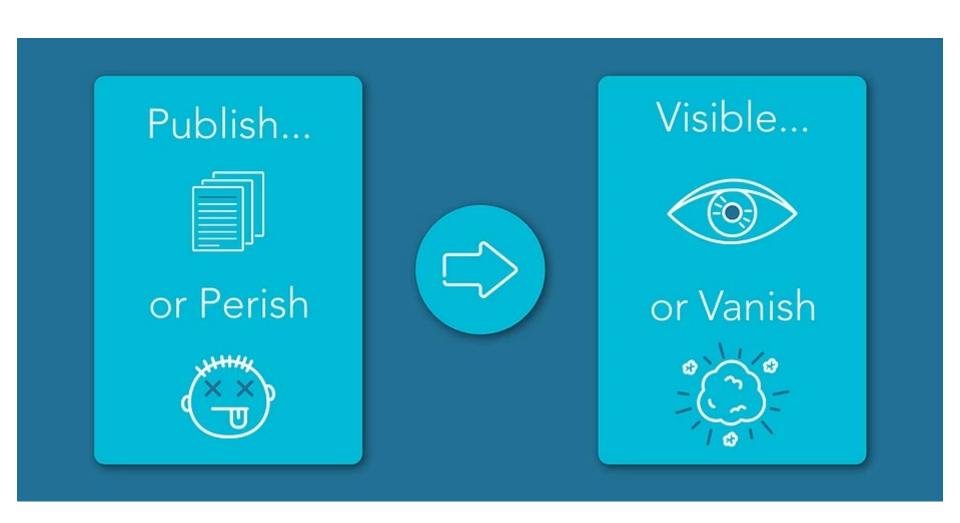
- √ How to properly sign publications
- ✓ How to use key authors identifiers (ORCID, etc.)
- ✓ More about UPCommons, the UPC's institutional repository, subject and data repositories and FUTUR, the website for the scientific output of UPC researchers
- √ How to make research more visible using social media and academic social networks
- ✓ More about authors and articles impact indicators and alternative metrics













During a study and once the article has been published, it is very important to maximise the visibility of what we are doing or what we have already done.





Plan your digital identity!





# PRIOR TO PUBLICATION



- Signature and institutional affiliation
- Author identifiers
- Open access

# DURING PUBLICATION



- UPCommons
- Thematic repositories
- Data repositories

# AFTER PUBLICATION



- Review of database indexing
- Social media sites
- Academic social networks
- Repositories and Futur



#### 1.1. Signature and institutional affiliation

### PRIOR TO PUBLICATION



#### Use of various forms of a name

- Citations received
- Visibility
- Retrieval of information in databases



# Authors with the same or similar names:

- -Could be difficult to differentiate
- -The names could lead to errors

http://bibliotecnica.upc.edu/investigadors/signatura-filiacio-institucional



#### 1.1. Signature and institutional affiliation

### PRIOR TO PUBLICATION







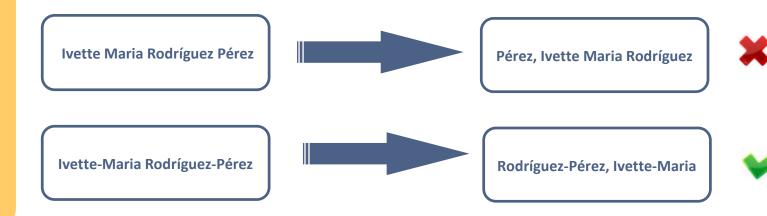
#### 1.1. Signature and institutional affiliation

### PRIOR TO PUBLICATION



#### How can we avoid problems with our scientific signature?

- Keep the same signature during our academic careers.
- Choose a format that will be interpreted correctly by databases.
- Include author identifiers such as ORCID.
- Include the institutional affiliation correctly.

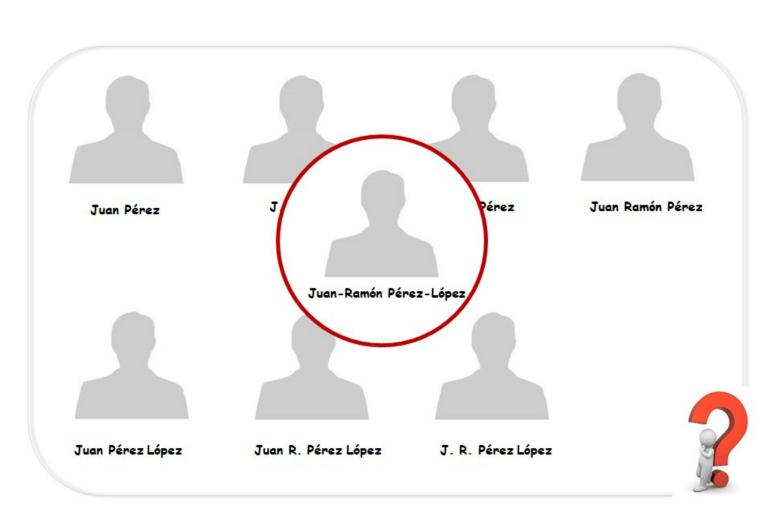




#### 1.1. Signature and institutional affiliation

## PRIOR TO PUBLICATION







1.1. Signature and institutional affiliation

### PRIOR TO PUBLICATION



#### Institutional affiliation

- 1. Department
- 2. Research group
- 3. Research institute
- 4. Research laboratory
- 5. Research centre
- 6. Chair
- 7. University service
- 8. Teaching centre





Universitat Politècnica de Catalunya (UPC)

Postal address



#### 1.1. Signature and institutional affiliation

### PRIOR TO PUBLICATION



Joan-Ramón Pérez-López<sup>1,</sup> Pere González-Miró<sup>2</sup>

<sup>1</sup> Departament de Mecànica de Fluids (MF), Escola Superior d'Enginyeries Industrial, Aeronàutica i Audiovisual de Terrassa (ESEIAAT), Universitat Politècnica de Catalunya (UPC), Ed. TR4, C. Colom, 11, 08222 Terrassa, Spain.

<sup>2</sup> Departament d'Enginyeria Mecànica (EM), Laboratori d'Enginyeria Acústica i Mecànica (LEAM), Escola Superior d'Enginyeries Industrial, Aeronàutica i Audiovisual de Terrassa (ESEIAAT), Universitat Politècnica de Catalunya (UPC), Ed. TR45, C. Colom, 11, 08222 Terrassa, Spain.

### Nomenclatura UPC

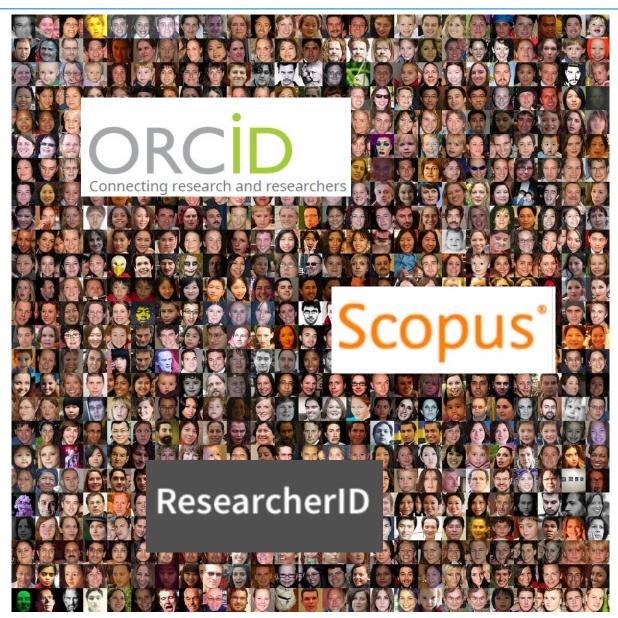
https://www.upc.edu/slt/nomenclatura-upc



1.2. Author identifiers

PRIOR TO PUBLICATION







1.2. Author identifiers

### PRIOR TO PUBLICATION



#### What are the advantages of unique identifiers?

- ✓ Standardise the name and institutional affiliation
- Correct identification errors in the author's name and affiliation
- ✓ Guarantee the unequivocal identification of your scientific and technical output
- ✓ Facilitate the retrieval and dissemination of publications.
- ✓ Link referenced research activities in different information systems
- ✓ Obtain new tools for identification in cycles of scientific work such as submission of articles to publishers
- ✓ Avoid subsequent errors in derived bibliometrics (*h*-index, citation reports, altmetric data, etc.)

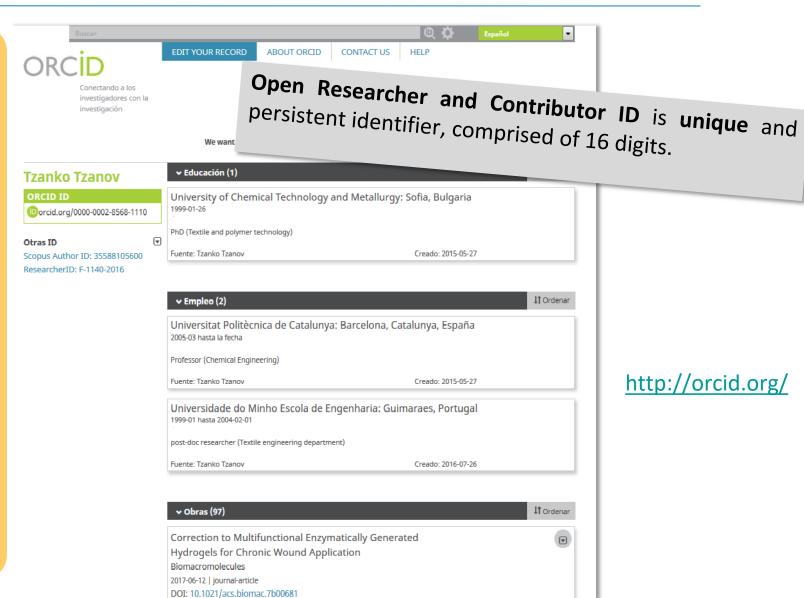
Is it necessary to have three identifiers?



1.2. Author identifiers









1.2. Author identifiers

### PRIOR TO PUBLICATION



#### Why should you register with ORCID?

- ✓ Eliminate ambiguity in your name, differentiate yourself from other authors and ensure correct attribution of publications
- ✓ Ensure the visibility of publications
- ✓ Minimize the time spent entering the same data repeatedly
- ✓ Link our register with **other information systems** (WOS ResearchID, Scopus Author ID, etc.)
- ✓ Identify yourself in the work cycles of scientific communication (submission of articles to publishers)
- ✓ A requirement to appear in the Catalan Research Portal (PRC):<a href="http://portalrecerca.csuc.cat/">http://portalrecerca.csuc.cat/</a>
- ✓ An identifier that is required to **participate in calls and grants** in Spain and internationally (H2020, AEI call, SGR 2017-2019, etc.)



1.2. Author identifiers

# PRIOR TO PUBLICATION



#### What can you do with ORCID to increase visibility?

- ✓ Add ORCID to DRAC
- ✓ Add ORCID to your email signature
- ✓ Add ORCID to your personal website, or the website of your research group
- ✓ Add ORCID to the profile of Google Scholar/profile of social academic networks
- ✓ Enable ORCID to be linked to Scopus and the Web of Science
- ✓ Sign your scientific output

Maria Albareda Sambola

ORCID ID: 0000-0002-7666-6218

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Terrassa School of Industrial, Aerospace and Audiovisual Engineering (ESEIAAT),

Universitat Politècnica de Catalunya (UPC),

Ed. TR5, C. Colom, 11, 08222 Terrassa, Spain



1.2. Author identifiers

FUTUR. Portal de la Producción Científica de los Investigadores de la UPC

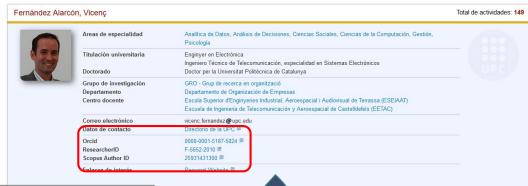
### PRIOR TO PUBLICATION

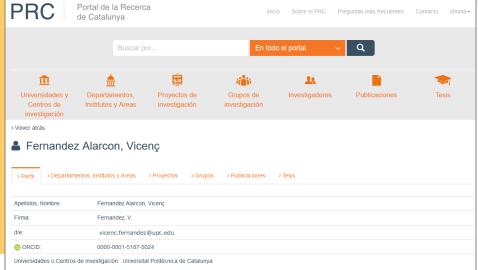














1.2. Author identifiers

### PRIOR TO PUBLICATION





https://publons.com/

- ✓ WoS ResearcherID is an author identification service provided by Web of Science.
- ✓ It is consulted from the Publons platform, which forms part of the Web of Science of Clarivate Analytics.
- ✓ You need to register, you will receive an individual identifying number that will differentiate you from other researchers.

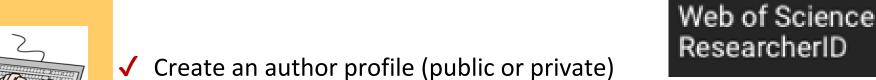




1.2. Author identifiers

### PRIOR TO PUBLICATION

#### What does WoS Researcher ID offer?



- ✓ Create and maintain a list of publications
- ✓ Generate metrics for Web of Science works: h-index, distribution of citations per year, total number of times cited, average citations received
- ✓ Seek potential collaborators based on the profiles that are created (does not require a subscription to Web of Science)
- Associate WoS ResearcherID with the ORCID identifier





1.2. Author identifiers

### PRIOR TO PUBLICATION

#### Register for Web of Science ResearcherID



- ✓ Go to <a href="https://publons.com/">https://publons.com/</a>.
- ✓ If you already have an old ResearcherID account, your profile will have been imported to Publons, and you will have kept the same number.
- ✓ If you do not have WoS ResearcherID, you need to create an account in Publons and import one or more publications from Web of Science.
- ✓ You will receive an email with your identifying code.
- ✓ From your profile, you can complete your data, add new publications or incorporate WoS ResearcherID and ORCID.
- ✓ From Web of Science, you could look for your publications and import them directly to your Publons profile.

More information: FAQ of Publons



1.2. Author identifiers

### PRIOR TO PUBLICATION



**Author ID** generates an identifier for each author who has publications in the database.

- ✓ Automatic allocation
- ✓ Profile only available for Scopus subscribers
- ✓ By carrying out an Author search, you can access all the information on this author: other forms of the name, references, h-index, etc.

# Scopus





1.2. Author identifiers

# Scopus

#### **SCOPUS Author ID**

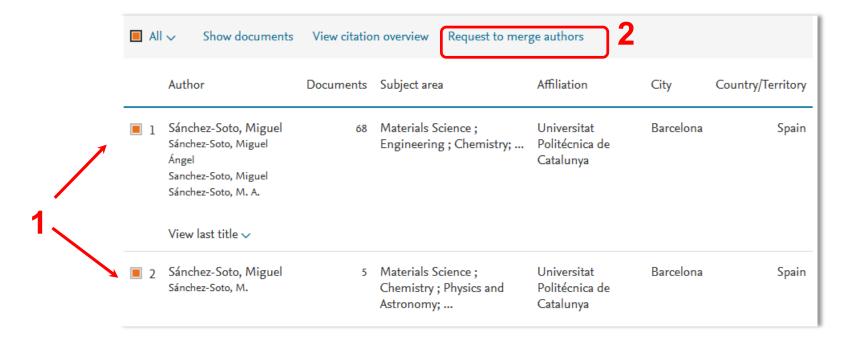
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	ter last name * ca-cladera				
All	Show documents	View citation overview	Request to r	merge authors	
	Author	Documents	h-index (i)	Affiliation	City
1	Roca, Josep Cladera, Josep Roca Cladera, J. Roca Cladera, Josep R.	34	6	Universitat Politècnica de Catalunya	Barcel



1.2. Author identifiers

#### Scopus Author ID

If researchers have two or more names in the databases, they can ask for their output to be grouped under **one entry**.





1.2. Author identifiers

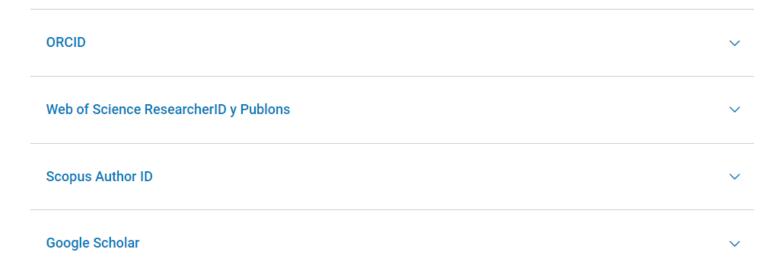
#### Identificadores y perfiles de investigadores

Existen diferentes iniciativas para evitar que las publicaciones de un autor estén incorrectamente atribuidas a otro investigador con el mismo nombre, o un nombre similar para las bases de datos que indexan las publicaciones.

Para evitar estas incidencias, te recomendamos que:

- Registrarte en ORCID 2 y obtengas tu identificador único
- Revisa periódicamente la información sobre tu autoría que muestra el Web of Science ResearcherID y el Scopus Author ID
- Firma tus publicaciones siempre con la misma firma y filiación institucional
- Crea un perfil de investigador a Google Scholar ☑

Incorpora tus identificadores ORCID, Web of Science ResearcherID y Scopus Author ID a DRAC 🗷 para que sean visibles en tu página personal de FUTUR 🗷.



https://bibliotecnica.upc.edu/es/investigadors/identificadors-perfils-investigadors



1.3. Repositories and Futur





#### **Open access repositories**

Depositing a paper in an open access repository is a way to make your scientific output more visible.

- Institutional repositories: UPCommons.upc.edu
- Thematic repositories









Publishers distinguish between preprints, postprints and the published version. In each case, you need to consult which version can be disseminated in an open access repository.

https://v2.sherpa.ac.uk/opendoar/

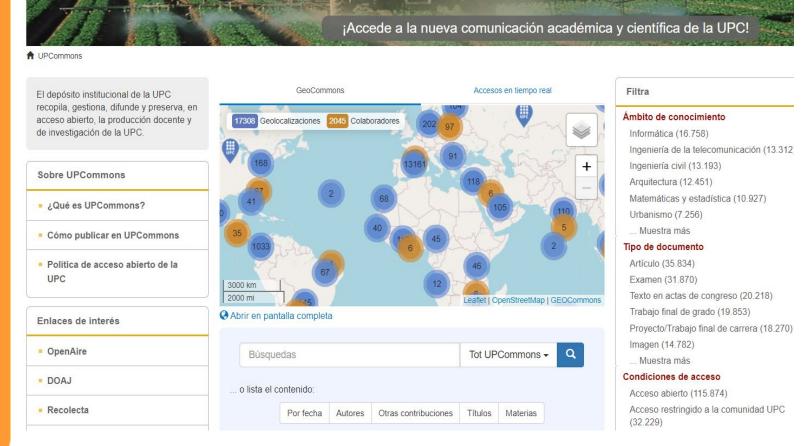


#### 1.3. Repositories and Futur

# DURING PUBLICATION



#### UPCommons. Portal de acceso abierto al conocimiento de la UPC



http://upcommons.upc.edu/



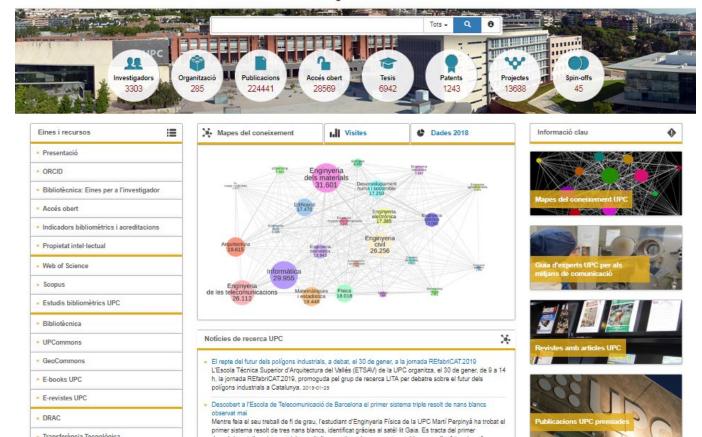
#### 1.3. Repositories and Futur

# DURING PUBLICATION





FUTUR. Portal de la Producció Científica dels Investigadors de la UPC



http://futur.upc.edu/



1.3. Repositories and Futur





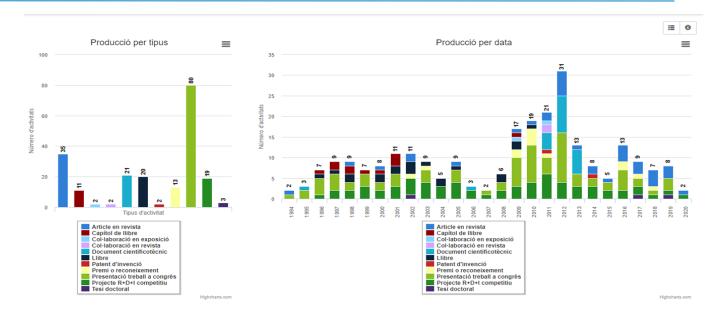
A1	Àrees d'expertesa Index h	Acers inoxidables, Ceràmiques, Comportament mecànic, Dona, Enginyeria Forense, Innovació docent, Metall dur, Metalls 4	
	Titulació universitària	Ciencias Químicas (Metalurgia)	
200	Doctorat	Doctor Ciencias Químicas	
900	Titulació de postgrau Categoria professional	Ciències, Tecnologia, Enginyeria i Matemàtiques (STEM) Professor/a col·laborador/a amb contracte indefinit	
	Grup de recerca	CIEFMA - Centre d'Integritat Estructural, Micromecànica i Fiabilitat dels Materials	
		GIOPACT - Grup de Recerca d'Igualtat d'Oportunitats per a l'Arquitectura, la Ciència i la Tecnologia	
	Departament	Departament de Ciència i Enginyeria de Materials	
	Centre docent	Escola Superior d'Enginyeries Industrial, Aeroespacial i Audiovisual de Terrassa (ESEIAAT)	
	Correu electrònic	nuria salan@upc.edu	
	Dades de contacte	Directori de la UPC 🗵	
	Orcid	0000-0001-9323-8883 ፟፟	
	WoS ResearcherID	L-5528-2014 @	
	Scopus Author ID	36544417300 ₪	
	Xarxa/es col·laborativa/es	in Re □ W	
	Enllaç/os d'interès	ASAMMET ®	
		CIEFMA Ø	
		Societat Catalana de Tecnología 🗵	
		Youtube #ChicasInTech @	
		Youtube TEDxReus @	
	Completa les teves dades		



#### 1.3. Repositories and Futur

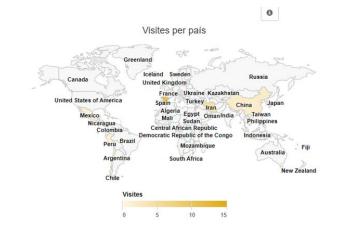






#### Visites per mes

Any	Mes	Visites	Usuaris	Promig de temps a la pàgina
2019	Desembre	4	4	00:00:38
2019	Novembre	2	2	00:00:09
2019	Octubre	4	4	00:00:17
2019	Setembre	5	4	00:00:21
2019	Agost	1	1	00:00:06
2019	Juliol	5	4	00:00:26
2019	Maig	2	2	00:00:04
2019	Abril	1	1	00:00:00
2019	Març	1	1	00:00:00
	TOTAL	25	23	00:00:10





#### 1.3. Repositories and Futur

#### **DURING PUBLICATION**



#### MCIA - Motion Control and Industrial Applications Research Group

URL

Grup de recerca

Grup de recerca UPC Tipus de grup Xarxa TECNIO / CIT UPC

Acrònim

Adreca Edifici GAIA - Rambla Sant Nebridi s/n @ Localitat

08222 Terrassa http://www.mcia.upc.edu/ @

Objectius El grup estudia la modelització, la simulació, les tècniques de control, la implantació física i les aplicacions dels sistemes electrònics de

> potència aplicats al control industrial i als accionaments elèctrics. Concretament, estudia el control digital amb microprocessadors, processadors de senyals digitals (DSP) i matrius de portes programables in situ (FPGA, de l'anglès field programmable gate array) dels convertidors i els llaços de regulació que apareixen en el control industrial i en el control dels motors elèctrics, per a la qual cosa aplica tècniques de control adaptatiu i intel·ligent. L'estudi dels sistemes electrònics per a la gestió i l'estalvi energètic, i el tractament de les

dades de la planta per al diagnòstic i el manteniment també són temes d'interès per al grup.

Paraules clau 3D Electromagnetic Design and Simulation, Charging Systems and Communications, Corona effect and mitigation, Data Driving

Process Monitoring, Diagnosis and Prognosis, Electric Machine and Power Converters, Electric powertrain, Energy Management

Systems, Fault Tolerant Drives, Microgrids, High Voltage Systems, Novelty Detection, Reliability, Smart Sensors

Completa aquestes dades (només responsables)

+ Compartir Informació R QR



Total activitats: 1356





#### ▲ Més investigadors



- Candelo Zuluaga, Carlos Andres (1)
- Cirera Balcells, Josep (4)
- Cortez, Ernest (4)
- Delgado Prieto, Miquel (120)

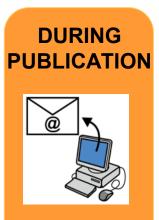
- Fernández Palomeque, Efrén Esteban (15)
- Garcia Espinosa, Antonio (150)
- Ghorbani, Hamidreza
- Kadechkar, Akash (7)
- Martinez Viol, Victor (3)

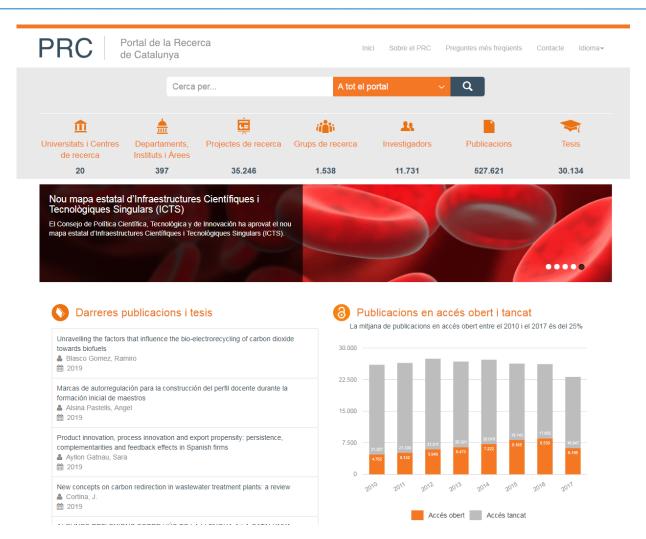
- Moreno Eguilaz, Juan Manuel (205)
- Ortega Redondo, Juan Antonio (330)
- Paredes Camacho, Alejandro (18)
- Piñal Moctezuma, Juan Fernando (4)
- Riba Ruiz, Jordi Roger (417)

- Rojas Dueñas, Gabriel Esteban
- Romeral Martinez, Jose Luis (540) Responsable
- Tapia Tlatelpa, Tecilli (3)
- Urbano Gonzalez, Eva Maria (3)



#### 1.3. Repositories and Futur





PRC Portal de la Recerca de les Universitats de Catalunya

http://portalrecerca.csuc.cat/



1.3. Repositories and Futur

# DURING PUBLICATION



There are open data repositories such as UPC Research Data

**UPCommons.** Portal de acceso abierto al conocimiento de la UPC



♠ UPCommons / Research data

#### Research data

Research Data UPC alberga los datos de investigación relacionados con las publicaciones (artículos de revistas, etc.) o con un proyecto de investigación (H2020, etc.).

Si es miembro de la UPC y está interesado en depositar y/o publicar datos de investigación en acceso abierto, por favor consulte:

http://bibliotecnica.upc.edu/investigadors/dades-recercaobert#upcommons

Deposita datos de investigación

#### Subcomunidades

Col·leccions de dades per projectes específics [0]

#### Colecciones

Dades de recerca [18]



#### Multidisciplinary Repositories for Open Access Data

	OZSHARE EUDAT	zenodo	fig <b>share</b>	DRYAD	Dataverse o	MENDELEY DATA
	EUDAT B2SHARE	CERN	Digital Science (Macmillan		IQSS (Harvard University)	Elsevier
1. Thematic and geographical area	Multidisciplinary International	Multidisciplinary International	Multidisciplinary International	With emphasis on science and medicine International	Multidisciplinary International	Multidisciplinary International
2. Type of data (software, images, raw data)?	All kind of formats	All kind of formats and published documents: publications, grey literature, images, audio,	All kind of formats: figures, datasets, images and audio, grey literature, filesets	All kind of formats (excluding software) and with preference for open source formats	All kind of formats Certain formats with specific functions (Stata, SPSS, R, Excel, CSV)	All kind of formats: plain text, images and audio, PDF, HTML
3. Open, embargoed, restricted or closed data?	Open, restricted o embargoed. The description of a set of data is public	Open, closed, restricted o embargoed (Policies)	Open, closed (by default until they are published), restricted o embargoed Confidential Metadata-only + Information	Open o <u>embargoed</u> (by default until the time of publication)	Open o restricted	Open, closed (by default until they are published), restricted o embargoed
4. Approximate size of the files to submit?	Up to 10 GB file. For larger sizes contact EUDAT	Up to 50 GB for dataset. For larger sizes contact: https://zenodo.org/contact	Up to 5 GB for dataset	10 GB data for DOI 300 GB (Box, DropBox) Google Drive is not recommended)	Up to 2 GB. For larger files contact: support@dataverse.org	Up to 10 GB
5. Licenses used to spread the data?	Allow a variety of licenses for data and for software	Allows a variety of licenses although we recommend open licenses. The description of the data is under CCO	- CCO for data (metadata & datasets) CC-BY for non data (audiovisuals, papers) - MIT for code and software		By default CCO but it may be changed	Allows a variety of licenses : CC-BY 4.0, CC- BY-NC, CCO 1.0, MIT, Apache 2.0, BSD 3 clause,
6. Persistent identifier	Handle I DOI	DOI	DOI	DOI	DOI	DOI
7. Conditions for removing content	Contact with <u>EUDAT</u>	Allowed to withdraw data explaining the reason. DOI and URL will be retained	Data can be <u>deleted</u>		Allows to delete datasets and files even though they have already been published	It is allowed to remove the data before publishing. Once published, contact with
8. Cost	Free for researchers and European scientists	Free. But by paying, it is possible to have more space ( <u>FAQS</u> )	Free 20 GB For more space <u>contact</u>	120 € for a set of data (up to 20 GB) ( <u>Payment plans</u> <u>Data publishing charges)</u>	Free	Free
9. Data linked to publications	It allows to add links to related documents	It allows to add links to related documents	It allows to add links to the full text or related documents	The data must be associated with a research paper, published or in publication process.	It allows to add links to related documents	It allows to add links to related articles

http://hdl.handle.net/2117/122030



#### 1.4. Social media and academic networks for research



Social media sites and academic social networks provide valuable opportunities to make our research more visible.

We need to invest time, draw up a strategy and decide which social media sites and academic social networks to participate in.

To construct our digital identity actively, we must manage visibility, reputation and privacy in the network.

#### #socialmedia4researchers





#### 1.4. Social media and academic networks for research



## Why have a Google Scholar profile?

- ✓ More visibility: approximately 75% of researchers start their bibliographic search in Google.
- ✓ Ease of use: easy to create, easy to compile our publications, easy to maintain.
- ✓ Can be used to monitor citations received and calculate the h-index.
- ✓ Improves reputation and digital identity.



https://www.slideshare.net/jalonsoarevalo/como-crear-perfil-de-investigador-en-g



### 1.4. Social media and academic networks for research



Berta Bardí Milà (ORCID: 0000-0003-0271-670X)

✓ SEGUEIX

Universitat Politècnica de Catalunya
Correu electrònic verificat a upc.edu

Ciudad y formas urbanas: Perspectivas transversales. Vol. 10: Formas urbanas

arquitectura docencia innovación aprendizaje proyectos

TÍTOL	CITADA PER	ANY
Dos modelos pedagógicos: conocer versus saber hacer BB i Milá, DG Escudero JIDA 4, textos de arquitectura, docencia e innovación, 16-35	4	2017
The JIDA conference: Teaching practice as research B Bardí Milà, D García Escudero JOTSE: Journal of Technology and Science Education 8 (3), 146-154	3	2018
Los antecedentes de la modernidad danesa: liberación y enfoque holístico L Balslev, B Bardí Milà, D García Escudero, DPA: Documents de Projectes d'Arquitectura, 86-91	3	2010
La forma urbana como objeto pedagógico: los casos de Learning from Las Vegas y Made in Tokyo. B Bardí Milà, D García Escudero, J Moreno Sanz	2	2018

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2015	2016 2017 2018	2019 2020 0



#### 1.4. Social media and academic networks for research



## **Creation of a profile in Google Scholar**

- You need to have a Gmail account.
- Go to Google Scholar Citations
   (https://scholar.google.es/citations).
- 3. Fill in the registration form.
- 4. Select your articles from the proposed list.
- Search for your articles in Google Scholar or add them manually.
- 6. Complete the profile (photos, coauthors, alerts, etc.).

http://bibliotecnica.upc.edu/investigadors/identificadors-perfils-investigadors#google-scholar



#### 1.4. Social media and academic networks for research





#### **Academic social networks**

These are different from general social networks in that:

- ✓ They are communities that are closer in subject area.
- ✓ They are more restrictive communities.
- ✓ They use specialised language.
- ✓ They enable fast dissemination of scientific articles.
- ✓ They provide the opportunity to share preprints and articles in open access.

http://www.slideshare.net/infobiblio/identidad-digital-para-investigadores-redes-sociales-academicas

### Advantages:

- They increase the visibility and impact of our research.
- ✓ They facilitate contact with other similar researchers.
- ✓ They help us to stay up to date in our field.

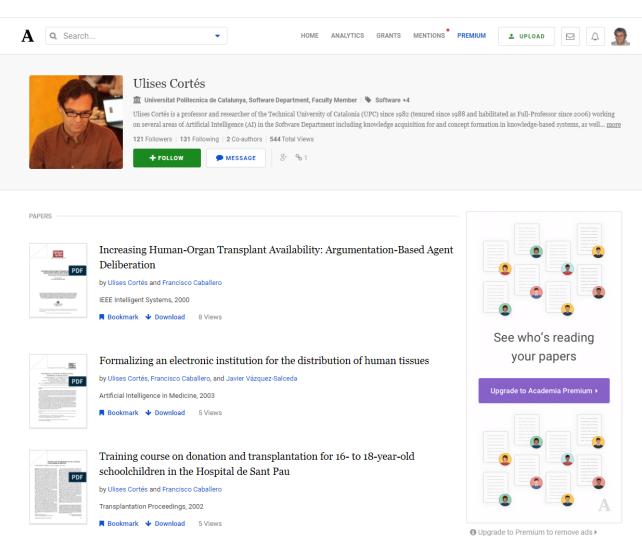
Important! Be active and keep information updated.

Resour ce	How?	Tips
Twitter	Create your Twitter profile.     Write messages using hashtags and link to your publications.	<ul> <li>Use hashtags relating to the subject area of your research.</li> <li>Mention colleagues and other researchers.</li> <li>Include DOI or the handle of the publications that are disseminated.</li> <li>Include images.</li> </ul>
LinkedIn	<ol> <li>Register as a personal user.</li> <li>Complete your profile with the publications that you want to disseminate.</li> </ol>	- Connect with other specialists Include DOI or the handle of the publications that are disseminated Regularly report on new aspects of your research. Include videos or images.
Research Gate	Register indicating which type of user you are.     Complete your profile with the publications that you want to disseminate.	<ul> <li>Include DOI or the handle of the publications that are disseminated.</li> <li>ResearchGate proposes connections with other specialists based on the data of your publications.</li> <li>Formulate or answer open questions on your research.</li> <li>Participate in open reviews of articles.</li> </ul>
Academia	<ol> <li>Register as a user.</li> <li>Complete your profile with the publications that you want to disseminate.</li> </ol>	- Add documents (in any format) Decide whether you accept that they can be opened to colleagues.
Google Scholar	<ol> <li>Enter your Google account or create a new account</li> <li>Enter in Google Scholar and click on My profile.</li> <li>Follow the instructions on the form.</li> </ol>	<ul> <li>Enter your affiliation correctly and write the relevant keywords in your area of research.</li> <li>Add your ORCID number beside your name.</li> <li>Google Scholar Citations offers metric data such as the number of citations received and the h-index.</li> </ul>
Blogs	Create your own blog or participate in the blogs of various authors.	- Share links and cite correctly If the blog is your own, write new posts regularly.
Wikipedia	Create an account to edit Wikipedia in any of its languages.	- Include bibliographic references to your publications in existing entries.  - Create new entries on your specialisations or edit them.
YouTube	<ol> <li>Start a session with a Google account.</li> <li>Within the profile options, create a channel.</li> </ol>	- Post videos or vlogs Comment on the videos of other researchers, research groups, etc.



#### 1.4. Social media and academic networks for research



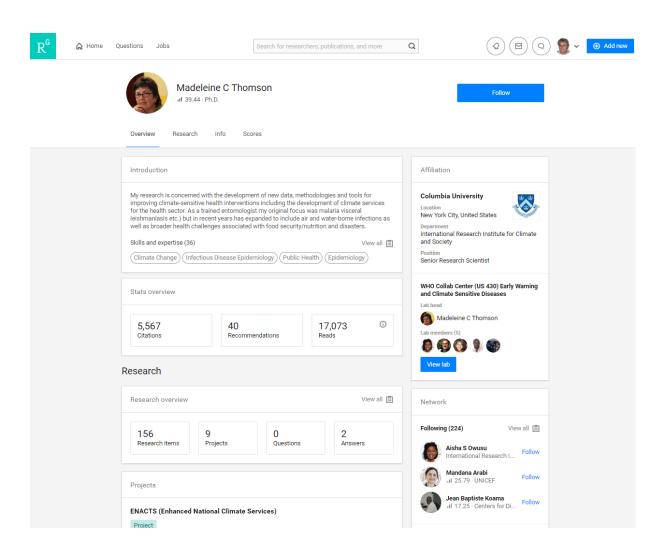


https://www.academia.edu/



#### 1.4. Social media and academic networks for research





https://www.researchgate.net/









2.1. Impact indicators

#### What is evaluated?

- ✓ Authors and their new ideas
- √The dissemination and impact of these ideas
- √ The value of the journals in which they are published

#### How is this evaluated?

- √ Through impact indicators
  - These guarantee that the results reach most of the community.
  - They give an idea of the relative importance of the journal within the subject area.



# 2. Evaluation and impact of scientific activity 2.1. Impact indicators

## Bibliometric indicators to assess scientific activity:

Different metrics and indicators at Journal, Article or Author level:

Based on the number of citations received by the publication

- ✓ Articles published in indexed journals/with an impact factor (Journal)
- √ Number of citations received (Article)
- $\checkmark$  h-index (Author)



2.1. Impact indicators

Indicator	What it is	How to consult it
1. Impact Factor (IF)	Measures the average citations received in a year for articles published in a journal during the two previous years.	Annual report that can be consulted in JCR (Journal Citation Reports). Based on data from the Web of Science.
2. Scimago Journal Rank (SJR)	Provides the weighted average of citations received in a year for documents published in a journal during over the three previous years.	Annual report that can be consulted in the Scimago Journal & Country Rank based on data from Scopus.
3. Source Normalized Impact per Paper (SNIP)	Relates the number of citations per article and the citation potential in the journal's subject area. Takes into account the last three years.	Calculated from Scopus data. Available in <u>Scopus Sources</u> .
4. CiteScore	Calculates the average citations received in a year for articles published in a journal over the four previous years.	Available in <u>Scopus Sources</u> .
5. Google Scholar Metrics	Measures the impact of a journal based on the citations received in Google Scholar.	Rankings of journals by language, organised by the <i>h</i> -index:  English Spanish
6. Eigenfactor	Measures the "relative" influence of JCR journals. Considers citations in the last five years and the influence of the journals that they came from.	Annual report that can be consulted in JCR (Journal Citation Reports). Based on data from the Web of Science.



2.1. Impact indicators

## **JOURNAL METRICS: Impact Factor**

**Impact factor (IF)**: measures the citations received in a specific year for the articles published in a journal during the two previous years.

The impact published in 2018 and 2019

Number of citations received in 2020 of articles published in 2018 and 2019

Number of articles published in 2018 and 2019

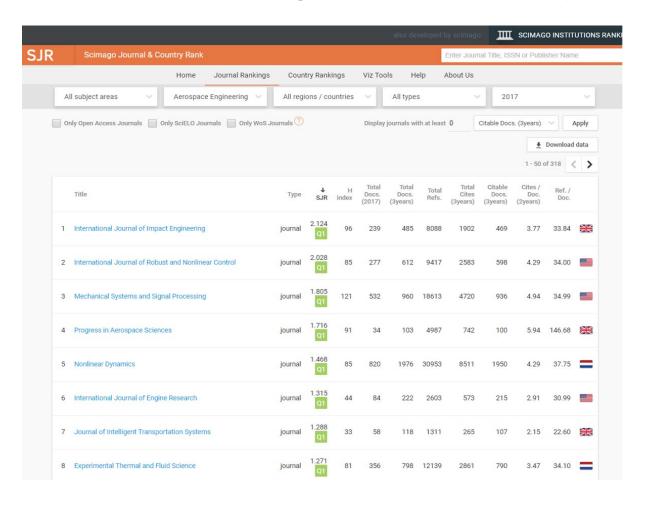
**Journal Citation Reports (JCR)**: A tool available on the Web of Science platform that enables the impact factor and other bibliometric indicators to be consulted.

Category Quartile Position



2.1. Impact indicators

## **JOURNAL METRICS: Scimago Journal Rank (SJR)**





2.1. Impact indicators

### **ARTICLE METRICS INDICATOR: Number of citations received**

- √ Web of Science (access via Bibliotècnica)
- √ SCOPUS (access via Bibliotècnica)
- √ Google Scholar (free access)

http://bibliotecnica.upc.edu/investigadors/indicadors-bibliometrics-acreditacions/citacions-article

#### **AUTHOR METRICS INDICATOR:** h-index:

Minimum number h of articles that have received at least h citations

<b>√</b>	Web of Science	(access via	Bibliotècnica)
----------	----------------	-------------	----------------

- ✓ SCOPUS (access via Bibliotècnica)
- √ Google Scholar (free access)

Ordre de l'article	Nombre de citacions
1	20
2	16
3	10
4	5
5	4

http://bibliotecnica.upc.edu/investigadors/indicadors-bibliometrics-acreditacions/index-h



2.1. Impact indicators

The main JOURNAL indicators in the field of **architecture** are:

- ✓ Impact factor (JCR) although the category 'Architecture' does not exist
- √ Scimago Journal Rank (SJR)
- ✓ Arts & Humanities Citation Index. This list only contains art and humanities journals. It does not provide the quartile or the impact factor. 'Architecture' is one of the subject categories (https://mjl.clarivate.com/home > Downloads).
- ✓ Presence in the Avery Index to Architectural Periodicals
- ✓ Presence in the Riba Catalogue



2.1. Impact indicators

## IBRA.upc.edu

**IBRA** (Indicadores Bibliométricos de Revistas de Arquitectura) es un sistema que informa sobre los indicios de calidad de las revistas en el ámbito de la arquitectura.

UNIVERSITAT POLITÈCNICA DE CATALUNYA BARCELONATECH	Castellano	<b>→</b> Login
IBRA. Indicadores Bibliométricos de Revistas de Arquitectura		
Sistema de información de calidad de las revistas en el ámbito de la Arquitectura	ARQUI TECTES	
Sobre IBRA Indicadores Búsqueda por revista		
Buscador por revista		
Titulo		
ISSN		
© UPC Universitat Politècnica de Catalunya · BarcelonaTech		



2.1. Impact indicators









2.2. Alternative metrics



## altmetrics = alternative metrics

**Altmetrics** analyse the contents of the social web to offer alternative or complementary metrics to the impact indicators to measure the value of academic publications.



2.2. Alternative metrics

Who are we for? Products Abo

ducts About altmetrics About our data

# Who's talking about your research?

Thousands of conversations about scholarly content happen online every day.

Altmetric tracks a range of sources to capture and collate this activity, helping you to monitor and report on the attention surrounding the work you care about.

For Publishers

For Institutions

For Researchers

For Funders

For R&D



2.2. Alternative metrics

**Publication** 

Diffusion

Publication at Congress Proceedings, Journals, Books, ...







E-document available at Data Bases and Repositories



**ScienceDirect** 





FUTUR
Portal de la
Producció Cientifica

Indexed by Google, Google Scholar and others









Blog sharing





Social Network sharing



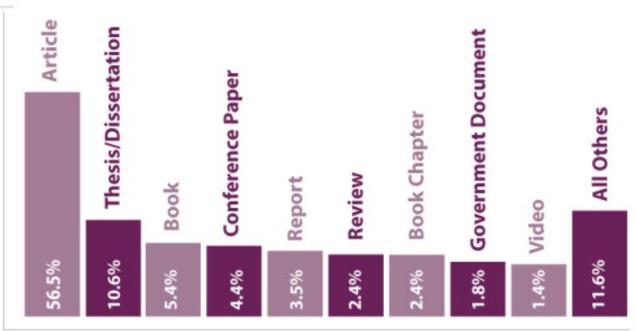


2.2. Alternative metrics

Below is a chart that shows how different PlumX customers categorize their research output.

# What is Research Output?





PlumX Customers' Research by Type



2.2. Alternative metrics



#### Usage

Abstract Views: 44

PDF Views: 1253

HTML Views: 10348

## Captures

Exports-saves: 7

Readers: 44

#### Mentions

News Mentions: 56

Blog Mentions: 25

Wikipedia: 3

#### Social Media

Likes: 22

Shares: 15

+1:4

#### Citations

Citation Indexes: 29

Clinical Citations: 3

Policy Citations: 2



# 2. Evaluation and impact of scientific activity 2.2. Alternative metrics

#### **Benefits:**

- ✓ Can be used to monitor the dissemination of research beyond academia.
- ✓ Shows the attention, reception and response to a publication before it is cited.
- √ Can be applied to non-traditional research results such as sets of data and blog publications.
- ✓ Shows the impact of research in real time: there is no need to wait until citation reports, like JCR, are published, and outside the academic environment



# 2. Evaluation and impact of scientific activity 2.2. Alternative metrics

## Aggregators of altmetric data



http://www.altmetric.com



https://profiles.impactstory.org



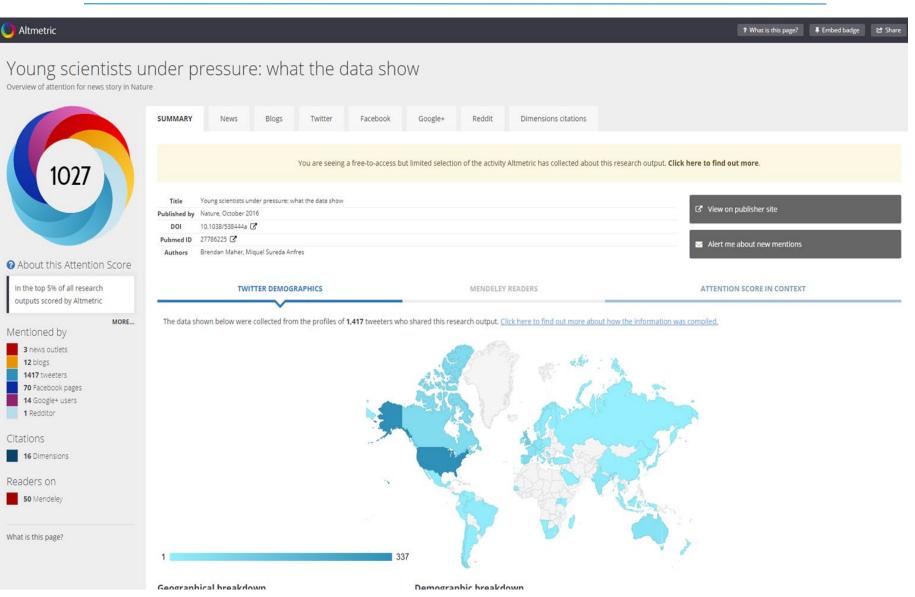
http://www.plumanalytics.com/



https://plos.org/publish/metrics/



2.2. Alternative metrics





# 2. Evaluation and impact of scientific activity 2.2. Alternative metrics



https://help.altmetric.com/support/solutions/articles/6000233311-how-is-the-altmetric-attention-score-calculated-

News	8
Blog	5
Policy document (per source)	3
Patent	3
Wikipedia	3
Twitter (tweets and retweets)	1
Peer review (Publons, Pubpeer)	1
Weibo (not trackable since 2015, but historical data kept)	1
Google+ (not trackable since 2019, but historical data kept)	1
F1000	1
Syllabi (Open Syllabus)	1
LinkedIn (not trackable since 2014, but historical data kept)	0.5
Facebook (only a curated list of public Pages)	0.25
Reddit	0.25
Pinterest (not trackable since 2013, but historical data kept)	0.25
Q&A (Stack Overflow)	0.25
Youtube	0.25
Number of Mendeley readers	0
Number of Dimensions and Web of Science citations	0



2.3. Assessment and accreditation

## **Assessment agencies:**

#### **ANECA**

National Agency for Quality Assessment and Accreditation of Spain

Assesses, accredits and

#### CNEAL

Spanish National Commission for Research Evaluation

Assesses research

Courses, professors and

institutions

certifies quality

Spain

To contribute to improving the quality of the higher education system.

activity

University professors and research staff of

**CSIC** 

Spain

To recognise a productivity supplement for researchers.

AQU

Catalan University Quality Assurance Agency

Assesses, accredits and certifies quality

Universities and higher education centres (courses, teaching staff and services)

Catalonia



# 2. Evaluation and impact of scientific activity 2.3. Assessment and accreditation

#### Assessment in the UPC



Teachers and researchers of the UPC update their curriculum in **DRAC**: <a href="http://futur.upc.edu/">http://futur.upc.edu/</a>

#### The UPC assigns:

- PATT points (technology transfer evaluation points)
   <a href="https://drac.upc.edu/info/ca/menu1/principals-funcionalitats-de-drac/copy">https://drac.upc.edu/info/ca/menu1/principals-funcionalitats-de-drac/copy</a> of lavaluacio-de-la-recerca-punts-par
- PAR points (research evaluation points)
   <a href="https://drac.upc.edu/info/ca/menu1/principals-funcionalitats-de-drac/lavaluacio-de-la-recerca-punts-par">https://drac.upc.edu/info/ca/menu1/principals-funcionalitats-de-drac/lavaluacio-de-la-recerca-punts-par</a>

New: DRAC PhD



2.3. Assessment and accreditation

## Assessment of journal articles in the UPC

http://drac.upc.edu/info/ca/lavaluaciodel-curriculum-vitae/upc-puntspar/relacio-dactivitats-avaluables-amb-par/copy of activitats-avaluades-elsarticles-en-revistes

#### Fields of engineering:

**√** JCR

Architecture, urban planning, social sciences and human sciences:

- **√** JCR
- **√** SJR
- ✓ A&HCI
- ✓ Avery Index to Architectural Periodicals
- ✓ RIBA catalogue



2.3. Assessment and accreditation

#### Assessment in the UPC

#### Example: **PAR points** for journal articles:

La classificació de les revistes als efectes del càlcul dels PAR en els àmbits de l'enginyeria industrial, l'enginyeria de les TIC, l'enginyeria civil i les ciències:

Articles publicats a	Valor en punts PAR
Revistes indexades en el JCR entre el primer decil de la seva àrea	40 PAR tipus 1
Revistes indexades en el JCR entre el primer quartil de la seva àrea	30 PAR tipus 1
Revistes indexades en el JCR entre el segon quartil de la seva àrea	24 PAR tipus 1
Revistes indexades en el JCR entre el tercer quartil de la seva àrea	20 PAR tipus 1
Revistes indexades en el JCR entre el quart quartil de la seva àrea	16 PAR tipus 1

La classificació de les revistes als efectes del càlcul dels PAR en els àmbits de l'arquitectura, l'urbanisme, l'edificació i les ciències socials i humanes:

Base de dades	Punts PAR	Criteri
1er decil JCR	40 PAR Tipus 1	
JCR Q1	30 PAR tipus 1	
JCR Q2, CiteScore percentil >= 75	24 PAR tipus 1	
JCR Q3, CiteScore percentil entre 75 i 50	20 PAR tipus 1	
JCR Q4, A&HCI	16 PAR tipus 1	
ESCI, FECYT, RIBA i Avery, ECONLIT,	12 PAR tipus 1	Revisió per parells
CiteScore percentil <= 50	8 PAR tipus 1	Comitè editorial
MIAR ICDS >=9, RIBA, Avery, Carhus+ A-B, ERIH Plus	8 PAR tipus 1	Revisió per parells
	4 PAR tipus 1	Comitè editorial
MIAR ICDS >=3.5, ICONDA, EAAE, Carhus+ C-D	4 PAR tipus 1	Revisió per parells
	4 PAR tipus 1	Comitè editorial

https://drac.upc.edu/info/ca/lavaluaciodel-curriculum-vitae/upc-punts-par/relacio-dactivitats-avaluables-amb-par/copy of activitats-avaluades-els-articles-en-revistes



2.3. Assessment and accreditation

#### Assessment in the UPC

#### Example: **PAR points** for conferences:

La classificació de les comunicacions i ponències segons els PAR

Articles publicats en congressos que apareixen entre les <i>Top Publications</i> de cada subàrea de Google Scholar  Articles publicats en congressos que apareixen en el primer quartil de la seva àrea del SJR  Articles publicats en congressos que apareixen en el segon quartil de la seva àrea del SJR  Comunicacions i ponències en congrés "notable". Articles amb 4 o més pàgines	e 24 PAR tipus 1
Articles publicats en congressos que apareixen en el segon quartil de la seva àrea del SJR	
	20 PAR tipus 1
Comunicacions i ponències en congrés "notable". Articles amb 4 o més pàgines	16 PAR tipus 1
	12 PAR tipus 1
Comunicacions i ponències en congrés "notable". Articles amb menys de 4 pàgines	
Comunicacions i ponències en congrés no considerat "notable". Text complet	4 PAR tipus 2
Abstract	2 PAR tipus 2

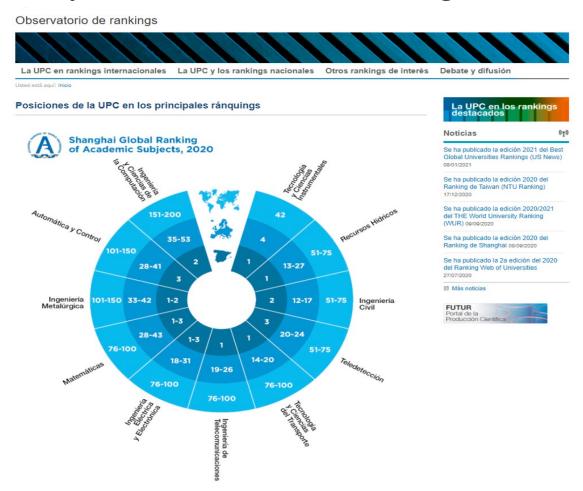
List of notable conferences

https://drac.upc.edu/info/ca/lavaluaciodel-curriculum-vitae/upc-punts-par/relacio-dactivitats-avaluables-amb-par/activitats-avaluades-les-comunicacions-i-ponencies-en-congressos



2.3. Assessment and accreditation

## The UPC's positions in the main rankings





## By way of conclusion

To increase the **visibility** and **impact** of our scientific activity, it is important:

- √ To sign publications correctly (personal name and affiliation).
- √ To have an ORCID code and other author identifiers (WoS ResearcherID, Scopus Author ID).
- √ To deposit eprints in open access repositories.
- √ To correctly manage researcher profiles in social media and in academic social networks.

The main **impact indicators** are based on the number of citations received.

The **evaluation** of scientific activity is closely related to the impact indicators of publications.



### **Services for PhD students**

#### **Doctorands**

#### Investigar



#### Identificadors i perfils d'investigadors

Crea el teu perfil per identificar totes les teves publicacions



#### Pla de gestió de dades

Ajuda per gestionar les dades de la teva recerca





#### Cursos de formació

Presencials, en línia i a mida



#### Visibilitat a FUTUR i a UPCommons

Fes més visibles les teves publicacions





#### Mendeley i altres gestors

Gestiona les referències bibliogràfiques dels treballs acadèmics





#### Indicadors bibliomètrics i acreditacions

Avaluació i acreditació de la recerca





#### Sales de doctorands

Sales de treball exclusives a la BRGF



#### Préstec de documents

Demana documents de les biblioteques de la UPC



https://bibliotecnica.upc.edu/doctorands



## **Services for PhD students**

#### Ajuda



Contacta amb un bibliotecari



Demana una sessió de formació





Proposa la compra d'un llibre





Cerques d'informació especialitzada





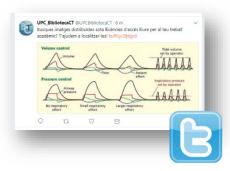
https://bibliotecnica.upc.edu/actualitat/xat-de-les-biblioteques











info.biblioteques@upc.edu

