

New methodology in bibliometrics using Altmetrics

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2006-2009



BACKGROUND

The CBL Library started writing bibliometric studies based on:

- ISI Web of Science
- Current Contents



Figure 1: UPC schools and Castelldefels Baix Llobregat Campus

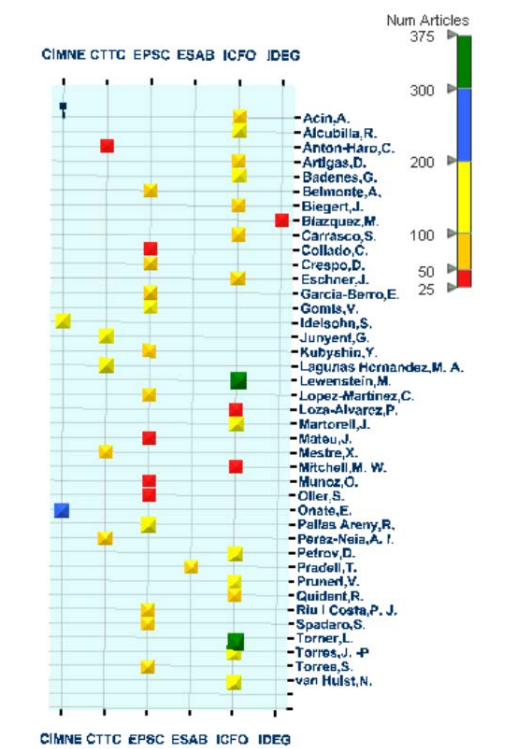


Figure 2: Authors by research center bibliometric data in 2009 (Castelldefels Baix Llobregat Campus).

CHALLENGES

Lack of standardization in author's signature and ISI limitations on author search.

- Bibliometric studies were based on author's name.
- Collected data referred to publications, citations, etc.
- Search strategy was set by address field of *Web Of Science*
- Results were classified by department and research centers
- Classification enabled to rank "best" authors.

Findings: a qualitative indicator was required to enhance the quantitative indicator based on the number of publications.



2009-2014



IMPROVEMENT 1: Scopus and ORCID

Scopus used instead of *Web Of Science*. Search strategy was author's name instead of WOS address field. Authors' names were extracted from LDAP. *Scopus ID* feature and *ORCID* spread amongst the community, plus linkage of both databases, helped identify and disambiguate researchers with similar or the very same names.

Journal Citation Reports database was used to evaluate Journals.

Quantitative indicators covered were:

- Number of publications by author
- Number of citations received by article
- Journal titles
- Journal Impact Factor
- Journal Quartile
- Type of publication
- Subject category
- Co-authors' country
- Co-authors' institution

Authors

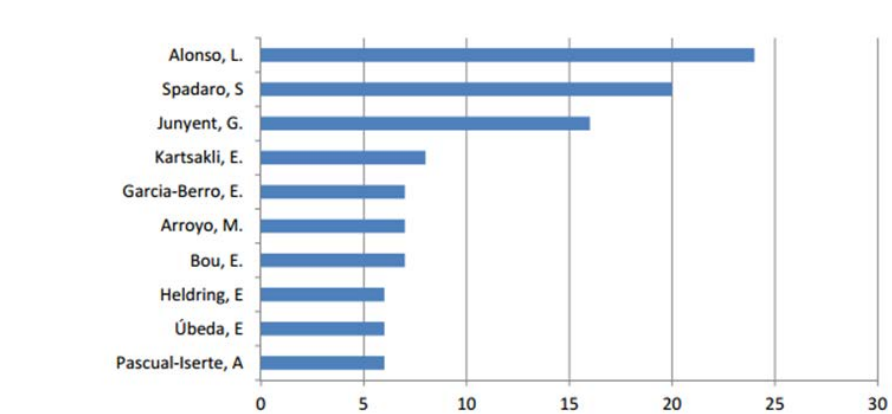


Figure 3: items published by author since 2010.

Sources

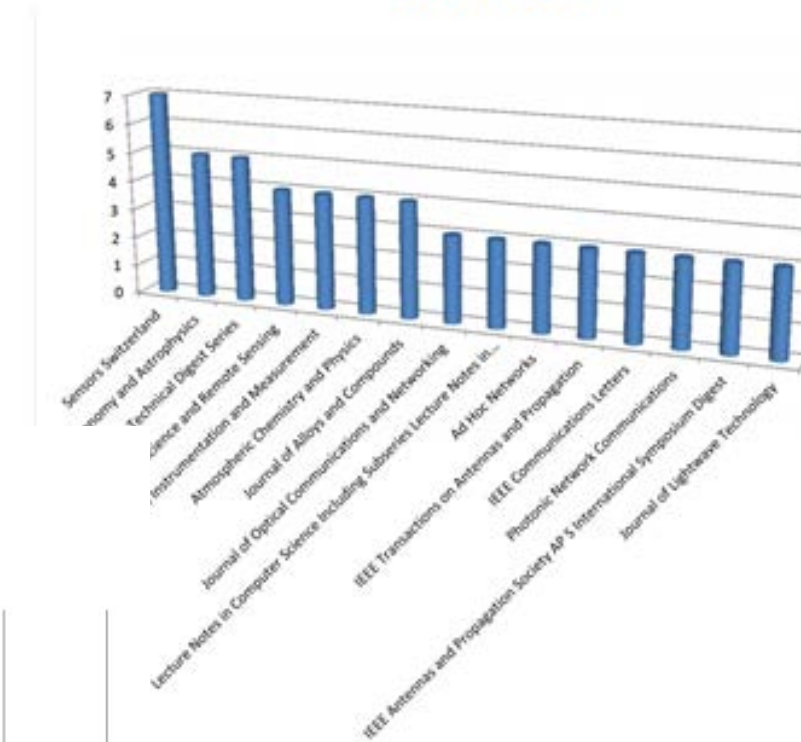


Figure 4: items published by journal title.

2015



IMPROVEMENT 2: Futur

Use of *Futur* as bibliographic source

- Futur* is the University research portal, launched in 2015, with data populated from *CRIS* and institutional repository, *UPCommons*.
- Contains other bibliographic material not covered in bibliographic databases. I.e. Posters, reports, book chapters, books, theses, exhibition's catalogue's chapters, etc.
- Includes Altmetric button both for item (if a DOI is provided) and author (if author has an *ORCID*).

Bibliographic studies were based on University subjects, which enabled to compare different University areas, such as Campus, Departments, etc.

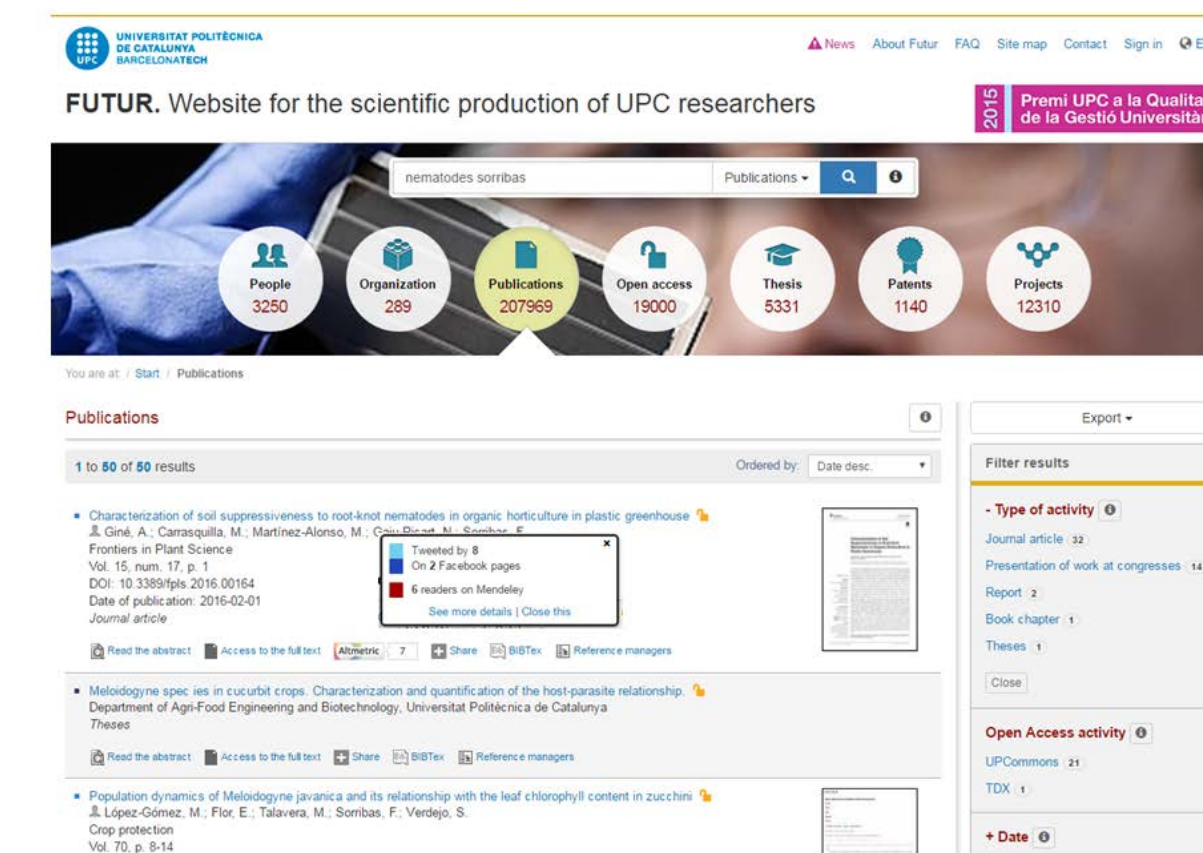


Figure 5: Futur, UPC research portal, displaying items with Altmetric button

Future



FUTURE TRENDS

- To complement *Futur* with providers and aggregators altmetrics data.
- To select most commonly bibliographic data tools used by UPC-BCNTech faculty. I.e. Data aggregators such as Google Scholar Citations, Mendeley, Research Gate, Twitter, since rankings and preferences are usually built on them.
- To include a new indicator that quantifies "popularity" using some of the features and data from *Impacstory*, *Plum Analytics* or altmetrics, such as:

Figure 6: colours of the Altmetric donut.

- Policy documents
- News
- Blogs
- Twitter
- Post-publication peer-reviews
- Facebook
- Sina Weibo
- Wikipedia
- Google+
- LinkedIn
- Reddit
- Faculty1000
- Q&A (stack overflow)
- Youtube
- Pinterest

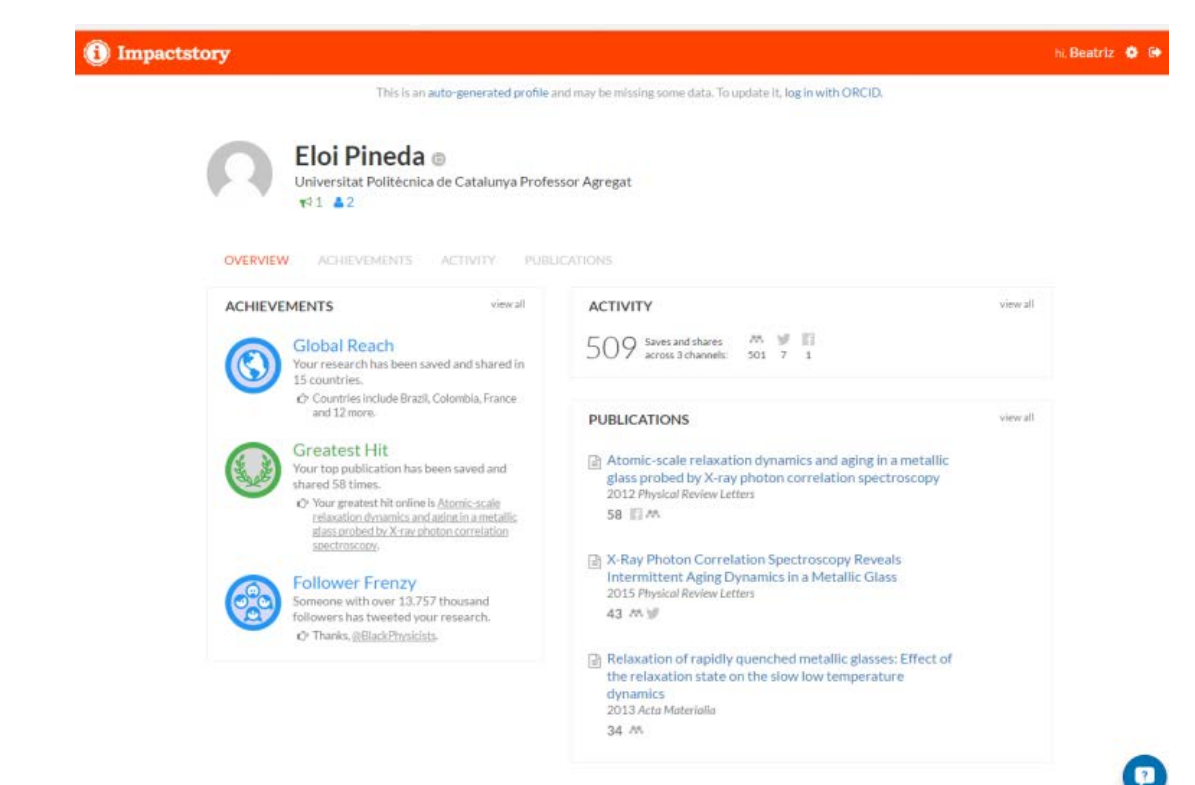


Figure 7: Impactstory record for a UPC Researcher.

