

## Altmetrics: Tracking the Online Attention and Broadening the Reach of Your Research

Josh & Charlotte, 27th July 2018

## Hello!

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## Hello!

## I'm Charlotte

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## Agenda

- Defining and demonstrating impact
- Altmetrics 101
- What can you do with Altmetric data?
- Digging into the data
- Getting started
- Questions?

# around impact, dissemination, and engagement

Defining and strategizing

## **Defining Impact**

How does academic research change and benefit the economy, society, culture, public policy and services, health, the environment or quality of life?

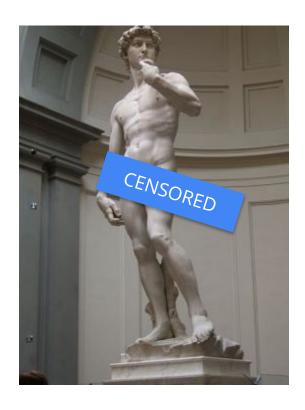


"All **impact** means is that we are **engaged** with the world, trying to make it a better place to live."

(UCL Professor)



## **SUBJECTIVE**





## **Demonstrating Impact**

#### **RESEARCHERS**

Report on impact to funders, institutions, research assessments **and understand** how their work is received and used.

#### **PUBLISHERS**

Help researchers and editors extend the short- and long-term **reach** of their research. Understand where content is being discussed and shared.

#### **FUNDERS**

Understand the reach of funded research outputs and improve and monitor **public engagement** activities.



# What are the goals of research? Quality Engagement Impact

#### The scholarship is robust

- Stands up to scrutiny
- •Can be replicated

#### It reaches the right people

- Other researchers
- Policy makers
- Practitioners
- The public

#### It makes a difference

- •Advances the field in some small way
- •Changes the way people think or approach an issue
- Changes practice



### **Traditional Metrics**

## Citation-based metrics, including:

Article-level	<ul> <li>Citation counts</li> <li>Relative Citation Ratio (RCR)</li> <li>Field-weighted citation ratio</li> </ul>
Journal-level	<ul><li>Impact Factor</li><li>Eigenfactor</li></ul>
Author-level	<ul><li>h-Index</li><li>h-Index variants</li></ul>

### **Traditional Metrics**

## ...ONLY TELL PART OF THE STORY

Bibliometrics such as the H-index and Impact Factor at the journal level are limited in how much they reveal about research engagement, particularly as they only report *academic* engagement.

#### **ALTMETRICS**

Altmetrics help expand our view of research attention, enabling researchers and organisations to understand and report on broader societal attention to their work beyond academia and traditional citation metrics.



### **Limitations of Traditional Metrics**

#### 1. NARROW

Not all research is cited in traditional journals.

#### 2. SCOPE

Broader engagement and use not captured.

#### 3. ACCESSIBILITY

Empowering readers, editors, authors, etc.



## TRADITIONAL METRICS

Often slow to accrue (2-5 years)

**ALTMETRICS** 

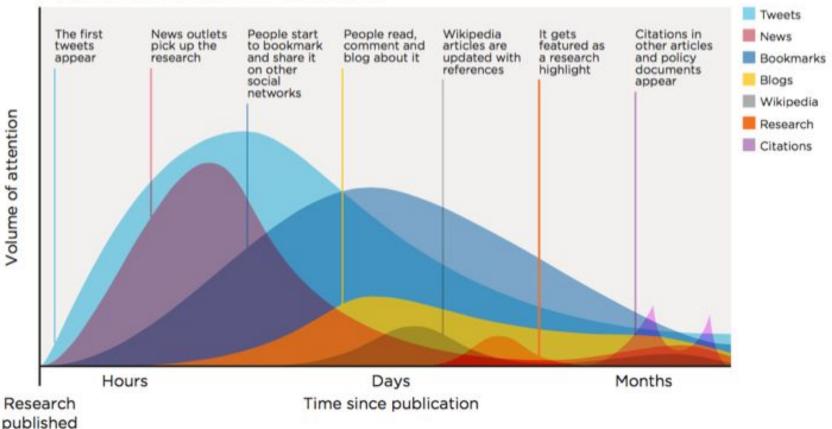
**Immediate** 

citations





#### A typical timeline of attention













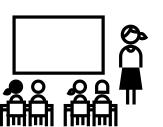
Government and Policy Makers





**Practitioners** 

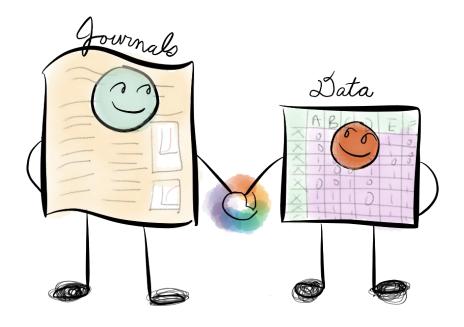












Altmetrics track <u>any</u> digital object produced in the research lifecycle.















? What is this page? # Embed badge Share











UP1.mov (10.86 MB)

UP2.mov (11.27 MB)

TR\_S.mov (13.88 MB)

PV\_R\_F.mov (2.22 MB)

UP3.mov (8.66 MB)

TL S.mov (13.61 MB)







Overview of attention for research output published on figshare, September 2014



Altmetric

PV\_R\_S.mov (3 MB)

Dreadnoughtus schrani 3D PDF images - Lacovara et al., 2014, A Gigantic, Exceptionally Complete Titanosaurian Sauropod Dinosaur from Southern Patagonia, Argentina, Scientific Reports,

Download all (1.04 GB) Embed + Collect (you need to login first) Share

A visual dataset of dance steps for behavioral experimentation

Version 7 ∨ 24.06.2015, 07:56 (GMT) by Argiro Vatakis, Helena Sgouramani



SUMMARY Google+ So far, Altmetric has seen 5 news stories from 4 outlets. Giant dinosaur discovered! Dreadnoughtus weighed as much as 7 T-Rexes Los Angeles Times Scientists have just announced the discovery of Dreadnoughtus schrani, a hulking dinosaur that stood two stories tall Dino-hunters discover Dreadnoughtus - maybe the biggest creature to have walked The A Register Finders make 3D scans of bones available for download Paleontologists have discovered the remains of a new type of dinosaur... Gigantic Dreadnoughtus Dinosaur Weighed Whopping 65 Tons, Feared Nothing A gargantuan, long-necked dinosaur as big as a two-story house and weighing as much as 12 elephants once stalked a flower-dotted... Dreadnoughtus Dinosaur Weighed Whopping 65 Tons, Feared Nothing



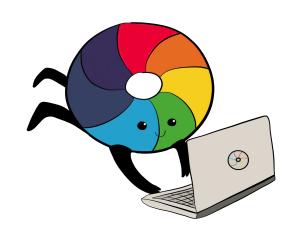
## **Altmetrics 101**



## What does the term 'altmetrics' mean?



"Alternative" metrics



## What do they track?



Online engagement with digitally published research objects



66

In scholarly and scientific publishing, altmetrics are non-traditional metrics proposed as an alternative or complement to more traditional citation impact metrics, such as impact factor and h-index.



Complementary to traditional citation metrics Score is an *indicator* and the underlying, qualitative data tells you who's saying what about research.

Track attention to scholarly outputs across peer reviews, news, Wikipedia citations, policy documents, research blogs, bookmarks on reference managers like Mendeley, and mentions on Twitter.



## Why Altmetrics?

- 1. Real-time, immediate feedback on attention to scholarly content.
- 2. Track attention to a broad range of research outputs, e.g. articles, posters, data sets, working papers, code.
- 3. Funders and other impact assessors want to see "broader" picture of engagement.
- Capture more diverse "flavours" of impacts than citation-based metrics.



## Limitations

- Altmetrics don't tell the whole story: altmetrics are a complement to, not a replacement for, things like informed peer review and citation-based metrics.
- Like any metric, there's a potential for gaming: providers have measures in place to identify and correct for gaming. Look at the underlying qualitative data.
- Altmetrics are relatively new: though we're learning a lot about how often research is shared online, we don't yet know a lot about why – more research is needed.

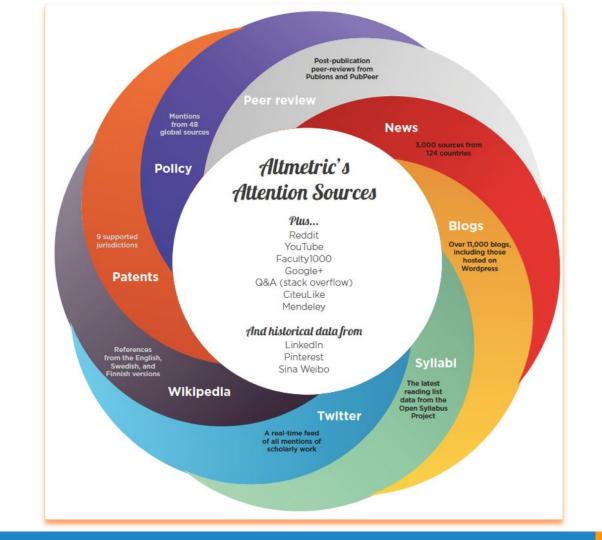


## Tracking your content

An <u>output</u> (journal article, dataset, etc) An <u>identifier</u> attached to the output (DOI, PMID, etc)

Mentions of output in a source we track





## **Attention Sources**

- ☐ News outlets & blogs over 2000 sites, global coverage
- □ Policy documents *international representation*
- Reference managers Mendeley, Citeulike, etc. + reader counts
- Social Media Twitter, Facebook, Google+ (public posts)
- ☐ Post-publication peer review
- □ Other sources Scopus citations, YouTube, F1000, Open Syllabus, Wikipedia, Reddit, Q&A, Patents





About this Attention Score

In the top 5% of all research outputs scored by Altmetric

MORE...

Mentioned by

9 news outlets



#### Altmetric Details Page

×

Variation in Melanism and Female Preference in Proximate but Ecologically Distinct Environments



About this Attention Score

In the top 5% of all research outputs scored by Altmetric

MORE...

Mentioned by

9 news outlets



News

Blogs

Twitter

Peer reviews

Weibo

Facebook

Google+



So far, Altmetric has seen 9 news stories from 9 outlets.

#### BuzzFeed

#### 21 Brutal, Honest And Relatable Things That Happened In Academic Publishing

Buzzfeed, 20 Sep 2016

Publish AND perish? Kelly Oakes BuzzFeed Staff, UK 1. This TEN YEAR gap between a journal getting the paper and publishing it.

#### Poynter.

#### The year in media errors and corrections 2014

Poynter, 18 Dec 2014

Correction of the Year This New York Times correction combines Kimye, butts and a writer treating a fake news website and a...



#### Facebook emotional manipulation study is top scientific paper of 2014 — barely

VentureBeat, 09 Dec 2014

The study that manipulated the emotions of nearly 700,000 users was the top-cited academic report of the year. A dry ecological..





Interpreting altmetrics

**Attention**: e.g. RTs, shares



### **Engagement**:

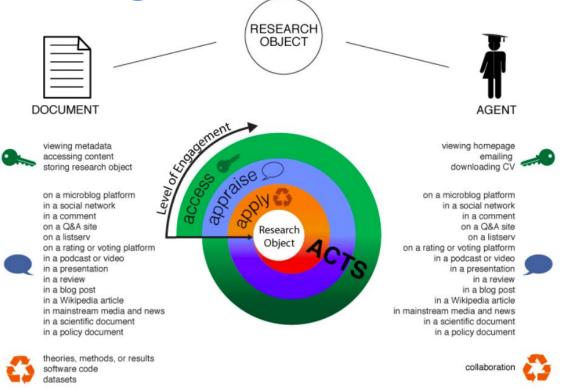
Analysis, discussion, reviews



**Impact:** e.g. shapes policy, influences working practices (tangible)



Interpreting altmetrics



Haustein, S., Bowman, T.D., Costas, R. (2016) Interpreting "altmetrics": viewing acts on social media through the lens of citation and social theories <a href="https://arxiv.org/pdf/1502.05701.pdf">https://arxiv.org/pdf/1502.05701.pdf</a>

Altmetrics in action:

What can you do with them?

## Answer questions like...

What attention is the work of my peers receiving?

Who's talking about my research?

Where are the audiences I want to reach?

What does 'successful' engagement look like for my field?

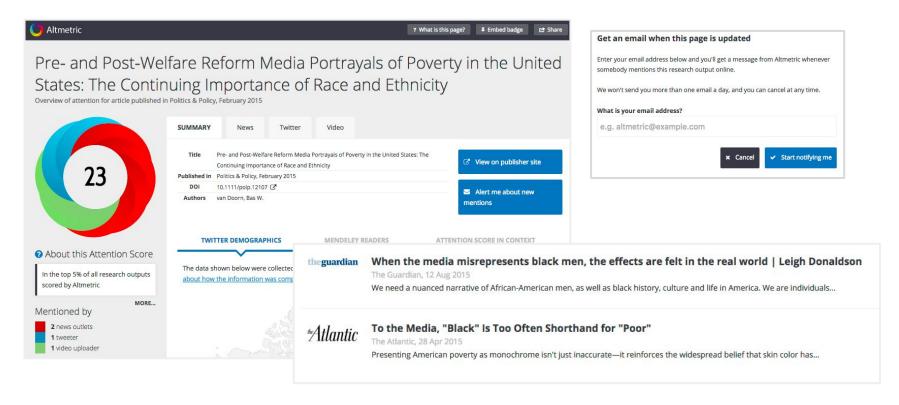
Who could I collaborate with on my next project?

How can I strengthen my funding application?

Do people 'get' my work? Or is it being misinterpreted?

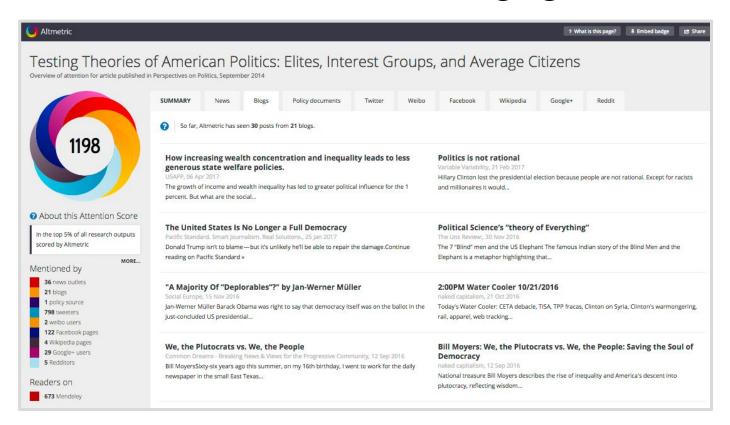


## Manage your reputation



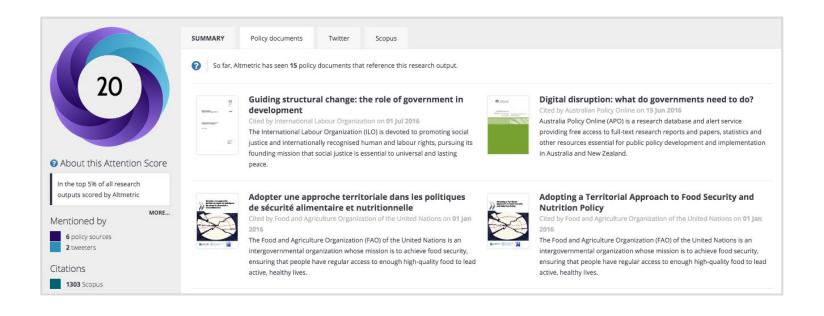


## Find evidence of reach and engagement



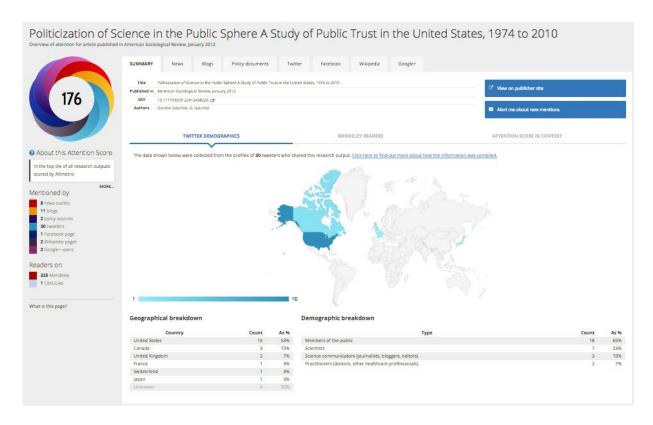


## Strengthen funding applications



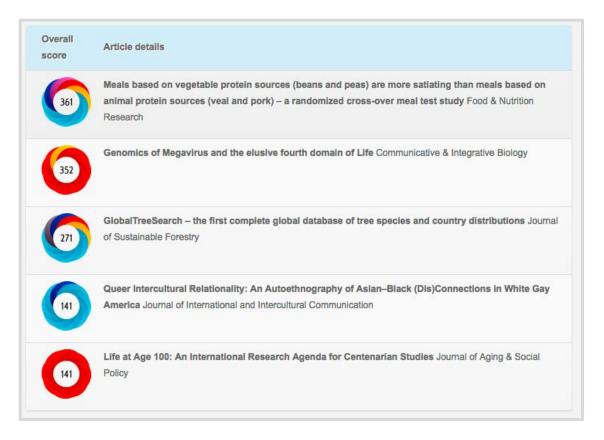


#### Find new collaborators



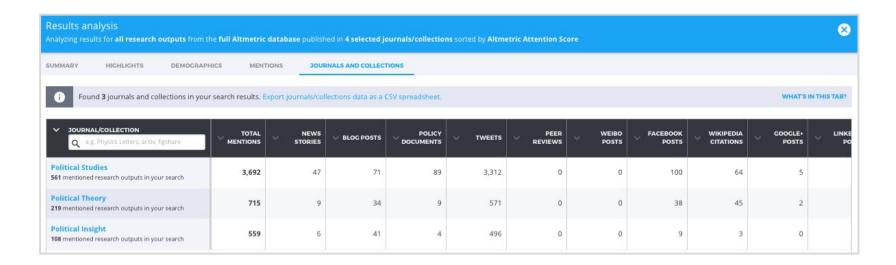


# Keep up to date with trends in your field





# Make informed publication decisions

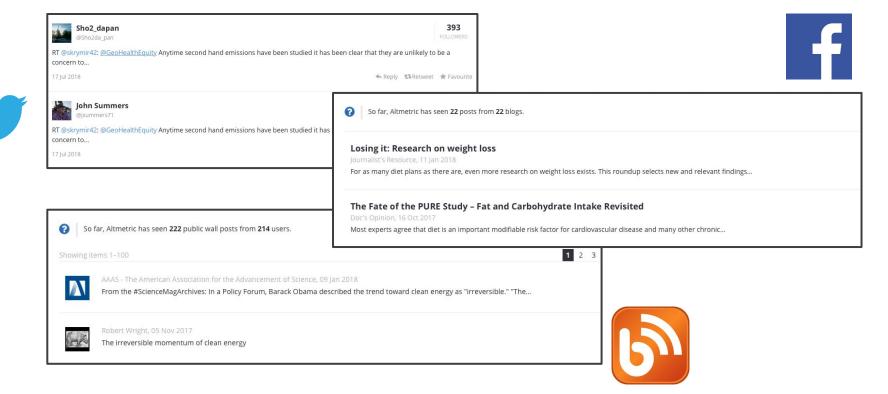




Altmetrics in action:

Outreach strategies

# Outreach





# Outreach

• Write a lay summary of your work



Upload and make available data images, posters and other files



- Start your own blog (or contribute to an existing one)
- Reach out to key bloggers



## Outreach

- Include a link to your work in your email signature, online profile or CV
- Work with the press office at your publisher or institution



Share links to your work via social media

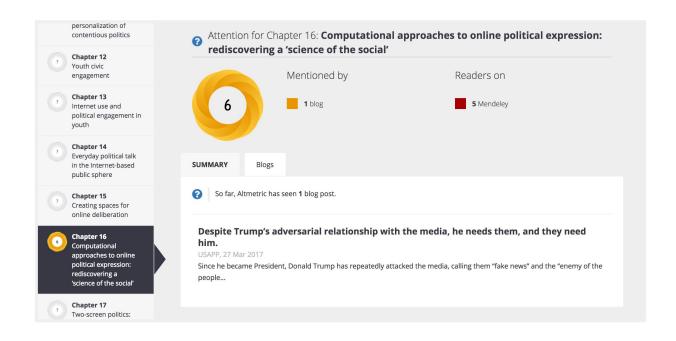


- Register for an ORCID iD
- Make your work available via Open Access wherever possible



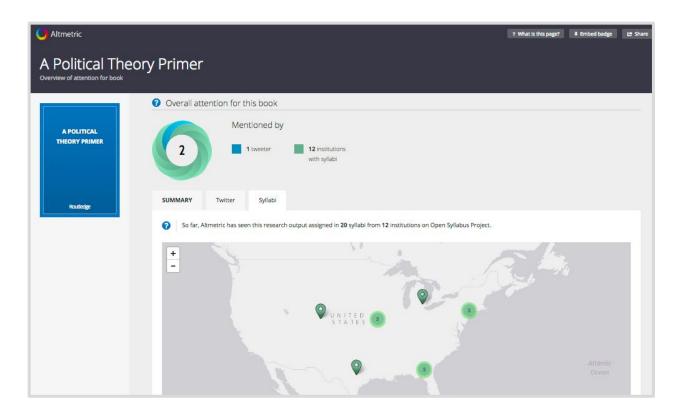
Let's dig into the data

# Book Chapter



https://www.altmetric.com/details/7527254/chapter/12707052

# Book



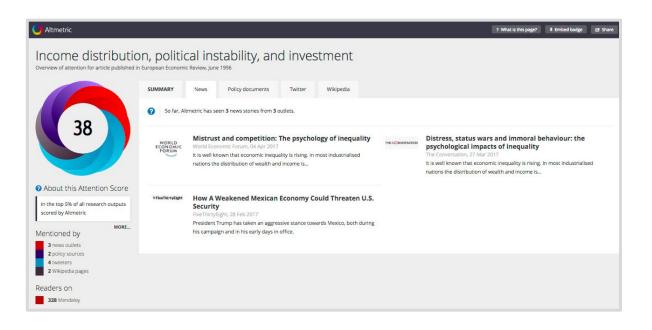
https://www.altmetric.com/details/6798340/syllabi

## Article



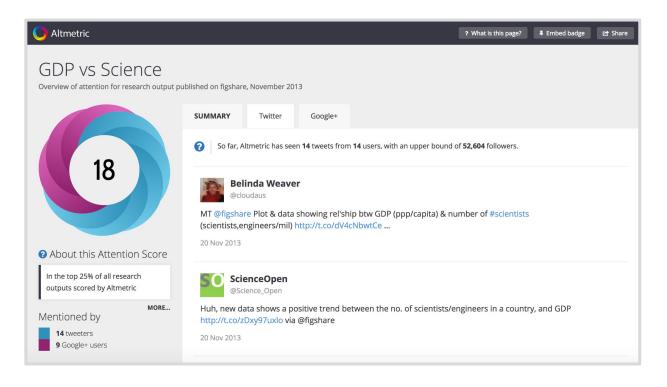
https://www.altmetric.com/details/17096295/policy-documents

# Article



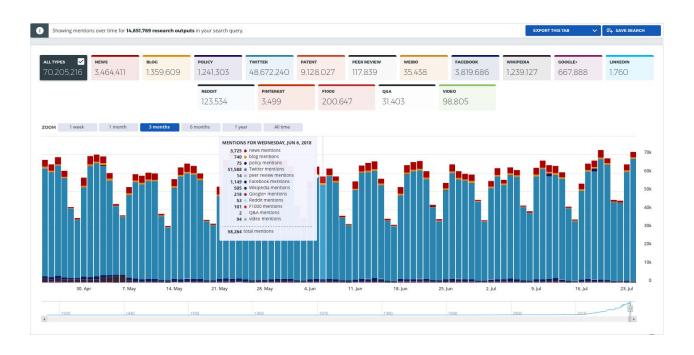
https://www.altmetric.com/details/543486/news

#### Dataset



https://www.altmetric.com/details/1919576

# Journal



# Get started

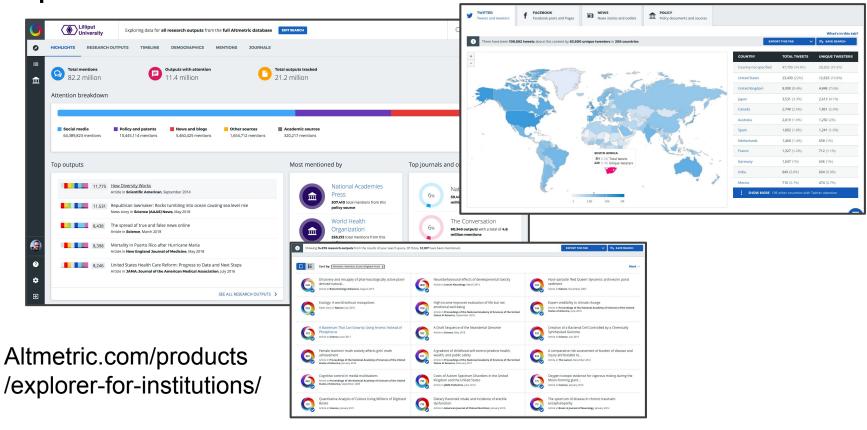
# Badges on publisher sites







# Explorer for Institutions





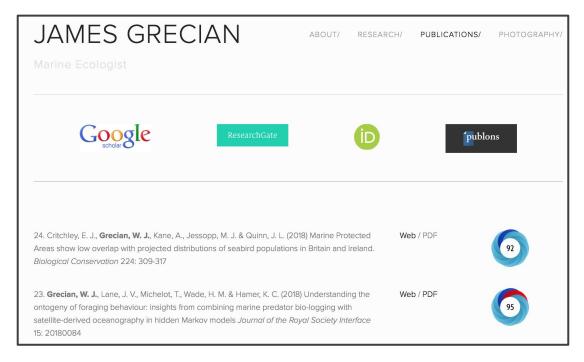
## API



https://www.altmetric.com/ products/altmetric-api/



# Free badges



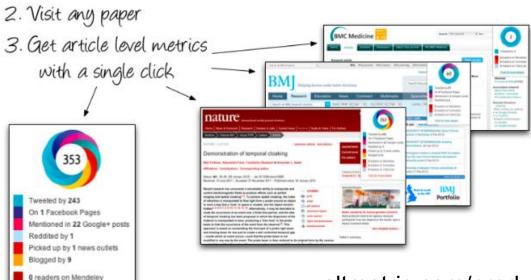


https://www.altmetric.com/products/free-tools

## Bookmarklet

0 readers on Connotea 0 readers on CiteULike

1. Add bookmarklet to your bookmarks toolbar

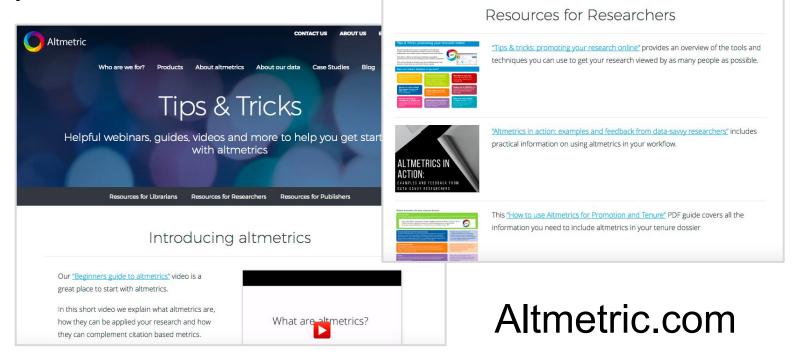


altmetric.com/products/free-tools/bookmarklet/



Useful materials

Tips and tricks

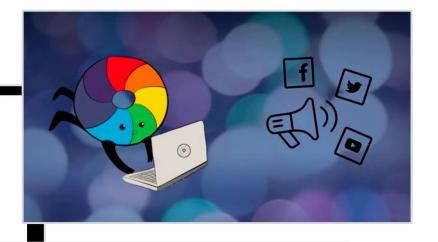




# Youtube videos

How to use altmetrics for professional advancement

Brought to you by Altmetric

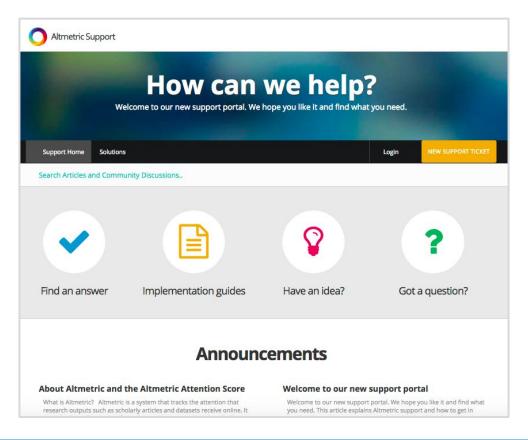


What are altmetrics?



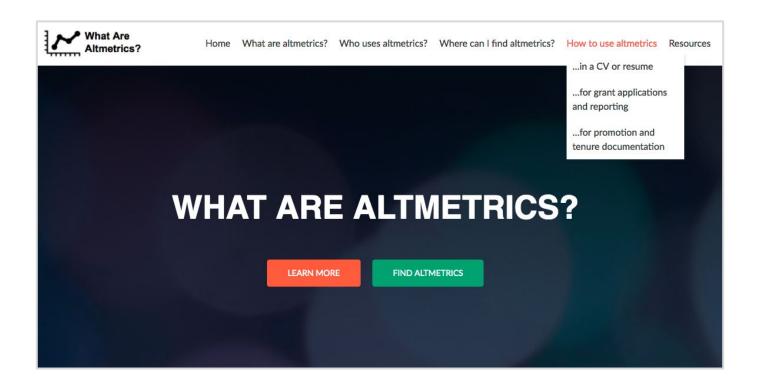


# Support site





## Whatarealtmetrics.com





## Questions?

Altmetric.com info@altmetric.com