



# Altmetrics in Action:

## Using Metrics Tools to Extend Library Research Support Services

Natalia Madjarevic  
Training and Implementation Manager,  
Altmetric

Scott Taylor  
Research Services Librarian,  
University of Manchester

@nataliafay / @altmetric / @scott\_tweets



[altmetric.com](https://altmetric.com)



# Overview

- **What are altmetrics?** Tracking attention to research outputs at Altmetric
- **Altmetric for Institutions** Monitoring attention to your research outputs
- **Implementing altmetrics at The University of Manchester** Altmetrics in research support

# Top questions I was asked as an academic librarian...



- How can I disseminate my work as widely as possible?
- Who's downloading and citing my research?
- What platforms should I use to share my papers & data?
- Many, **many** questions about open access policies
- How can the Library help me with all of this?



# Developing library services to support digital scholarship...



Literature reviews,  
resources and  
training



Grant  
applications and  
funder reporting



Open access and  
dissemination



Research data  
management



Evaluation and  
impact assessment

...driving research innovation and  
enabling open research.



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

*(Professor Michael Stewart, UCL)*

How does research contribute to changes in everyday decisions or working practices?

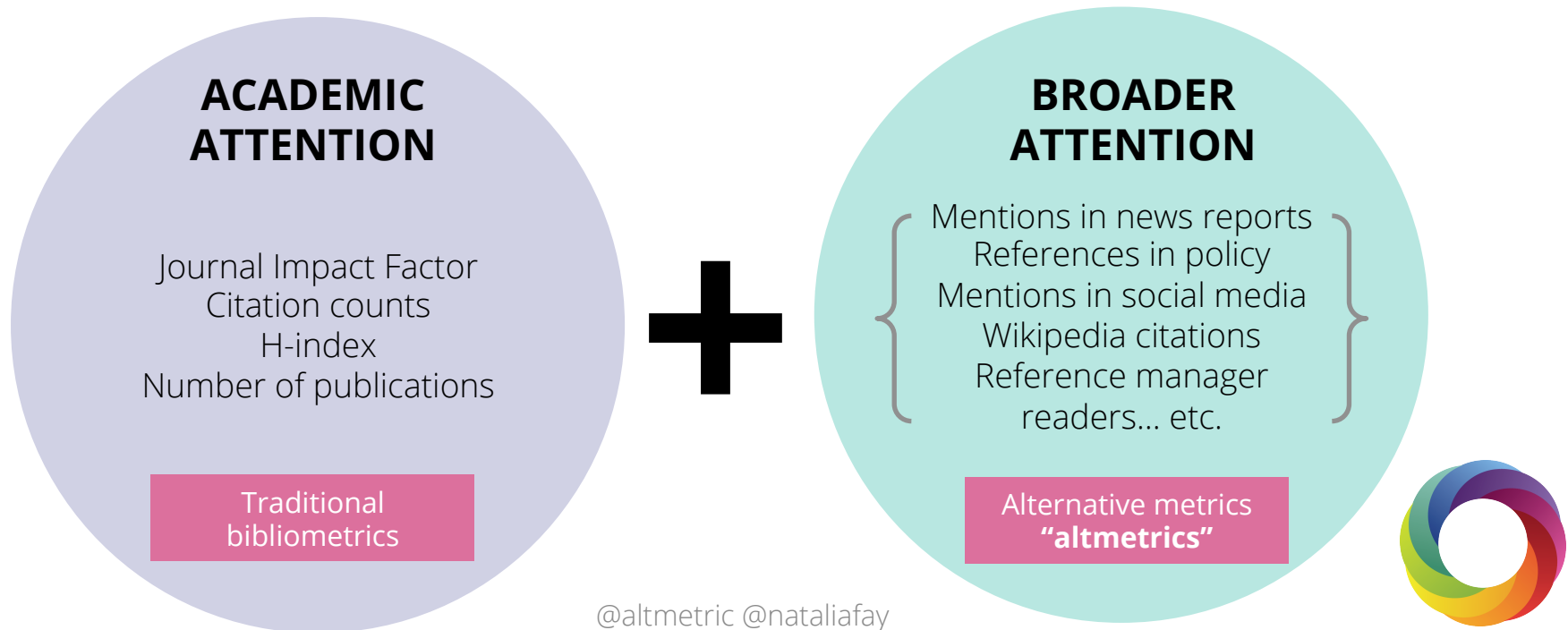
- ★ Did it help improve services or business?
- ★ Provoke debate?
- ★ Shape policy?

And how do you demonstrate this to funders?



# What are altmetrics?

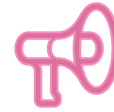
- Tracking attention to research outputs in non-traditional sources, e.g. policy documents, news, blogs and social media
- Help understand how research is being received and used
- *Complementary to traditional citation-based analysis*
- *Indicators of research impact*



# Altmetrics are part of a broader conversation...



Traditional  
bibliometrics



Altmetrics



Clinical  
guidelines



Funding  
awards



Awards and  
professional  
recognition



Teaching  
activities



Patents



Public  
speaking  
events



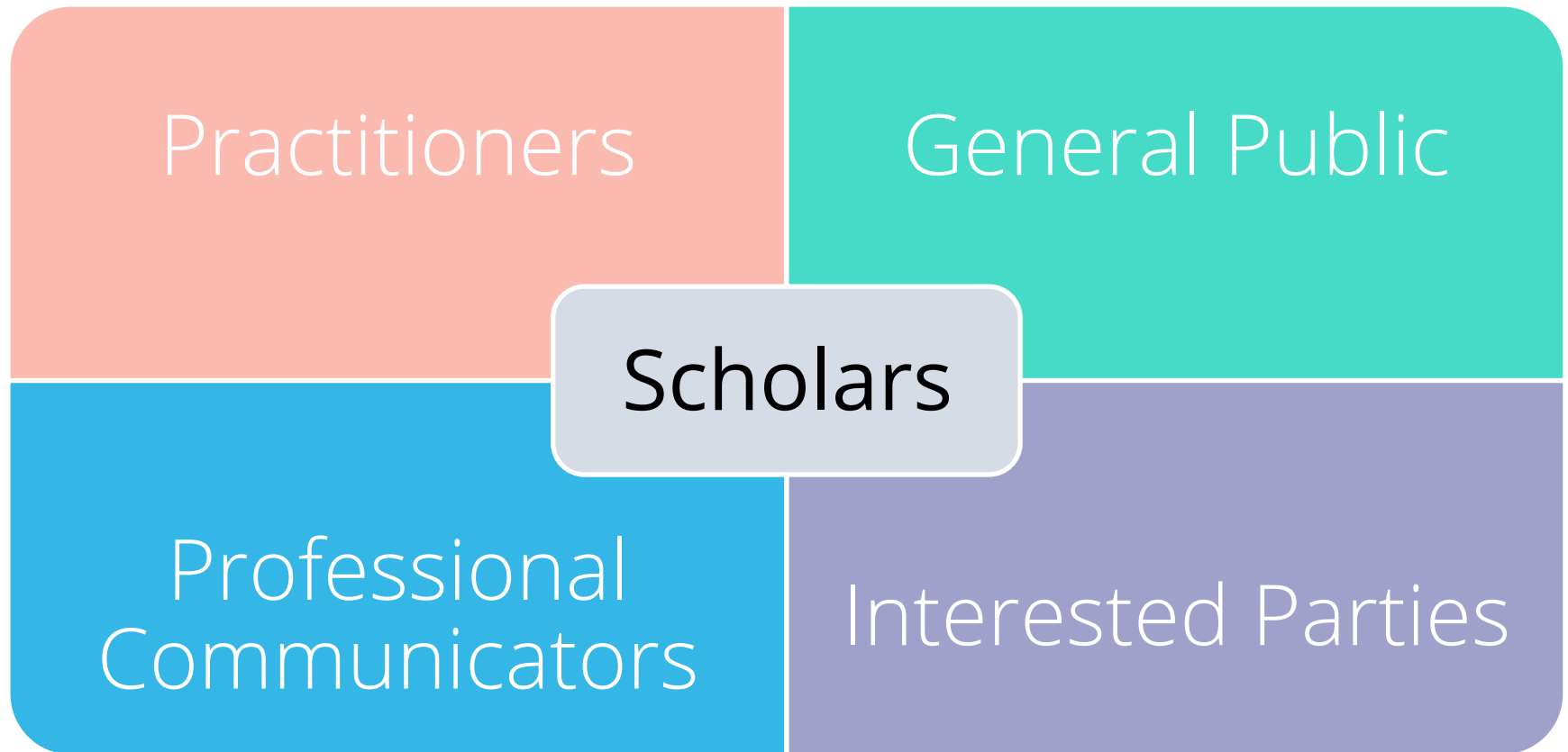
Changes to  
curriculum



Government  
debates

# Multifaceted picture of engagement:

## *Audiences*





# Advantages of altmetrics

- 1 Moving beyond crediting only journal article contributions
- 2 Early career researchers whose work may not have accrued citations to demonstrate engagement
- 3 Real-time, immediate feedback on attention and dissemination of scholarly content



# A more well-rounded view of research impact...



Each day, we track  
**~44,000** new  
mentions of  
research across  
sources incl. social  
media, news, and  
policy docs.

We've tracked  
almost **4m**  
outputs.

Each week,  
**~50k**  
unique articles  
are shared.

Mentions range in  
complexity, from  
quick shares to  
comprehensive  
reviews.

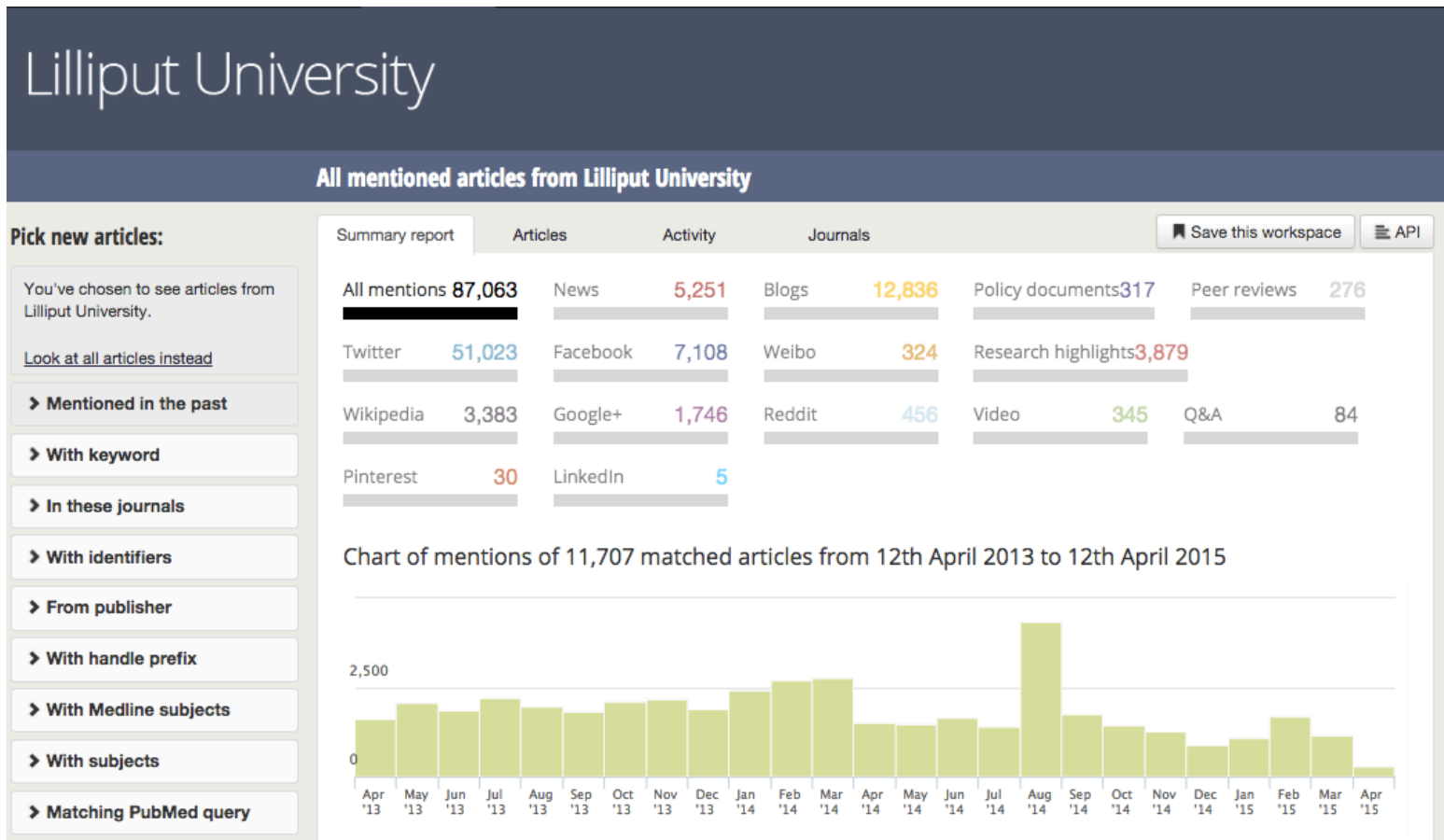
Looking beyond  
numbers  
towards *quality*  
of engagement...

# Altmetric for Institutions



# Building Altmetric for Institutions

*"Please let me see data on papers from a person or department."*



# ★ Real-time feed of research engagement

The screenshot displays a web interface for monitoring research engagement. At the top, a dark blue header reads "All mentioned articles from Lilliput University". Below this is a navigation bar with four tabs: "Summary report", "Articles", "Activity" (which is circled in pink), and "Journals". On the right side of the navigation bar, there are two buttons: "Save this workspace" and "API".

The main content area shows a list of tweets and news articles. The first two items are tweets from EpiCSA (@epicsa01) and Colette Miller (@coletteinthelab), both discussing the "Effects of Temperature and Relative Humidity on DNA Methylation" with hashtags #ItsTooHot, #Epigenetics, and #ScienceofSummer. The third item is a tweet from tomomi (@tmmngc) about high income and emotional well-being. The fourth item is a news article titled "Orange Is the New Black repeats a dumb, bogus statistic about money not buying happiness" by Dylan Matthews.

Each tweet entry includes the user's profile picture, name, and handle, followed by the tweet text, a link, and a highlighted engagement bar. The engagement bars for the first two tweets show a count of 3 and the word "Epidemiology". The engagement bar for the third tweet shows a count of 739 and the text "High income improves evaluation of life but not emotional well-being Proceedings of the National Academy of Sciences of the United States of America".

At the bottom right of the screenshot, there is a yellow callout box with the text: "Monitor your popular papers being discussed right now".

# ★ How we populate Altmetric for Institutions



- Integrations with CRISs, IRs, profiles, Excel, URL tracking, custom APIs, bespoke connectors
- Low barrier technical setup for end users
- Departmental hierarchy, author papers
- Regular updates

# ★ Encourage staff to deposit in your research information management system

My Publications

You have 13 pending publications. Please claim the ones that are yours.

Navigation: Mine (118) Pending Not mine

Sort by: Reporting date (newest to oldest) Results per page: 10 1-10 of 118

Filter results: Relationship type: Author of, Title, Journal, Reporting date from, Reporting date to, Publication type, SHERPA RoMEO colour, Repository status

Article 1: Ultra-Luminous Supernovae as a New Probe of the Interstellar Medium in Distant Galaxies. Berger E, Chornock R, Lunnan R, Foley R, Czekala I, Rest A, Leibler C, Soderberg AM, Roth K, Narayan G, et al. 18 Jun 2012. Altmetric score: 13.

Article 2: An ultraviolet-optical flare from the tidal disruption of a helium-rich stellar core. Gezari S, Chornock R, Rest A, Huber ME, Forster K, Berger E, Challis PJ, Neill JD, Martin DC, Heckman T, et al. Nature 485(7397):217-220 10 May 2012. Altmetric score: 108.

Article 3: The Spectroscopic Diversity of Type Ia Supernovae. Blondin S, Matheson T, Zirshner BP, Mandel KS, Berlind P, Calkins M, Challis P, Garnavich PM, Jha SW, Modjaz M, et al. The Astronomical Journal 143(3):126 21 Mar 2012. Altmetric score: 3.



37% of Altmetric Top 100 2014 were open access



@altmetric @nataliafay

# Altmetrics formula...



Range of methods  
to understand  
research attention

+



Library support  
services and training

=



Adoption & better  
evidencing of  
research impact



# Implementing altmetrics at The University of Manchester

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Wed 24<sup>th</sup> June, LIBER 2015

Scott Taylor, The University of Manchester Library



The University of Manchester

# Why were we interested in altmetrics?



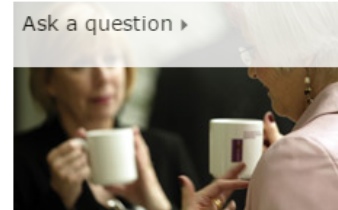
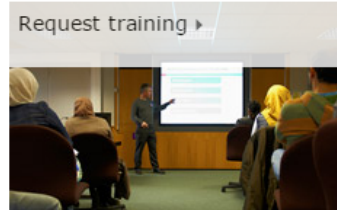
- ▲ The University of Manchester Library
- ▲ Our services
- ▲ Research Services

- Citation Services**
- ▶ Research publication metrics
  - ▶ How do I...?
  - ▶ About the service
  - ▶ Definitions
  - ▶ Request a report
  - ▶ Request training
  - ▶ Contact us

**FEEDBACK AND ENQUIRIES** ➔

## Citation Services

- Learn about research publication metrics
- Read how you can use citation data
- Learn more about the service



## Welcome to SciVal



### Overview

Get a high-level overview of the research performance of your Institution, other Institutions, Countries and Groups of Researchers.

[Go to Overview](#)



### Benchmarking

Compare and benchmark your Institution to other institutions, Researchers and Groups of Researchers using a variety of metrics.

[Go to Benchmarking](#)



### Collaboration

Explore the collaboration network of both your Institution and other Institutions.

[Go to Collaboration](#)

## Quick Guide to SciVal

Get a quick overview of SciVal, how you can use it and how it can help you.

- [Getting started with SciVal](#)
- [Working with entities](#)
- [Using SciVal for strategic planning](#)

[View the SciVal Online Manual](#)

### February 2015 - New in this release

Release of the SciVal Trends module:

- Get a performance snapshot of your Research Areas with citation and usage data
- Discover hot topics through the keyphrase analysis using Elsevier Fingerprinting technology
- See top authors, institutions, journals and countries

[See the full list of features in the February 2015 release](#)

# [Dummy] Citation report: Institute of Astroscience



**Year**

- (All)
- 2008
- 2009
- 2010
- 2011
- 2012

**Staff member**

(All)

**Source title**

(All)

**Subject for actual per...**

(All)

**Keyword**

**Document Type**

(All)

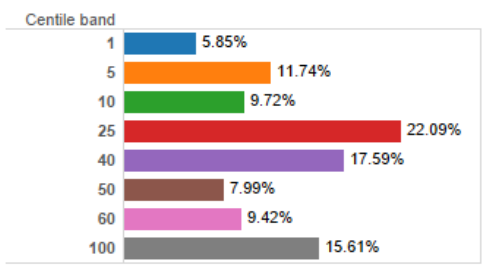
**Number of records selected**

Document Type	Count
Article	1,996
Conference Paper	328
Review	53
<b>Grand Total</b>	<b>2,377</b>

## Overall citation performance

In / Out of Top 10 centile

In	27.30%
Out	72.70%



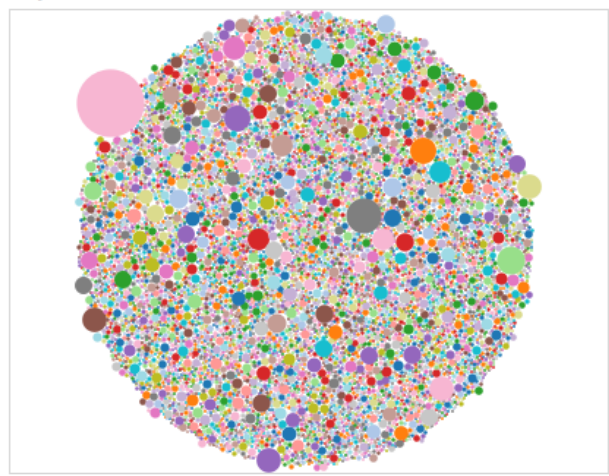
## Outputs per journal

Source title	Count
Journal of Applied Physics	511
Astronautica Acta	473
Review of Scientific Instruments	431
Nuclear Instruments and Methods	243
Nature	184
The Journal of Chemical Physics	97
Physics of Fluids	70
Journal of Mathematical Physics	38
British Journal of Applied Physics	36
Nuclear Physics	20

## Article citation performance

Title	Staff member	Citation Score	Count
Double beta decay	Lemontree, Trevor	673.64	5,342
	Sharp, Pat	673.64	5,342
Erratum: Microwave Propag..	Sharp, Pat	113.81	3,032
Erratum: Elastic constants of bismuth (Journal Applied of Physics (1960) 31 (1534))	Lemontree, Trevor	40.39	1,537
	Sharp, Pat	40.39	1,537
	Thumbton, Tom	40.39	1,537
	Tips, Fred	40.39	1,537
Surface kinetics and physics investigation of the reaction between single-crystal germanium and iodine	Bluff, Ron	131.10	1,349
	Timbo, Uve	131.10	1,349
Erratum: Accelerator energy calibrations (Reviews of Modern Physics)	Walker, Luke	131.10	1,349
	Lemontree, Trevor	49.74	1,325
	Sharp, Pat	49.74	1,325

## Keywords



The citation data and metadata used in this report is not based on actual research outputs.

View usage metrics for selection

### Manchester eScholar - maximising access to the University's research (2011)

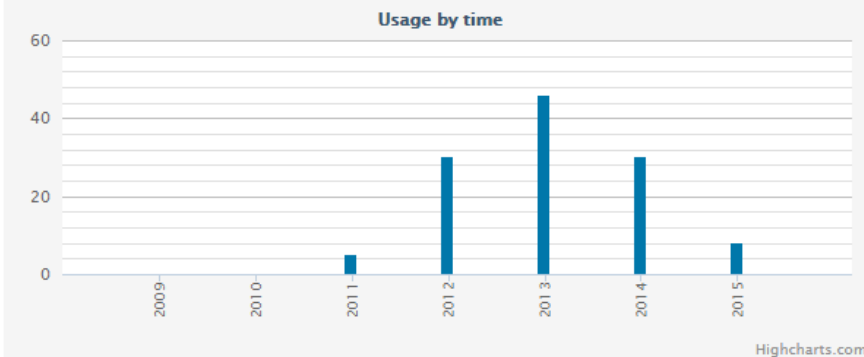
Pageviews

**119**

Downloads

**86**

View **Pageviews** Date range 01/01/2009 to 13/03/2015



#### Demographics

#### Traffic sources

Records 1 to 5 of 12.

[First](#) [Previous](#) [1](#) [2](#) [3](#) [Next](#) [Last](#)

Country	Pageviews
United Kingdom	92
United States	13
Hong Kong	3
Chile	2
India	2

[First](#) [Previous](#) [1](#) [2](#) [3](#) [Next](#) [Last](#)

Records 1 to 5 of 32.

[First](#) [Previous](#) [1](#) [2](#) [3](#) [4](#) [5](#) [Next](#) [Last](#)

City	Pageviews
Manchester, United Kingdom	54
London, United Kingdom	12
New Haven, United States	9
Sheffield, United Kingdom	5
Hong Kong, Hong Kong	3

[First](#) [Previous](#) [1](#) [2](#) [3](#) [4](#) [5](#) [Next](#) [Last](#)

Records 1 to 5 of 12.

[First](#) [Previous](#) [1](#) [2](#) [3](#) [Next](#) [Last](#)

University network	Pageviews
university of manchester	24
the university of manchester local area network	13
yale university	8
harvard university	3
the university of manchester	3

[First](#) [Previous](#) [1](#) [2](#) [3](#) [Next](#) [Last](#)

Close



The University of Manchester


# Why Altmetric?

Mentioned at any time on  
Order by  
[reset filters and search terms](#)



Ranking	Country	Percentage
1	UK	38 %
2	US	23 %
3	ES	5 %
		4 %
		3 %
		3 %
		2 %
		2 %
		2 %
		16 %

Show matching articles >




**Tom**  
@medicineupdate  
3,538 followers

Prevalence of abnormalities in knees detected by MRI in adults without knee osteoarthritis: population based... <http://t.co/6FxpRQBH>

13-Nov-2012

---




**Tom**  
@youareinformed  
3,538 followers

Prevalence of abnormalities in knees detected by MRI in adults without knee osteoarthritis: population based... <http://t.co/WTTZtCbO>

13-Nov-2012

Reply Retweet Favorite

---




**Tom Heston**  
@tomheston  
87,868 followers

Prevalence of abnormalities in knees detected by MRI in adults without knee osteoarthritis: population based... <http://t.co/KLdRtkj5>

13-Nov-2012

---




**Steven Santolin**  
@DrSteveSantolin  
63 followers

Yet another in a long list of studies showing high rates of MRI pathological/abnormal joint findings on people... <http://t.co/50ro7c5U>

15-Jan-2013

---



**Markus Walden**  
@MarkusWalden  
1,370 followers

Similar high frequency of abnormalities on MRI in non-OA knees among painful & painfree joints @bmj\_latest <http://t.co/5qiv675diQ>

09-Oct-2013

4th	367	18	The DNA sequence and biological annotation of human chromosome 1.	Nature
5th	364	192	Patellofemoral pain: consensus statement from the 3rd International Patellofemoral Pain Research Retreat held in Vancouver, September 2013.	British Journal of Sports Medicine
6th	348	223	Uprooting researchers can drive them out of science.	Nature
6th	348	339	Cognitive therapy for people with schizophrenia spectrum disorders not taking antipsychotic drugs: a single-blind	The Lancet (British Edition)



Mentioned at any time on  
Order by  
[reset filters and search terms](#)



Ranking	Country	Percentage
1	UK	38 %
2	US	23 %
3	ES	5 %
		4 %
		3 %
		3 %
		2 %
		2 %
		2 %
		16 %

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09-Oct-2013

4th	367	18	The DNA sequence and biological annotation of human chromosome 1.	Nature
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6th	348	223	Uprooting researchers can drive them out of science.	Nature
6th	348	339	Cognitive therapy for people with schizophrenia spectrum disorders not taking antipsychotic drugs: a single-blind	The Lancet (British Edition)

Altmetric Explorer

www.altmetric.com/explorer.php?view=institutional#!manchester\_uni/authors/k

Altmetric Explorer Explore the data Explore my institution Help

Access provided by Manchester University Anonymous access

**MANCHESTER**  
1824  
The University of Manchester

5,415 authors 158,048 items 12,484 mentioned

Authors Departments Journal subjects

Type to filter A B C D E F G H I J K L M N O P Q R S T U V W X Y Z ALL

	158,048 articles	12,484 have metrics
All authors		
Kaar, Tracy	2 articles	2 have metrics
Kachatkou, Anton	1 articles	1 has metrics
Kadirvel, Manikandan	19 articles	2 have metrics
Kadler, Karl	83 articles	27 have metrics
Kafkas, Alexandros	14 articles	2 have metrics
Kaika, Maria	78 articles	4 have metrics
Kalambouka, Afroditi	22 articles	1 has metrics
Kalra, Philip	57 articles	3 have metrics
Kalra, Virinder	35 articles	5 have metrics
Kalshoven, Petra Tjitske	19 articles	- have metrics
Kaltungo, Akilu	5 articles	- have metrics
Kamara, Alhaji	1 articles	- have metrics
	2	-

www.altmetric.com/explorer.php?view=institutional#

Authors  
 Authors Departments Journal subjects

Type to filter

Type to filter	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	ALL	
All departments																										5,415 authors	158,048 articles	12,484 have metrics
Faculty of Engineering and Physical Sciences																										1,172 authors	45,707 articles	2,657 have metrics
School of Chemical Engineering and Analytical Science																										71 authors	2,873 articles	149 have metrics
Analytical Science																										7 authors	581 articles	28 have metrics
Chemical Engineering																										21 authors	328 articles	27 have metrics
Process Integration																										3 authors	276 articles	5 have metrics
School of Computer Science																										173 authors	6,187 articles	375 have metrics
School of Earth, Atmospheric and Environmental Sciences																										110 authors	3,617 articles	259 have metrics
School of Electrical and Electronic Engineering																										112 authors	4,459 articles	38 have metrics
School of Materials																										142 authors	5,228 articles	171 have metrics
Corrosion and Protection Centre																										14 authors	80 articles	2 have metrics
Materials Science Centre																										78 authors	554 articles	21 have metrics
Textiles and Paper																										29 authors	41 articles	1 has metrics
School of Mathematics																										87 authors	2,217 articles	92 have metrics
Applied Mathematics																										43 authors	1,252 articles	79 have metrics

Altmetric Explorer

www.altmetric.com/explorer.php?view=institutional#!manchester\_uni/authors/k

www.altmetric.com/explorer.php?view=institutional#!manchester\_uni/groups

www.altmetric.com/explorer.php?view=institutional#!manchester\_uni/subjects

Altmetric Explorer Explore the data Explore my institution Help

Access provided by Manchester University Anonymous access

MANCHESTER 1824 The University of Manchester

5,415 authors 158,048 items 12,484 mentioned

Authors Departments Journal subjects

Type to filter

Journal subjects	Articles	Have metrics
All journal subjects	158,048	12,484
Cluster 1: Physical, Chemical and Earth Sciences - (PCE)	14,136	1,600
CHEMICAL SCIENCES	5,961	799
Analytical chemistry	397	73
Inorganic chemistry	582	93
Macromolecular and materials chemistry	126	9
Medicinal and biomolecular chemistry	792	99
Organic chemistry	708	81
Other chemical sciences	644	128
Physical chemistry (incl. structural)	1,006	80
Theoretical and computational chemistry	242	20
EARTH SCIENCES	1,457	215
Atmospheric sciences	557	38

www.altmetric.com/explorer.php?view=institutional#ie\_main\_lists



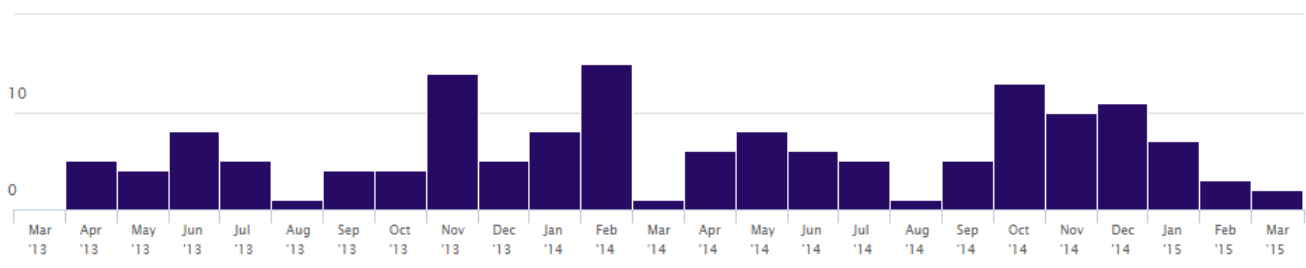
## All mentioned articles from The University of Manchester

### Pick new articles:

- You've chosen to see articles from The University of Manchester.
- [Look at all articles instead](#)
- › Mentioned in the past
- › With keyword
- › In these journals
- › With identifiers
- › From publisher
- › With handle prefix
- › With Medline subjects
- › With subjects
- › Matching PubMed query
- › Funded by
- › Mentioned at any time on
- › Order by
- [reset filters and search terms](#)
- Show matching articles ▶

Summary report	Articles	Activity	Journals		
All mentions 86,227	News 3,817	Blogs 4,655	Policy documents 380	Peer reviews 217	
Twitter 66,088	Facebook 4,727	Weibo 24	Wikipedia 2,095	Research highlights 1,357	
Google+ 1,101	Reddit 161	Video 138	Q&A 43	Pinterest 15	
LinkedIn 9					

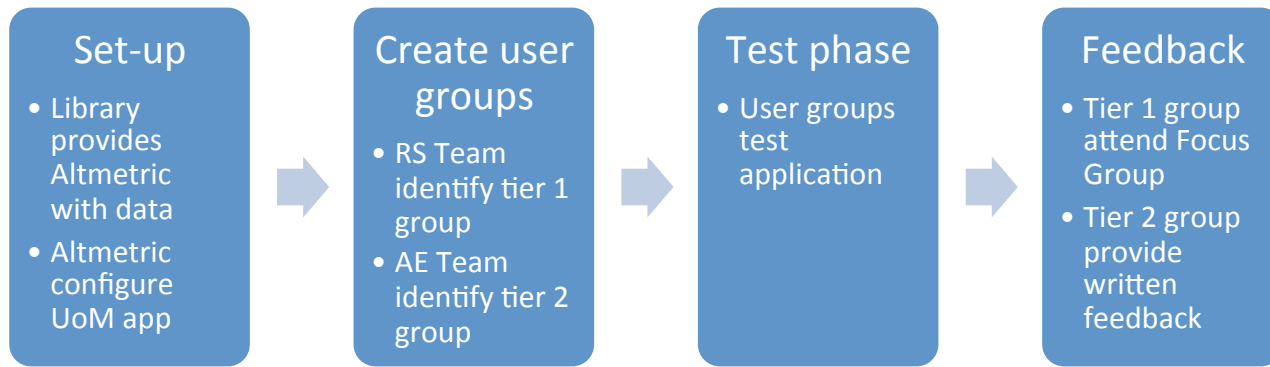
Chart of policy documents of 315 matched articles from 16th March 2013 to 16th March 2015



### Top articles in policy documents

	Rank	Policy Documents	Score	Title	Journal
	1st	8	172	Beyond 'dangerous' climate change: emission scenarios for a new world	Philosophical Transactions Of The Royal Society A: Mathematical, Physical & Engineering Sciences
	2nd	4	3	Corporate income tax reforms and international tax competition	Economic Policy

# How we trialled AFI



**Set-up**

- Library provides Altmetric with data
- Altmetric configure UoM app

**Create user groups**

- RS Team identify tier 1 group
- AE Team identify tier 2 group

**Test phase**

- User groups test application

**Feedback**

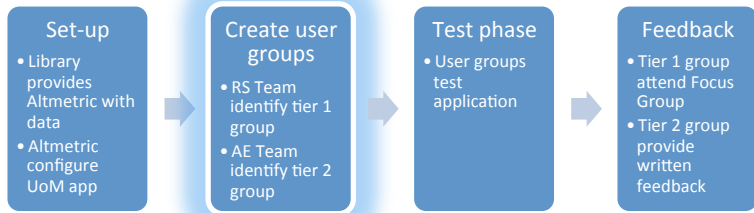
- Tier 1 group attend Focus Group
- Tier 2 group provide written feedback

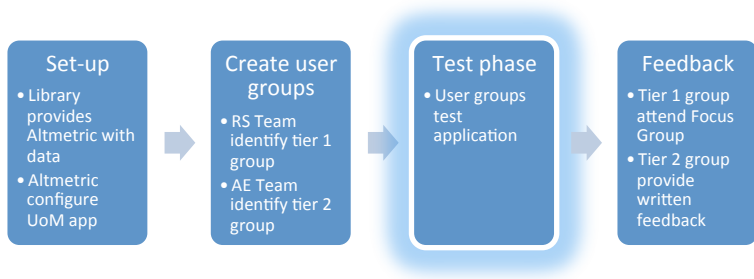


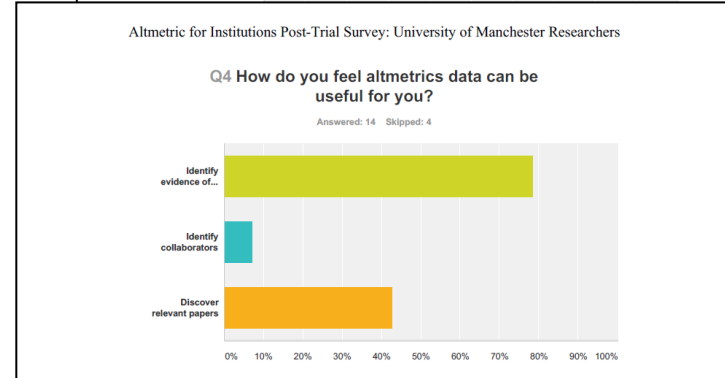
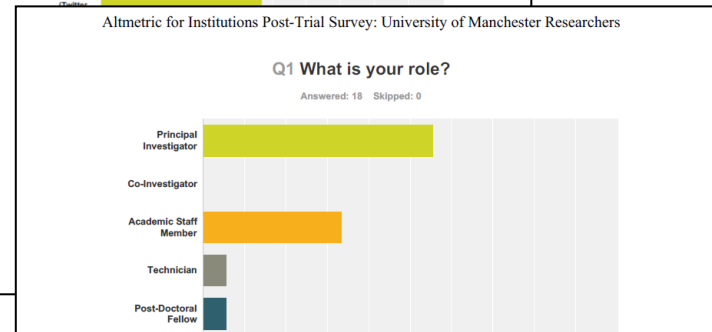
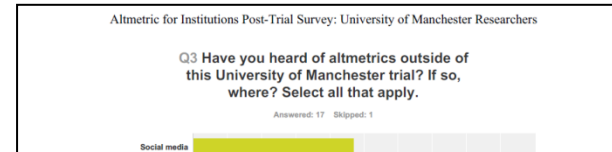
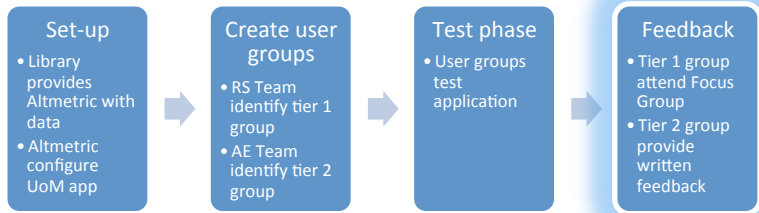
Institutional Repositories













## Case Study

# The University of Manchester

### User profile

Scott Taylor is part of the Research Services team at The University of Manchester Library. Scott's team provides research tools to the entire institution with the aim of identifying new tools or innovations that could most benefit their researchers.

### Institutional goals

- Having gone through the process of manually searching for and compiling evidence of 'broader engagement' for the most recent Research Excellence Framework (REF), the research services team at Manchester wanted to make it easier for their researchers to find this evidence by providing them with online attention in one consolidated source.
- Scott's team was also looking for new ways to monitor outreach and public engagement activities across their departments and faculty. To do this they wanted a reliable system that would offer insight into qualitative data, not just numbers, and give them the chance to position themselves as a forward-thinking institution.

### Key Stats

- 64,786 mentions of Manchester research to date

### Implementing Altmetric for Institutions

The University of Manchester was one of a handful of institutions that agreed to be development partners by testing Altmetric for Institutions just prior to the official product launch.

Altmetric for Institutions was first launched at Manchester to a select group of administrators and faculty across several disciplines. The objective of this targeted launch was to give Scott and his colleagues the chance to explore all of the data and reporting functionality offered by the platform, and to develop a better understanding of how they would later use the product across the entire institution.

Summary report	Articles	Activity	Journals
All mentions <b>64,786</b>	News <b>2,533</b>	Blogs <b>3,447</b>	...
Facebook <b>3,644</b>	Weibo <b>140</b>	Research highlights <b>1,311</b>	...
Q&A <b>41</b>	Pinterest <b>14</b>	LinkedIn <b>9</b>	...

### Gathering evidence and context

Researchers and administrators are facing increasing demands from management and government reviews to provide evidence of the broader impact and value of their work. Altmetric for Institutions is already being utilized by Manchester Research Services team as the key resource for determining the online attention of



The University of Manchester

# Our future plans



By Chris Brown (Edgware Road) [CC BY-SA 2.0 (<http://creativecommons.org/licenses/by-sa/2.0>)], via Wikimedia Commons



# Do You Know The Full Impact of Your Research?

## **Altmetrics service offers powerful citation insight**

Like so many other facets of modern life, scholarship and research is being reshaped in the digital age. Open Access led a revolutionary change in the way research output is published and shared. Now, [Altmetrics](#) is aiming to reinterpret how and where research output is discussed and measured, by blurring the boundary between traditional citation methods and digital sources.

*Altmetrics* offers insight into the online world, tapping into channels not visible to current citation methods. Researchers can use *Altmetrics* to measure the attention their output is receiving across blogs, news media and social media; where, when and by whom. They can also use it to identify and explore new places to disseminate their work and reach their intended audiences.

Following a successful trial, the University Library now provides full access to *Altmetrics*, making Manchester one of the first UK universities to do so. Working in partnership with [Altmetric LLP](#), market leaders in Altmetric solutions, the University's research community can now gather a broader awareness and understanding of the attention that their research output receives.

If you are interested in knowing about the impact your research is receiving online, try the service today by clicking on the icon below. If you require further information about *Altmetrics*, please contact [Research Services](#).



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Research / Services / Research Data Management

- < The University of Manchester Library
- < Services and support
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- What do I need to do?
- Data Management Planning Tool
- Data management planning
- University of Manchester Research Data Management Policy
- How to manage your data

#### Research Data Management

The University of Manchester Research Data Management Policy

The University of Manchester Research Data Management Policy became mandatory on 2 December 2013. The University of Manchester Library is providing a Research Data Management service to support researchers. Information, guidance, an implementation timetable, [compliance requirements](#) and contact details are on these pages.



#### Preparing your Data Management Plan

Information and advice to help you prepare your Data Management Plan



#### Data Management Planning Tool

Support for researchers writing their Data Management Plan





# Thanks!



[natalia@altmetric.com](mailto:natalia@altmetric.com) /  
[scott.taylor@manchester.ac.uk](mailto:scott.taylor@manchester.ac.uk)



@nataliafay / @altmetric / @scott\_tweets



[altmetric.com](http://altmetric.com)

