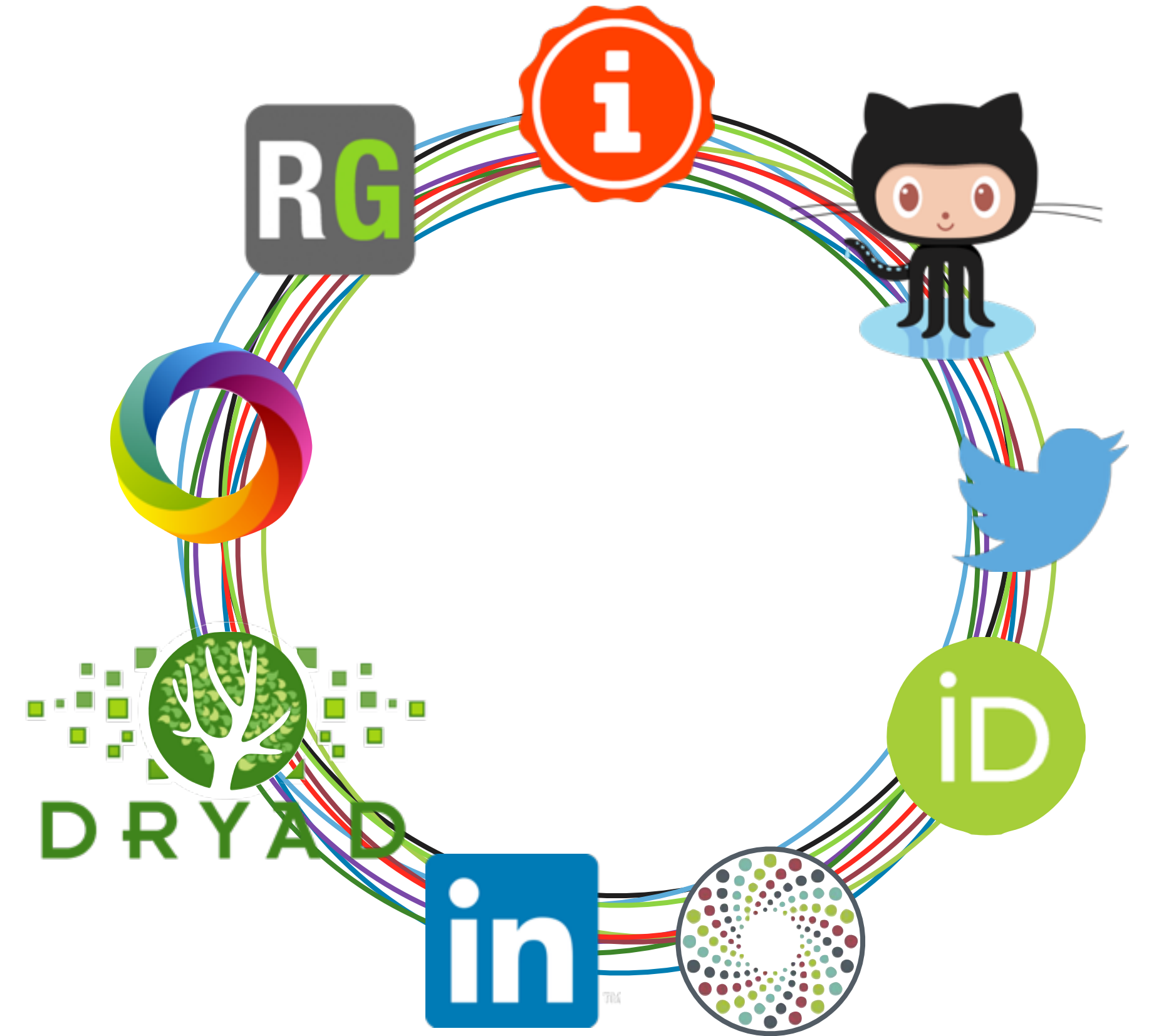
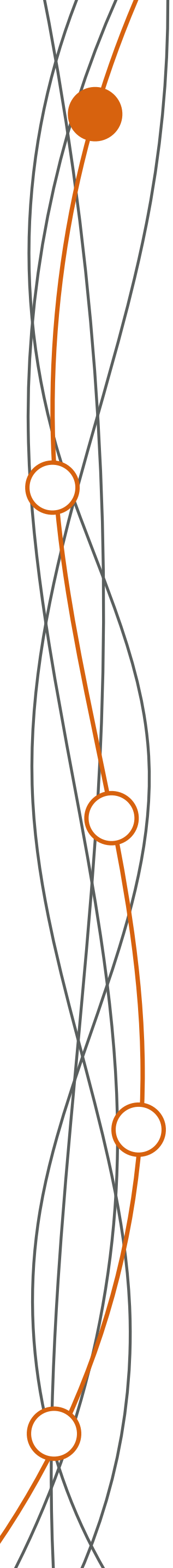


SCIENTIFIC VALORISATION

Guillaume Lobet
guillaume.lobet@ulg.ac.be
@guillaumelobet





QUANTIFYING SCIENTIFIC PRODUCTION

PRODUCTIVITY METRICS

WHY?

EVALUATIONS, GRANTS AND NEW POSITION

JOURNAL
LEVEL



IMPACT FACTOR

SCIENTIST
LEVEL



PAPERS
CITATIONS
H-INDEX

PAPER
LEVEL

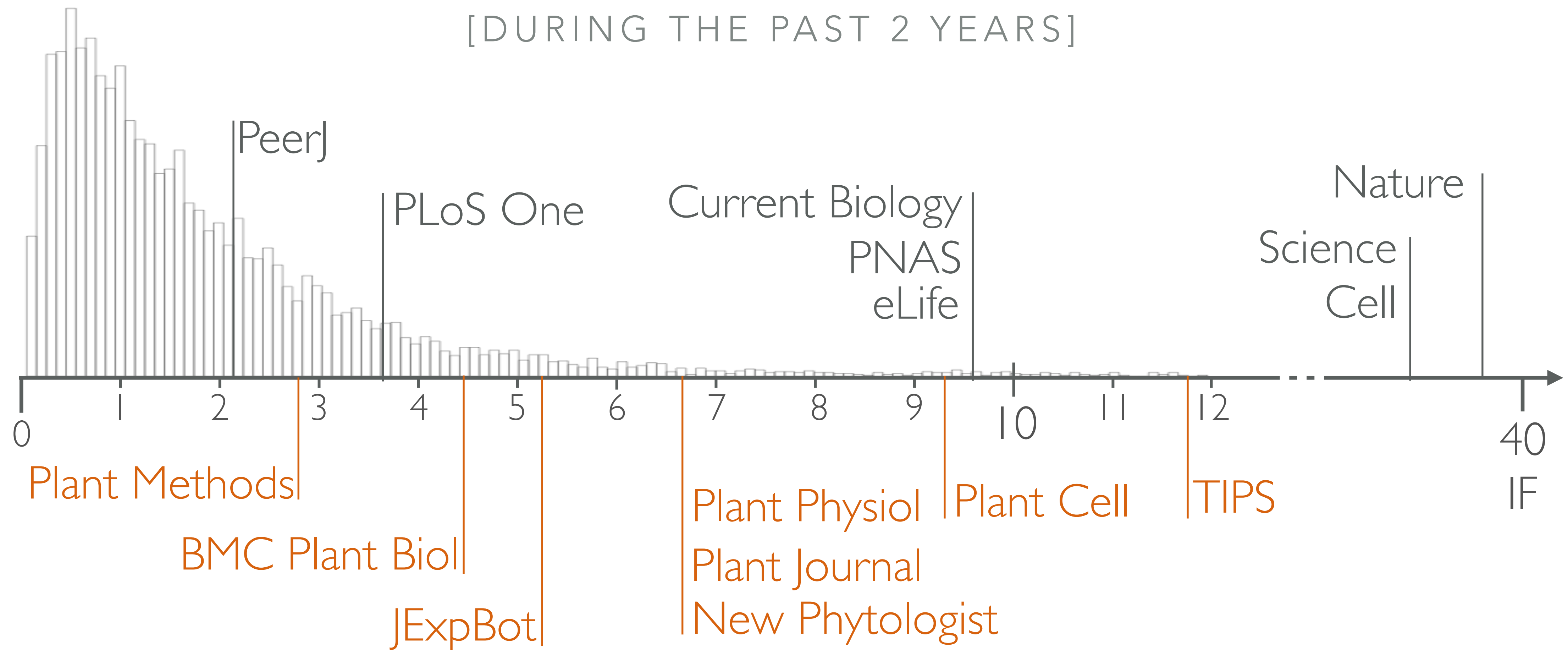


CITATIONS
ALTMETRICS

IMPACT FACTOR

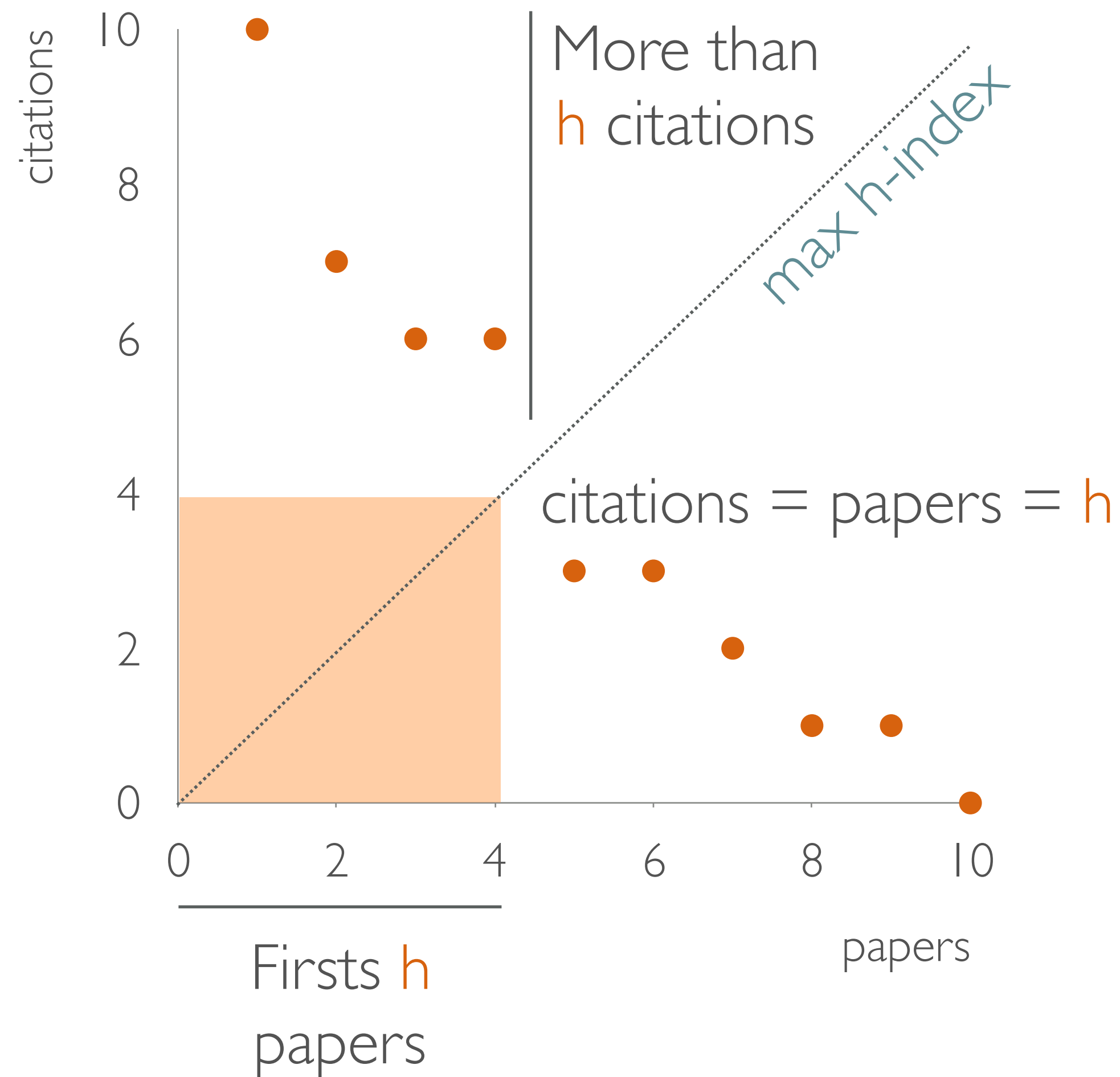
$$IF = \# \text{ CITATIONS} / \# \text{ PAPERS}$$

[DURING THE PAST 2 YEARS]



Source: ISI Journal Citation Report

H - INDEX



A scientist has index h if h of his/her n papers have at least h citations each, and the other $(n - h)$ papers have no more than h citations each.

DIGITAL OBJECT IDENTIFIER

UNIQUE IDENTIFIER OF AN ELECTRONIC OBJECT

For:

- articles
- datasets
- codes
- ...

DOI $\neq$ peer-reviewed

The screenshot displays the 'THE PLANT CELL' website. At the top, there's a navigation bar with links: HOME, ABOUT, SUBMIT, SUBSCRIPTIONS, ADVERTISE, ARCHIVE, CONTACT US. Below this, a teal banner contains the text 'Institution: FAC Gembloux, SC Agronomiques Sign In as Member / Individual'. To the right of the banner is a search bar with fields for 'Quick Search [advanced]', 'Author:' (with a dropdown showing '(e.g. Smith, JS)'), 'Keyword(s):', 'Year:', 'Vol:', 'Page:', and a 'Go' button. Below the banner, the main content area shows a research article titled 'Analysis of the Root System Architecture of Arabidopsis Provides a Quantitative Readout of Crosstalk between Nutritional Signals'. The article is marked as 'OPEN' and includes the text '© 2014 American Society of Plant Biologists. All rights reserved.' The authors listed are Fabian Kellermeier^a, Patrick Armengaud^b, Triona J. Seditas^a, John Danku^c, David E. Salt^c and Anna Amtmann^{a,1}. A link for 'Address correspondence to anna.amtmann@glasgow.ac.uk' is provided. The publication date is 'Published online before print April 2014' and the journal issue is 'The Plant Cell April 2014 vol. 26 no. 4 1480-1496'. A DOI link is highlighted in an orange box: 'doi: http://dx.doi.org/10.1105/tpc.113.122101'. Below the article, there are links for 'Full Text', 'Full Text (PDF)', 'PDF + Supp Data', 'Supplemental Data', and 'PPT Slides of All Figures'. To the right of the article, there's a 'More in Research Articles' section with three articles listed for May 2014. Further right, there's a 'Current Issue' section for April 2014, issue 26 (4), with a 'PLANT CELL' logo and a link to 'Alert me to new issues of The Plant Cell'. At the bottom right, there's a sidebar with links: ABOUT THE PLANT CELL, EDITORIAL BOARD AND STAFF, INSTRUCTIONS FOR AUTHORS, SUBMIT A MANUSCRIPT, and ABOUT UTOPIA DOCUMENTS.

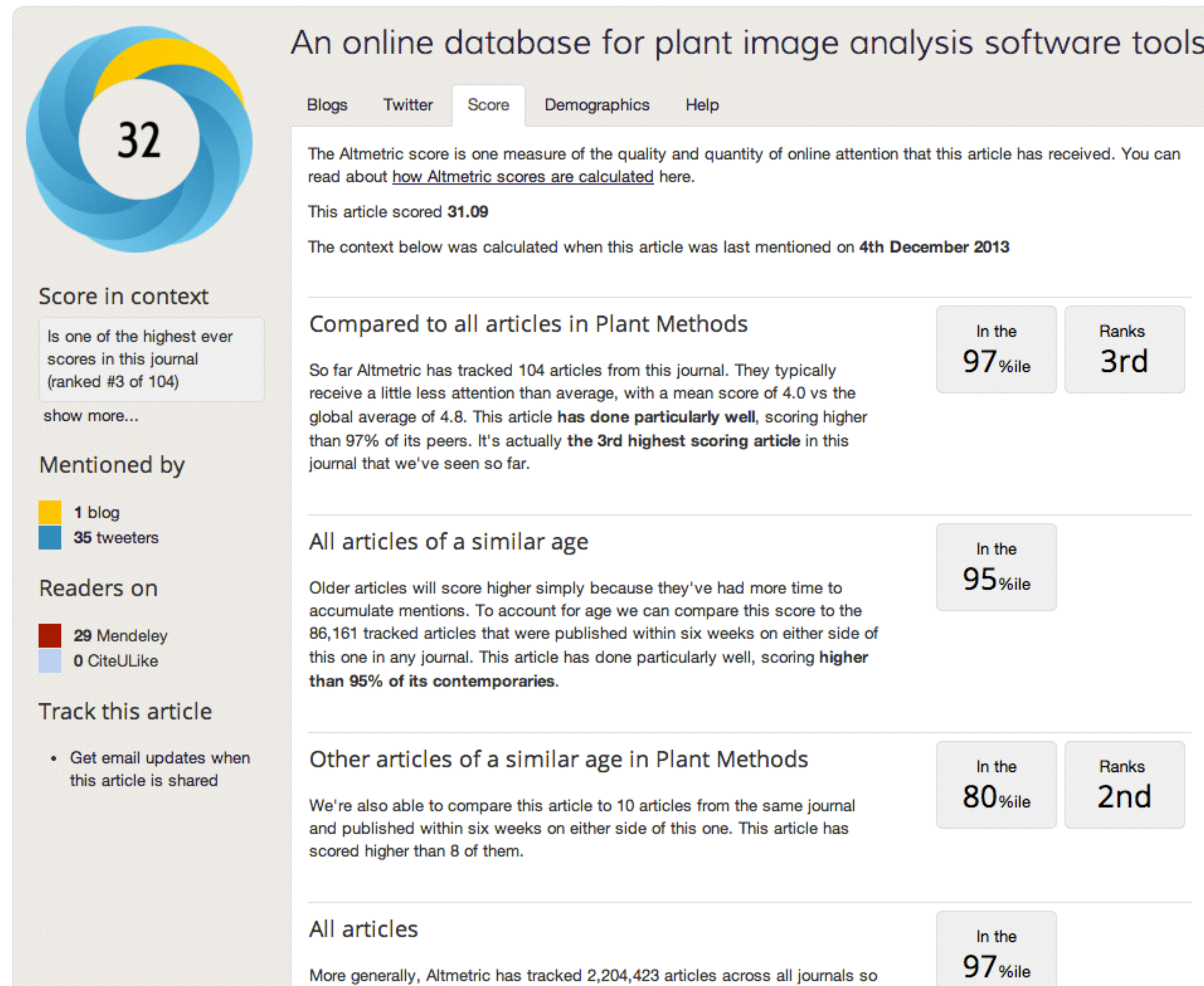
Direct access to document based on DOI:
dx.doi.org/DOI



www.altmetric.com

ALTMETRICS

“*Article level metrics made easy.*”



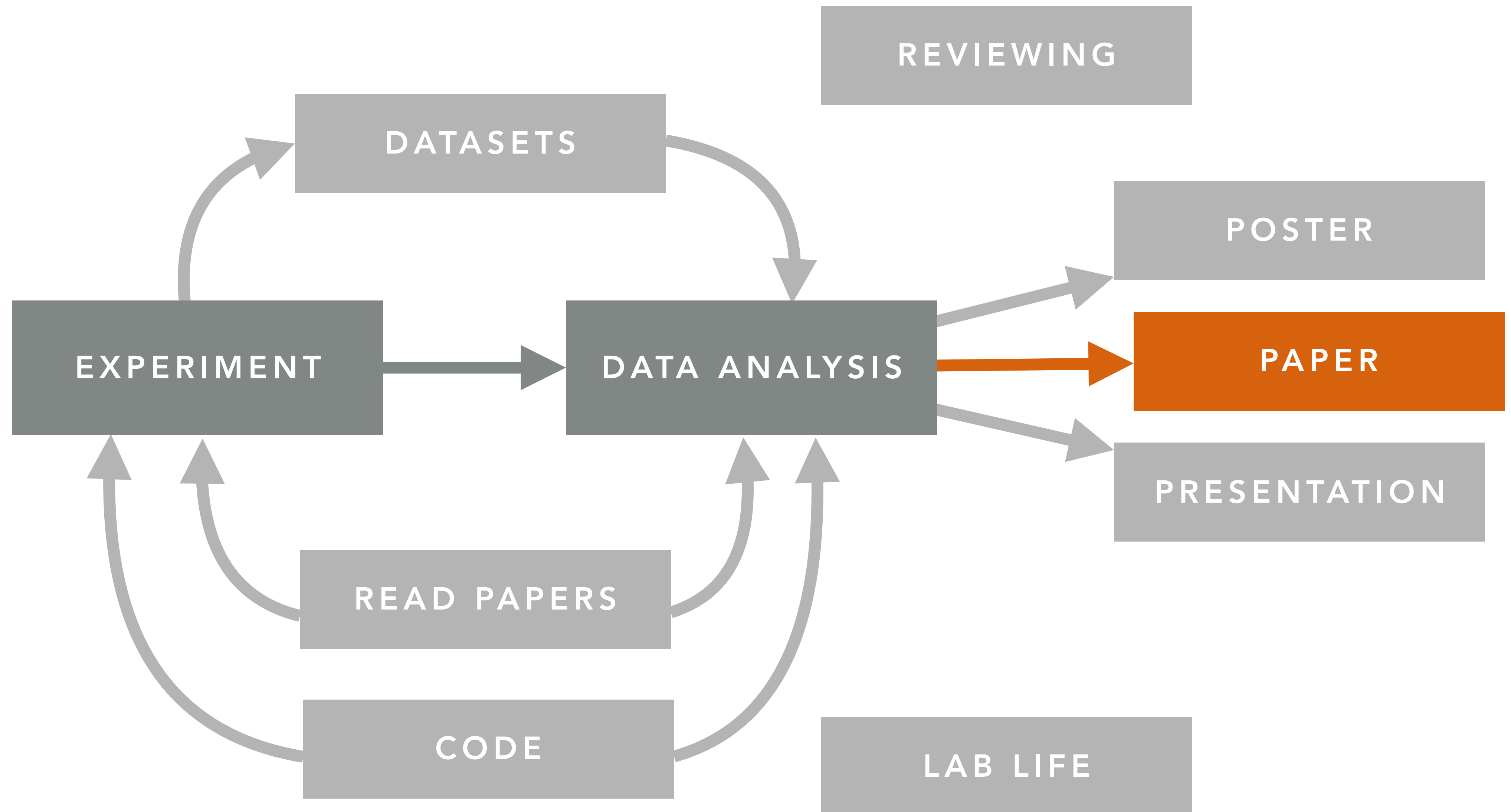
Based on references in:

- Scientific blogs
- Twitter
- Facebook
- Google +
- Mendeley
- ...

Used by

- NPG
- BioMed Central
- Springer
-

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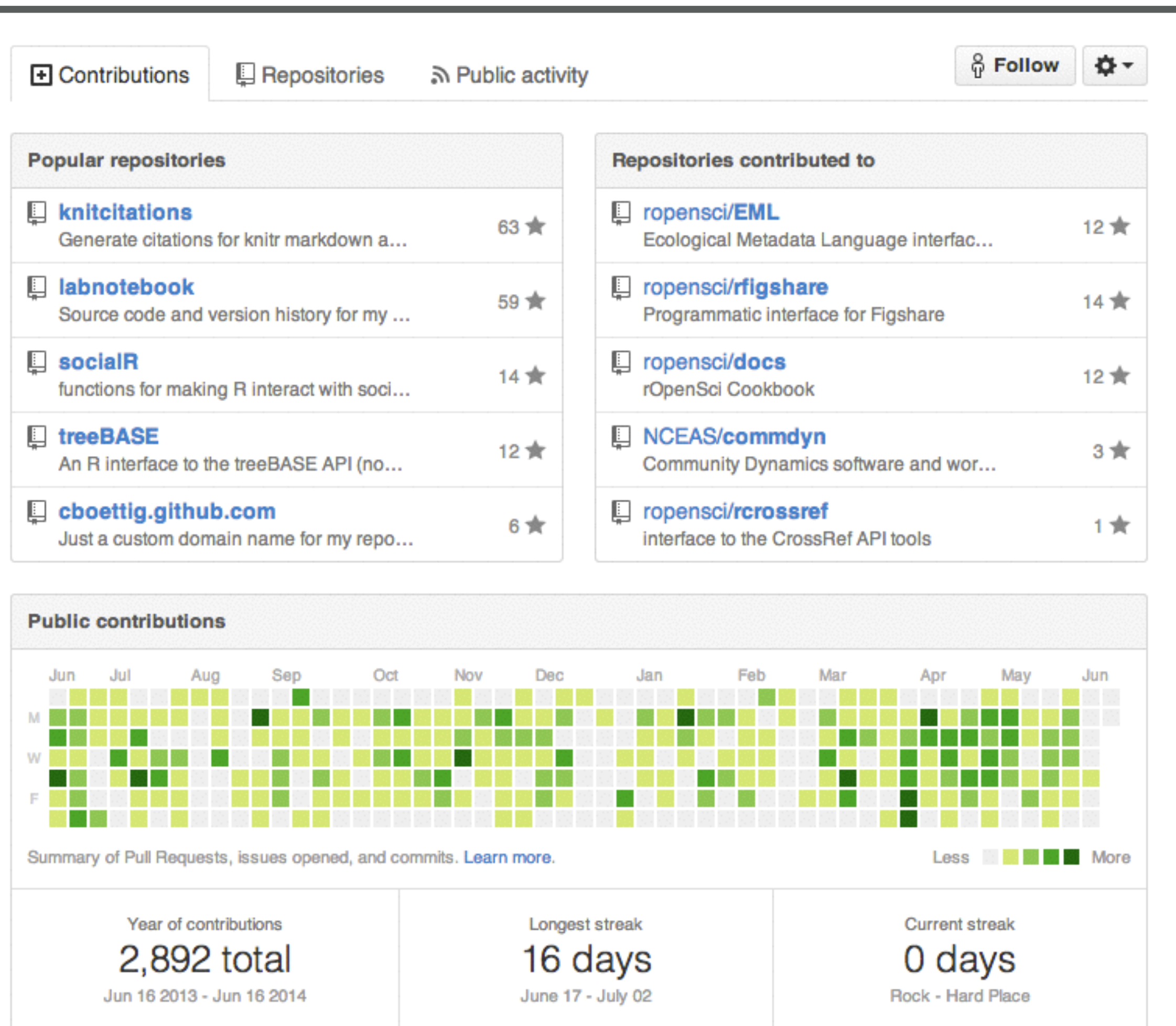
www.mendeley.com

A screenshot of the Mendeley Groups page. The top navigation bar includes 'Dashboard', 'My Library', 'Papers', 'Groups', and 'People'. A search bar on the right says 'Groups Search...'. The main heading is 'Groups' with a subtext 'In this catalog: 106,690 public groups' and a green 'Create a new group' button. Below this is a search bar for groups with the example 'eg: Social networks'. The page is divided into two columns. The left column, 'My groups', lists groups I own or can administer: 'Lateral roots' (36 papers, 2 members), 'Maize flowering' (19 papers, 2 members), 'Plant Flowering' (8 papers, 4 members), 'Plant image analysis' (211 papers, 31 members), and 'Root system analysis' (10 papers, 2 members). The right column, 'Browse disciplines', lists various academic fields like Arts and Literature, Astronomy, Biological Sciences, etc.

GITHUB, BITBUCKET, SOURCEFORGE

*“The best place to share your **code**”*

- share **code**
- **collaborative** development
- **version control** system
- millions of users
- **citable** (doi)



github.com



Bitbucket

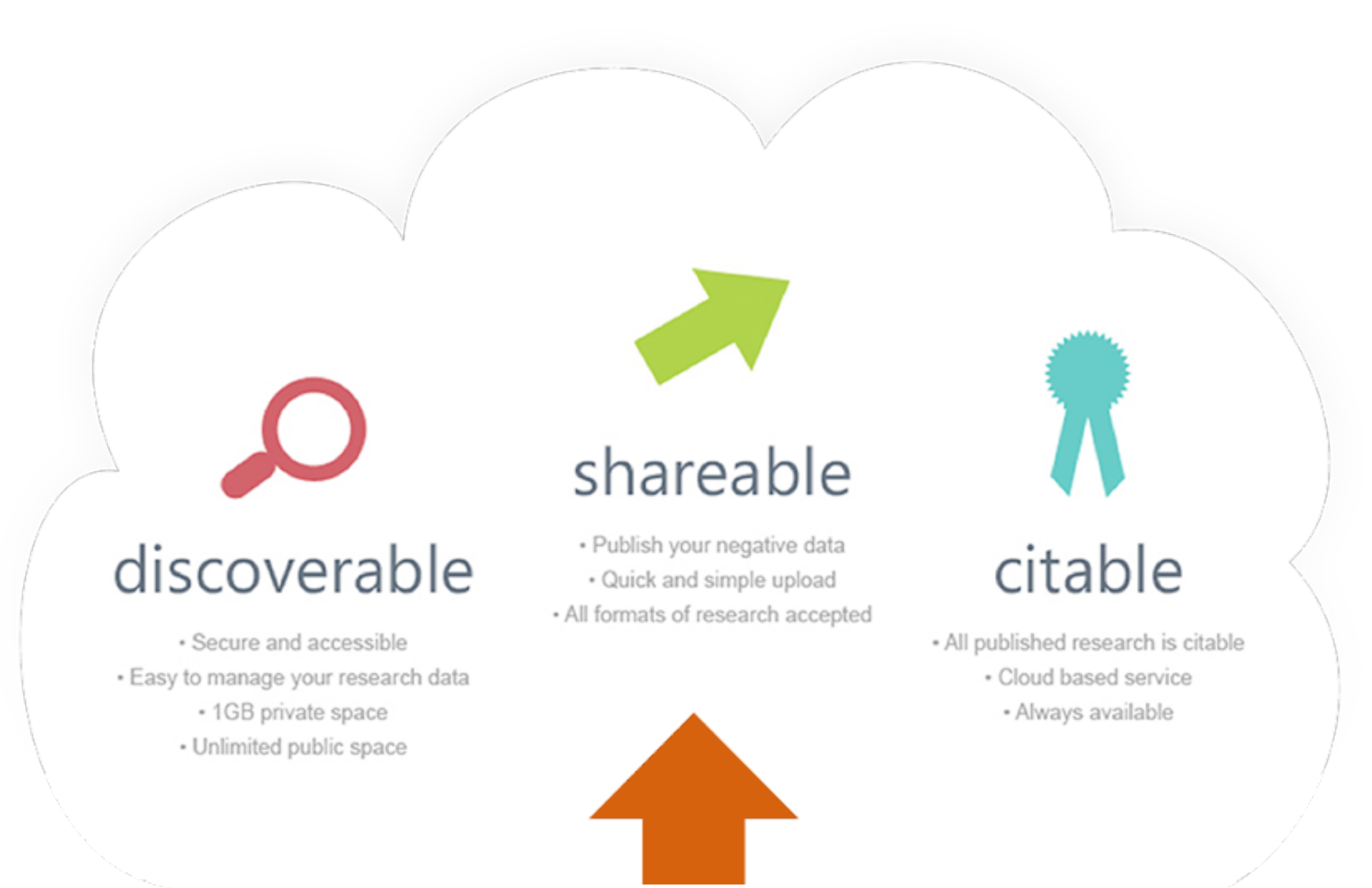
bitbucket.org



sourceforge.org

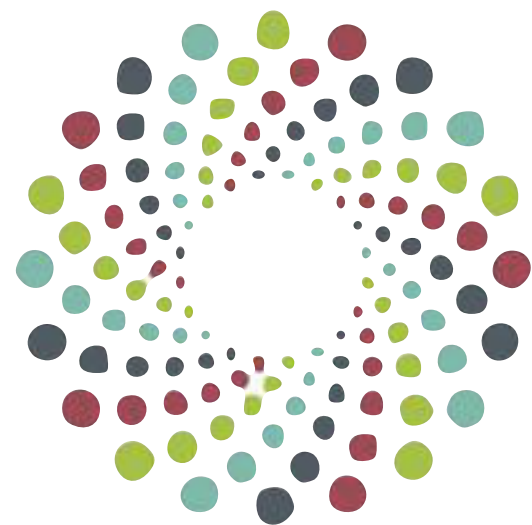
FIGSHARE

*Share all your **research products***



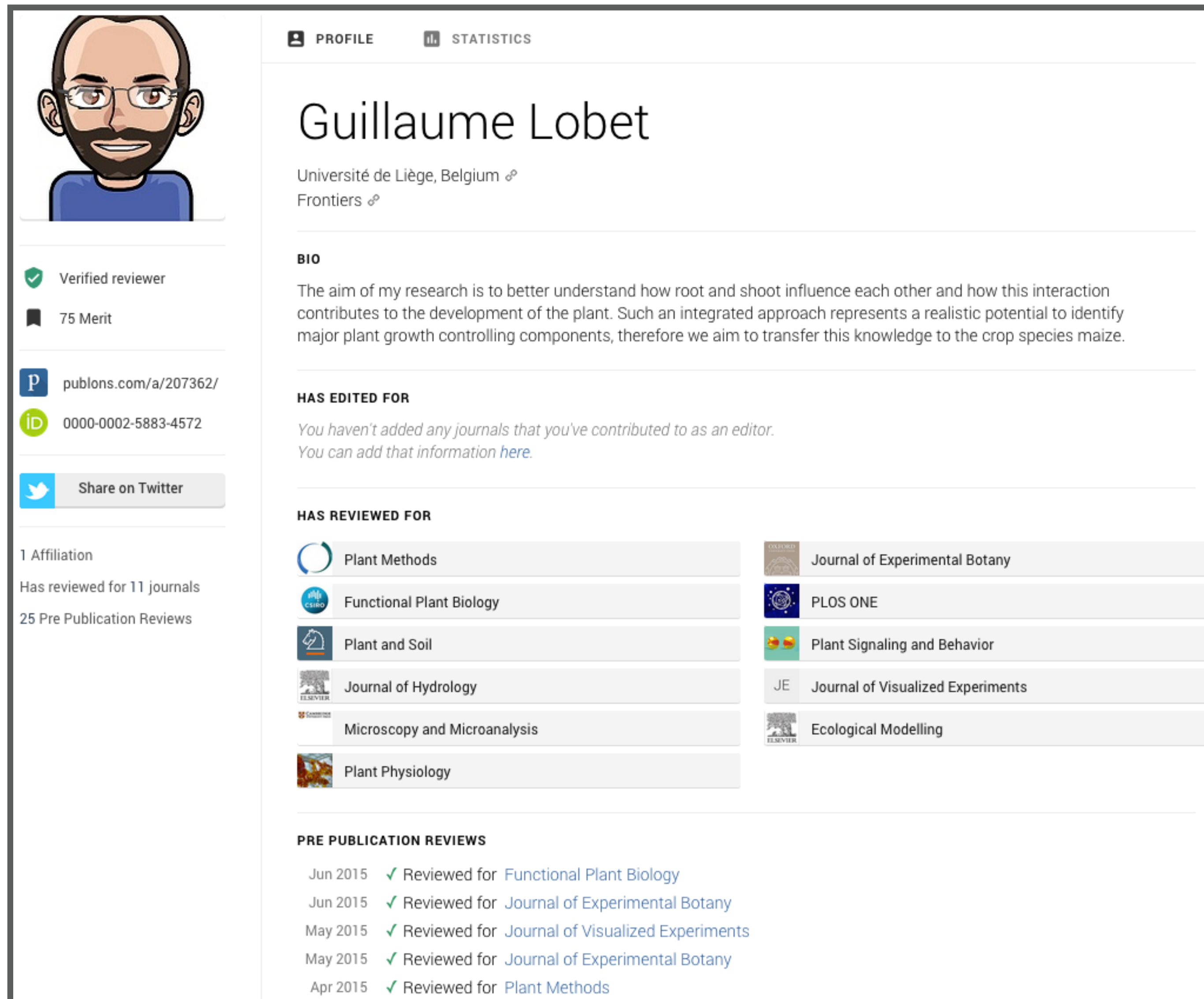
- **Manage** your research data
- Private **storage** space
- **Securely** stored in the cloud
- **Accessible** from anywhere
- Easily filtered, tags etc
- **Citable** (doi)

Institutional repository = linked to institution
You = (probably) not linked to institution



PUBLONS

“*produce comprehensive **reviewer profiles***”



The screenshot shows a PUBLONS profile for Guillaume Lobet. On the left, there is a profile picture of a man with a beard and glasses, a 'Verified reviewer' badge, a '75 Merit' badge, a PUBLONS ID badge (publons.com/a/207362/), an ORCID iD badge (0000-0002-5883-4572), and a 'Share on Twitter' button. Below these are statistics: '1 Affiliation', 'Has reviewed for 11 journals', and '25 Pre Publication Reviews'. The main profile area has tabs for 'PROFILE' and 'STATISTICS'. The 'PROFILE' tab is active, showing the name 'Guillaume Lobet', affiliation 'Université de Liège, Belgium' and 'Frontiers', and a 'BIO' section stating the research aim. Below the bio is a 'HAS EDITED FOR' section with a note that no journals have been added yet. The 'HAS REVIEWED FOR' section lists 11 journals: Plant Methods, Functional Plant Biology, Plant and Soil, Journal of Hydrology, Microscopy and Microanalysis, Plant Physiology, Journal of Experimental Botany, PLOS ONE, Plant Signaling and Behavior, Journal of Visualized Experiments, and Ecological Modelling. The 'PRE PUBLICATION REVIEWS' section shows a list of reviews from June 2015 to April 2015, all marked as 'Reviewed' for various journals.

Guillaume Lobet
Université de Liège, Belgium
Frontiers

BIO
The aim of my research is to better understand how root and shoot influence each other and how this interaction contributes to the development of the plant. Such an integrated approach represents a realistic potential to identify major plant growth controlling components, therefore we aim to transfer this knowledge to the crop species maize.

HAS EDITED FOR
You haven't added any journals that you've contributed to as an editor.
You can add that information [here](#).

HAS REVIEWED FOR

Plant Methods	Journal of Experimental Botany
Functional Plant Biology	PLOS ONE
Plant and Soil	Plant Signaling and Behavior
Journal of Hydrology	Journal of Visualized Experiments
Microscopy and Microanalysis	Ecological Modelling
Plant Physiology	

PRE PUBLICATION REVIEWS

Jun 2015	Reviewed for Functional Plant Biology
Jun 2015	Reviewed for Journal of Experimental Botany
May 2015	Reviewed for Journal of Visualized Experiments
May 2015	Reviewed for Journal of Experimental Botany
Apr 2015	Reviewed for Plant Methods

- pre/post publication
- **verified**
- **public** reviews



www.publons.com

PRE-PRINT SEVER

*“a free online archive and distribution service for unpublished **preprints** in the life sciences”*

bioRxiv

- share **manuscript** before publication
- common practice in math, physics, engineering
- new to biology
- get feedback from other scientists

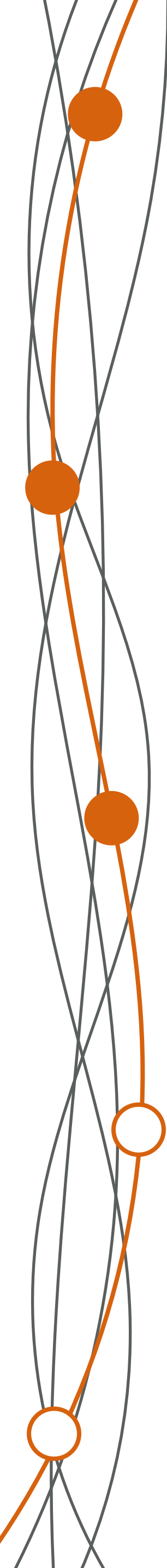
bioRxiv
beta

THE PREPRINT SERVER FOR BIOLOGY

www.biorxiv.org

PeerJ

<https://peerj.com/preprints/>



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*Is this what you want other people to **see about you?***

Not really?

*Then it is time to **do something about it...***

ORCID

*Unique **identifier** for scientists*

- **Avoid confusion** between similar names (J. Smith or J. Wang)
- Used by publishers, platforms, ...

Guillaume Lobet  http://orcid.org/0000-0002-5883-4572	
Country: Belgium Keywords: root system, water uptake, plant physiology, image analysis Websites: Personal Plant Image Analysis Other IDs: Scopus Author ID: 36091572800	Personal information Biography I am a post-doc researcher at the Université de Liège, in Belgium, in the Plant Physiology lab of Pr. Claire Perilleux. The aim of my research is to better understand how root and shoot influence each other and how this interaction contributes to the development of the plant. Such an integrated approach represents a realistic potential to identify major plant growth controlling components, therefore we aim to transfer this knowledge to the crop species maize. Works Plant Water Uptake in Drying Soils 2014-02  An online database for plant image analysis software tools 2013  Comparative analysis of Cd and Zn impacts on root distribution and morphology of Lolium perenne and Trifolium repens: implications for phytostabilization 2013  Novel scanning procedure enabling the vectorization of entire rhizotron-grown root systems 2013  Root systems biology: Integrative modeling across scales, 



www.orcid.org

LINKEDIN - RESEARCHGATE - ACADEMIA.EDU

*Professional online **profile***

Generalist

- [LinkedIn](#)
- online profile
- display professional achievements
- networking
- very large network (6.4 M)



www.linkedin.com

Specific for researchers

- [ResearchGate](#), [Academia.edu](#)
- online profile
- display scientific achievements
- networking
- specific to science
- publications, ...



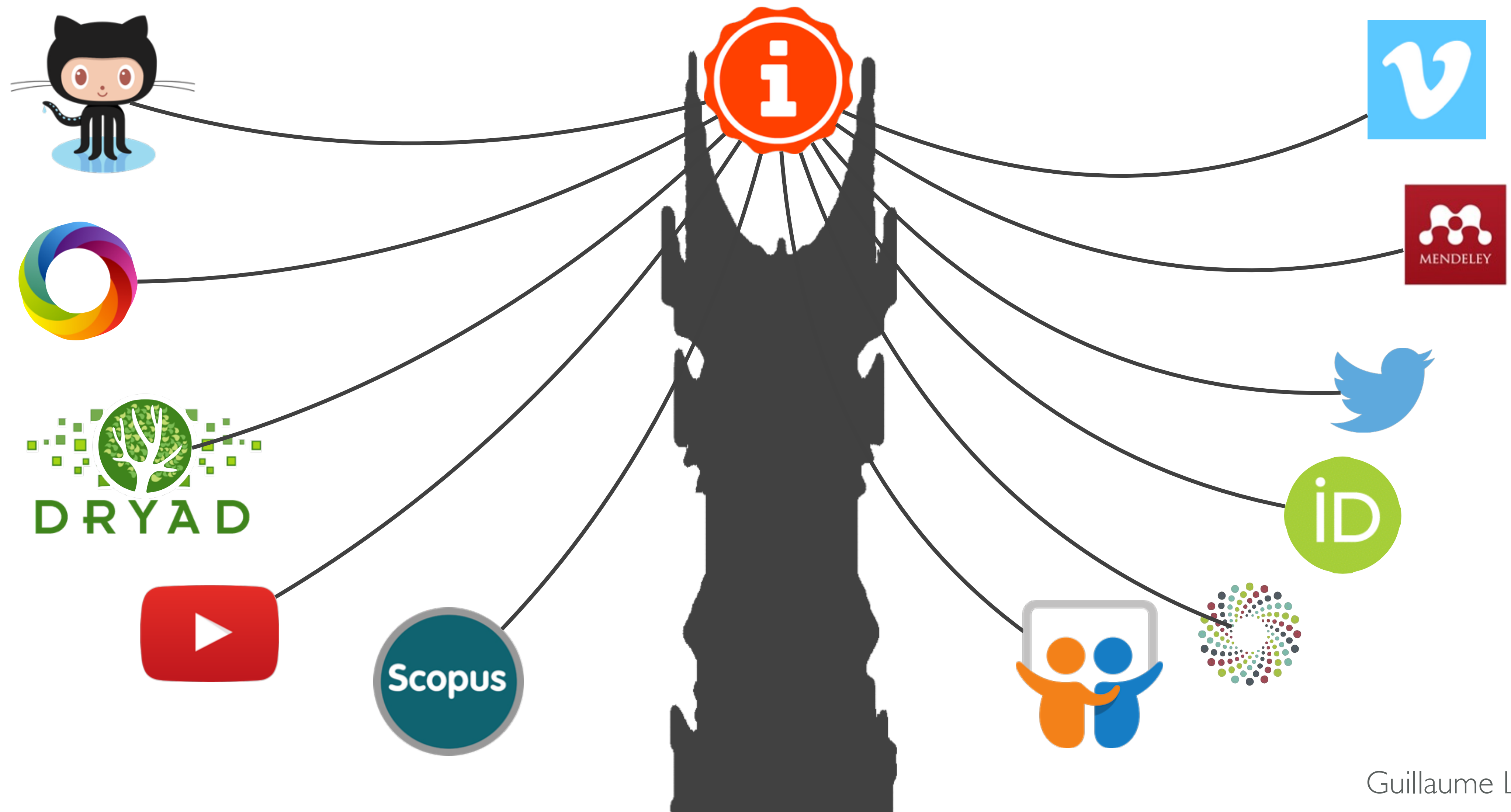
www.researchgate.net



www.academia.edu

IMPACTSTORY

*“One **website** to bring them all and in your **profile** bind them”*



IMPACTSTORY

“ImpactStory delivers open **metrics**, with **context**, for diverse products”

Article

A Novel Image-Analysis Toolbox Enabling Quantitative Analysis of Root System Arch



(2011) Lobet, Pages, Draye. *PLANT PHYSIOLOGY*

Model-assisted integration of physiological and environmental constraints affecting the dynamic and spatial patterns of root water uptake from soils

(2010) Draye, Kim, Lobet et al.. *Journal of Experimental Botany*

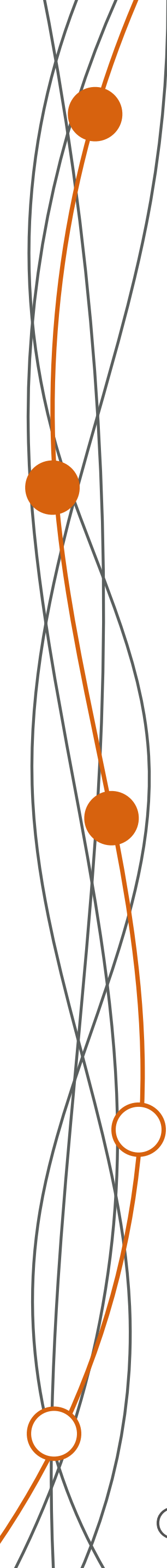
Highly cited by **scholars**

This item has 47 Scopus citations. That's more than 91% of 2010 articles in Web of Science, suggesting it's highly cited by scholars. Click for details.

highly cited

highly saved





SOCIAL MEDIA

*“The power of social media lies in its **interactivity** and its strength to **amplify** the reach of content”*

-Anne Osterrieder 2013-

TWITTER

*“Create and **share** ideas and information **instantly**”*

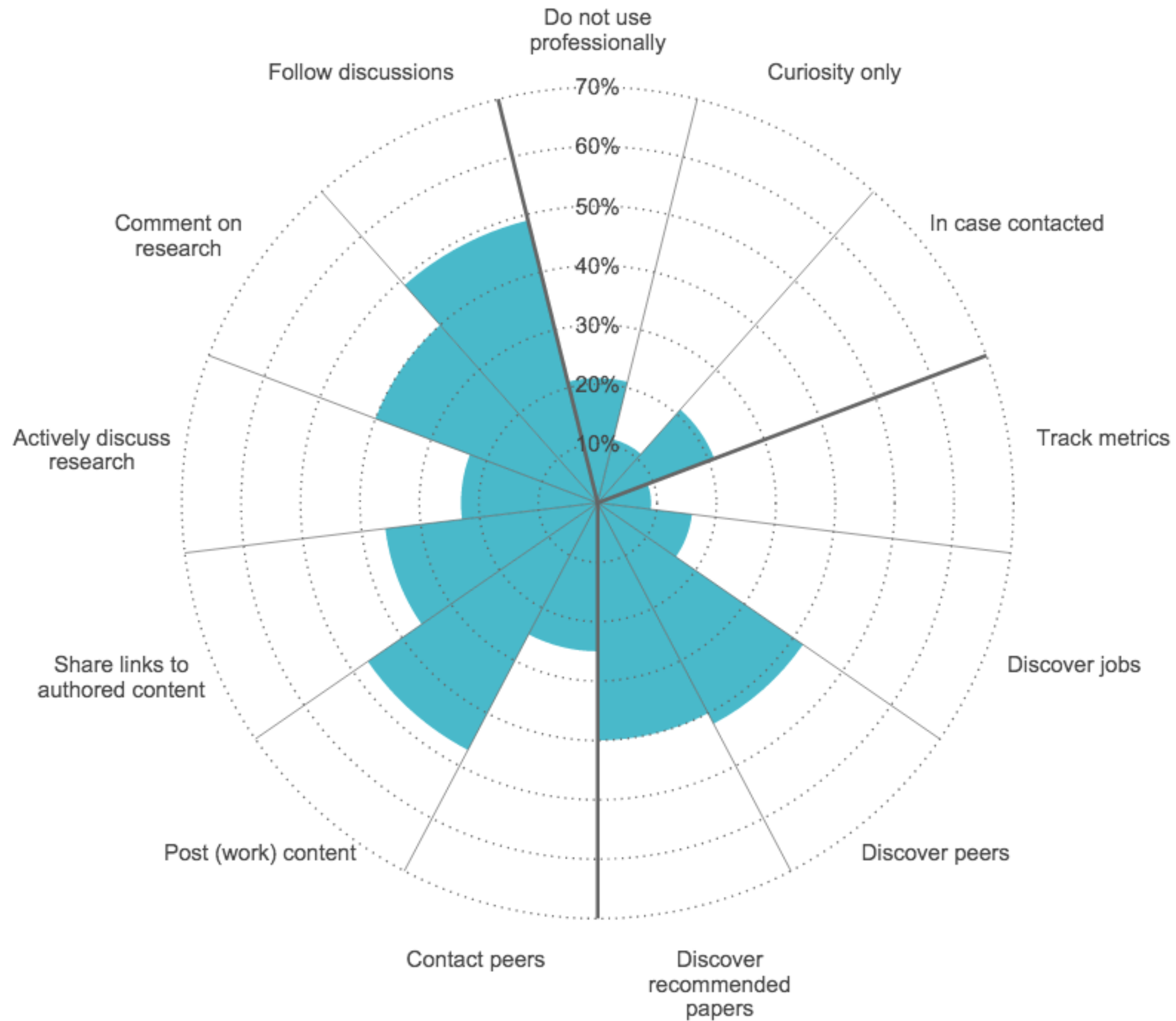
- Interesting, engaging and informative **updates** about your research
- Find the right **balance** between professional and personal informations
- Beware of posting confidential informations (grants, papers, ...)
- Everything is **in the open!**



www.twitter.com

Osterrieder (2013) Plant Methods

IS TWITTER USED BY SCIENTISTS?



van Noorden (2014) Nature



www.twitter.com

IS TWITTER USED BY SCIENTISTS?

MAKE YOUR WORK VISIBLE

Astrophysics



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4.55M

Developmental biology



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Neurology



Oliver Sacks
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113K

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The Tree of Life

<http://phylogenomics.blogspot.be/>

#HOPEJAHRENSURECANWRITE

<http://hopejahrensurecanwrite.com/>

Plant Cell Biology

<http://www.plantcellbiology.com/>

Aerosol metathesis catalyst preparation by Damien Debecker (UCL)

Oct 6, 2015 | Belgium, Chemistry, Damien Debecker, Heterogeneous catalysis, Thailand | 0 comments



The Concept

Aerosol-assisted sol-gel chemistry is a way to obtain porous mixed oxides with a good control on composition & texture. We expect high WO₃ dispersion in the silica matrix, high surface area and higher catalytic metathesis activity.

The Outcome

The aerosol-made catalyst exhibit high surface area, calibrated pores and remain totally amorphous. They markedly outcompete other catalysts prepared by classical two-step methods.

[Go to Full Paper](#)

550

m²/g

15%

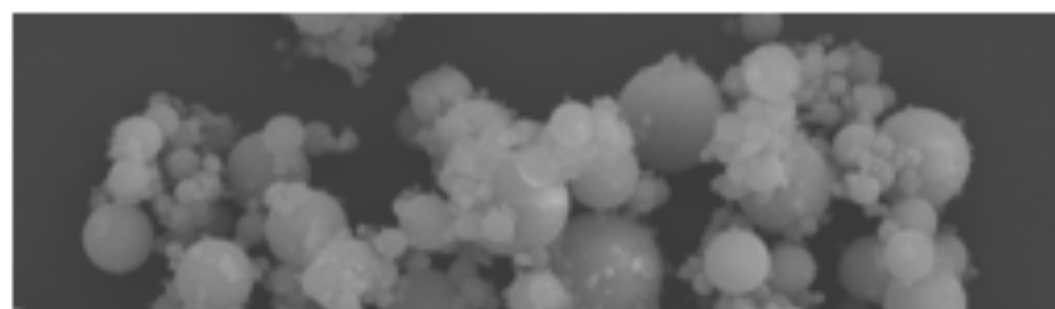
WO₃ wt.% loading in silica

450

Reaction temperature (°C)

55

Propene yield (%)



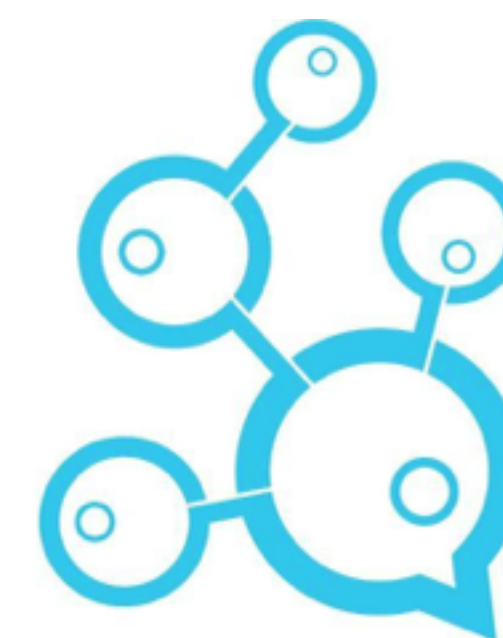
A factual abstract

Benefiting from the advantage of the aerosol process, new WO₃-SiO₂ catalysts are prepared in one-pot, exhibiting outstanding textural properties, with a high specific surface area (500-600 m² g⁻¹) solely generated by calibrated supermicropores of about 2 nm. The catalyst particles are

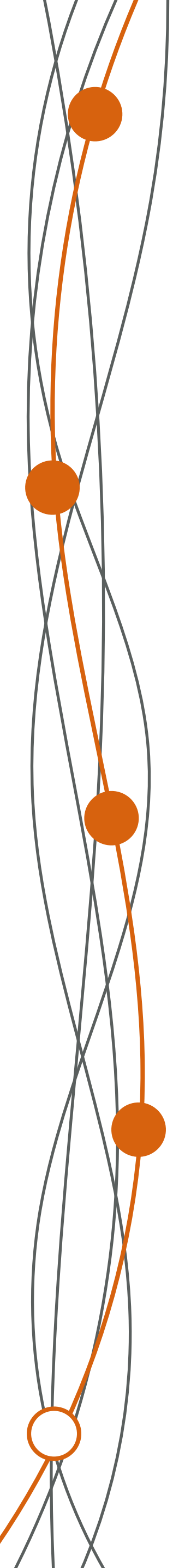
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IS IT WORTH IT?

TWEETING YOUR RESEARCH



Guillaume Lobet
@guillaumelobet

New website presenting plant image analysis softwares, powered by @ImpactStory. plant-image-analysis.org

RETWEETS
4

LIKE
1



re-tweeted by



Anne Osterrieder
@AnneOsterrieder



Following

Visiting this website is like entering a massive candy store! plant-image-analysis.org - thanks to @Andrew_French for the link! #plantsci

seen by

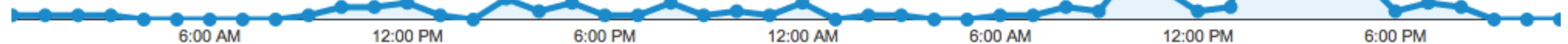
effect on

● Visits

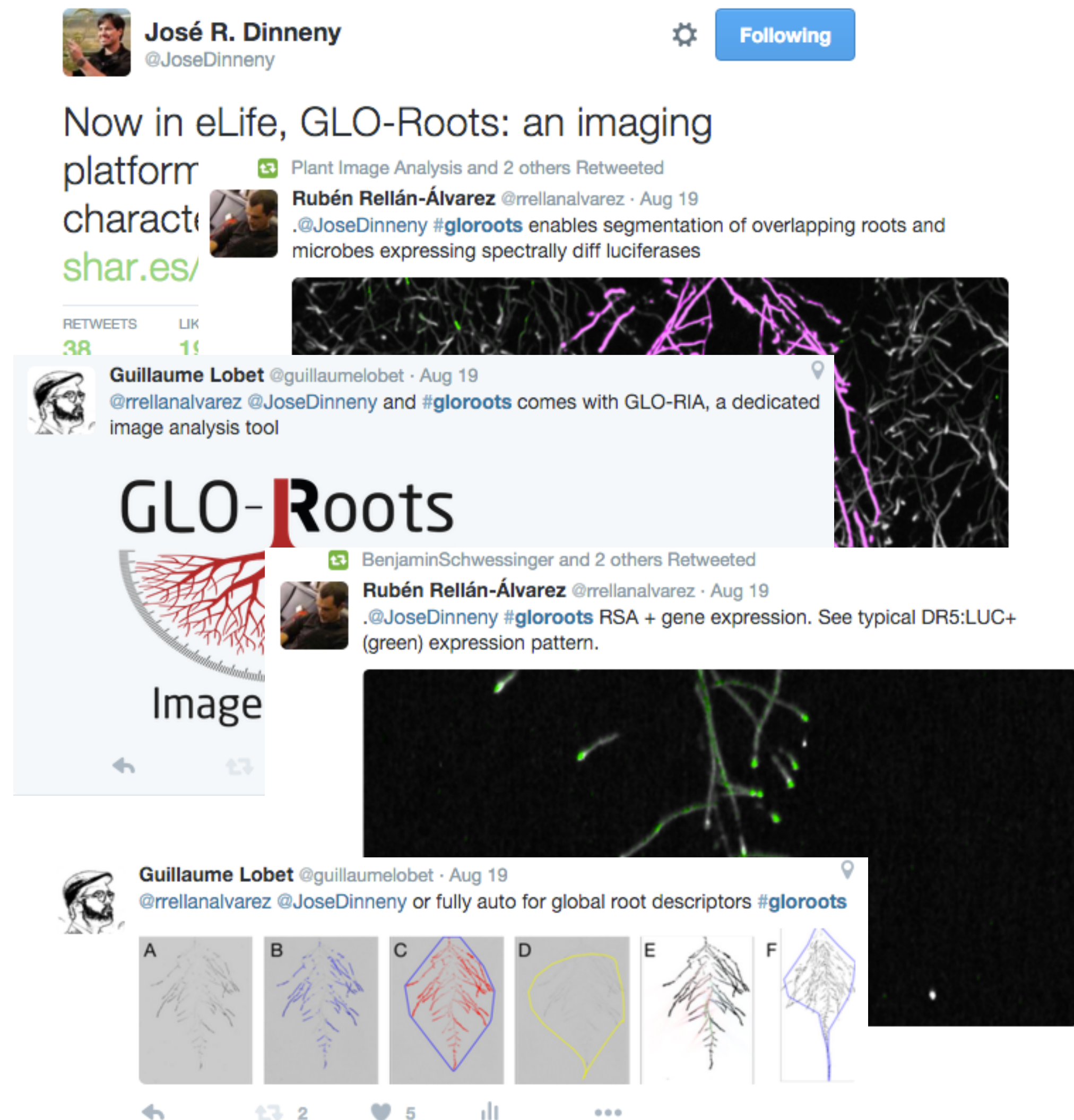
50

25

Effect of one tweet from @AnneOsterrieder

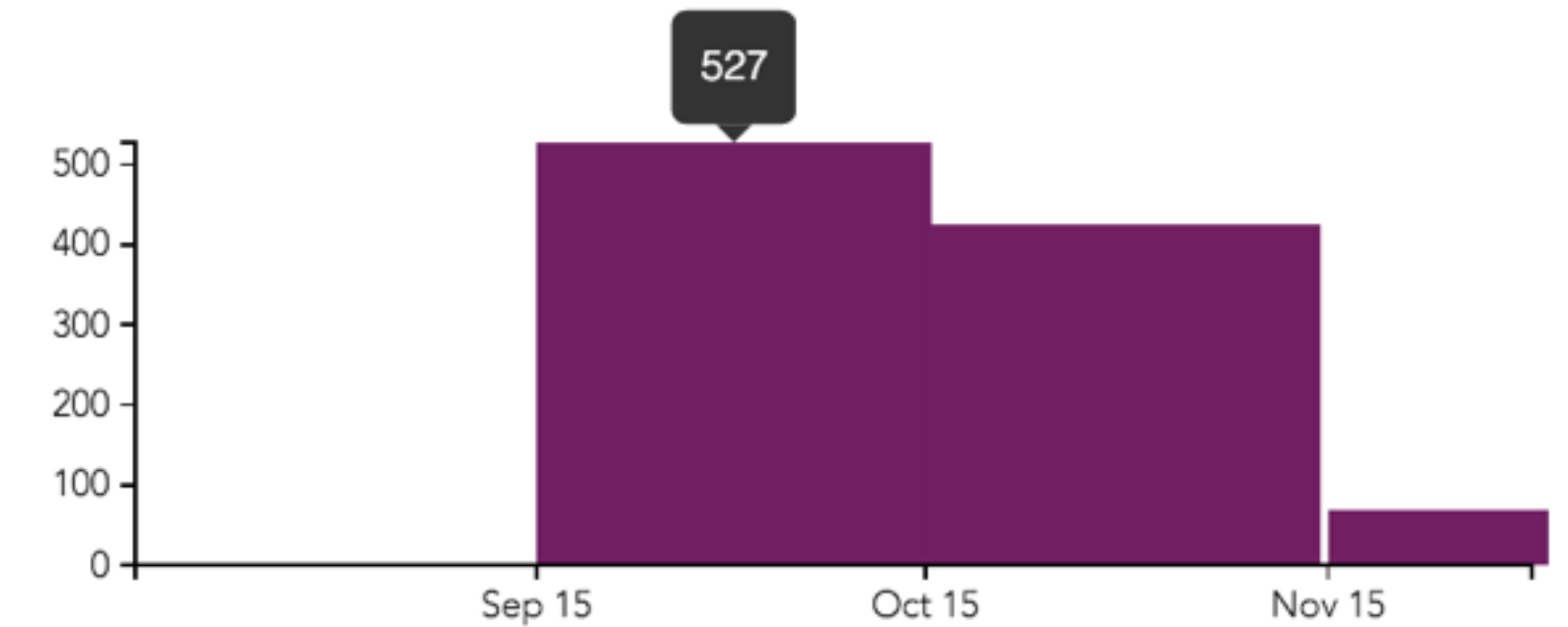


TWEETING ARTICLES



PDF downloads

1,836



100's of view in a couple of hours

BUILDING NEW COLLABORATIONS



Ruben Rellan-Alvarez
@rrellanalvarez

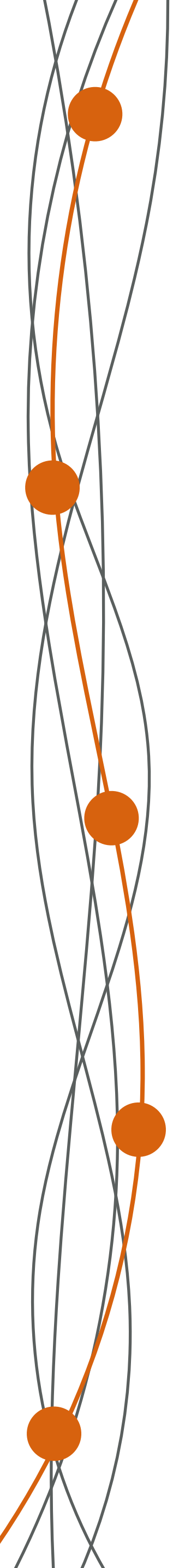
Real Life - **Twitter** -
Email - **GitHub** -
Google Doc

2014

Follow each other's
work

Connect with each
other on twitter

2013



WRAPPING UP

Publish everything



PeerJ



Bitbucket



bioRxiv
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Good, old-fashioned,
peer-reviewed **paper**

Identify yourself

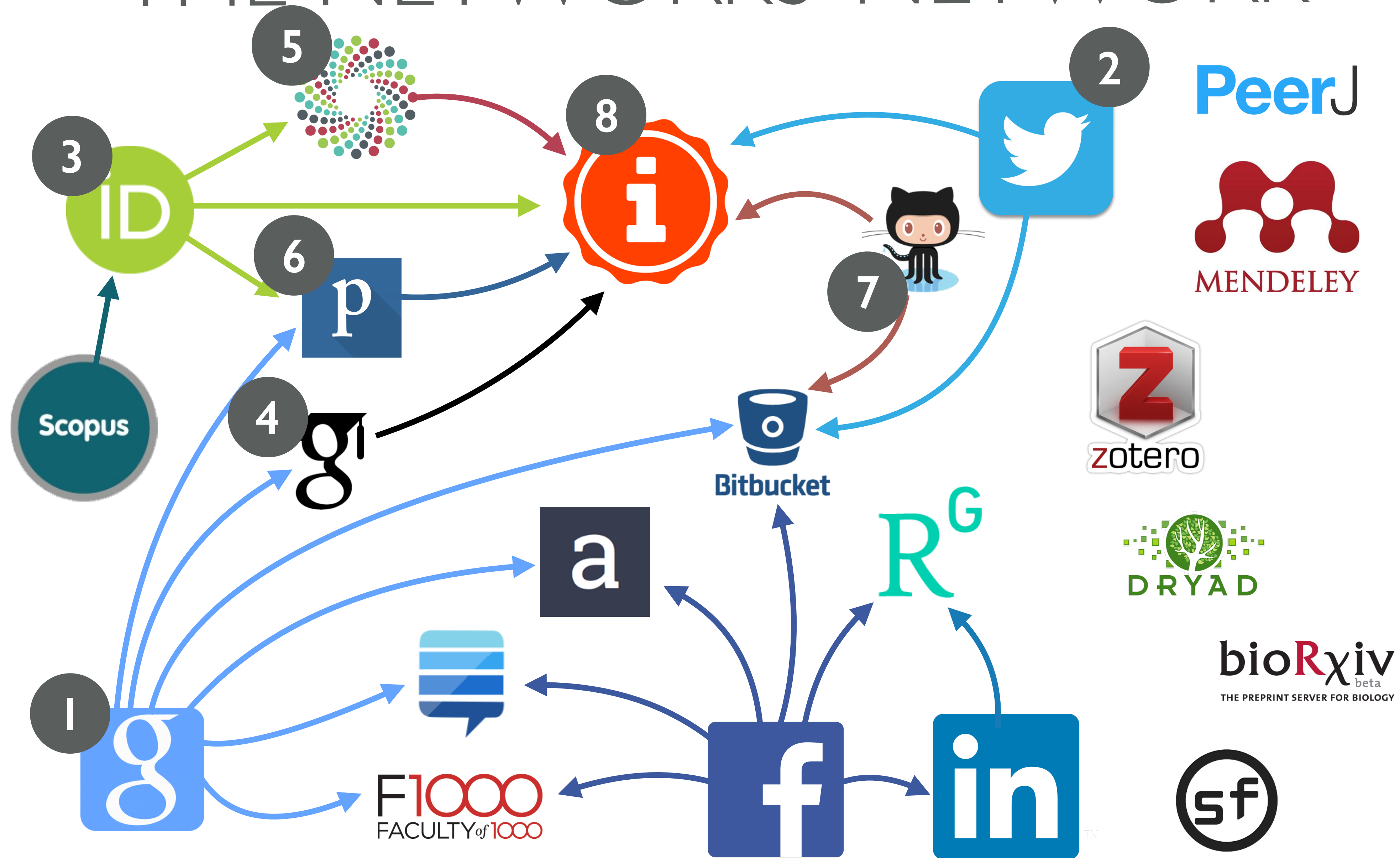


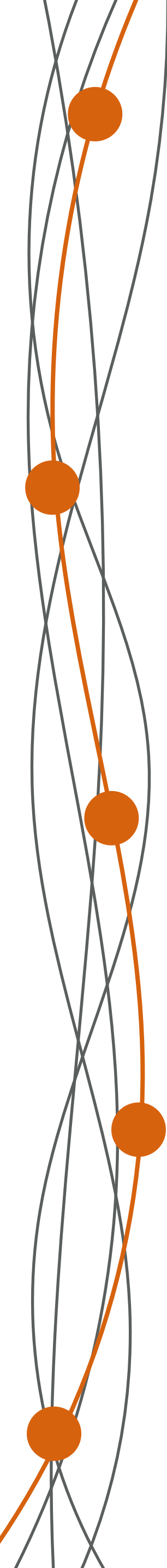
R^G



and many more...

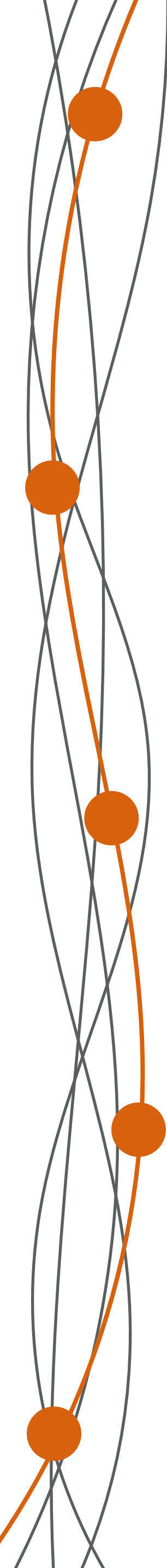
THE NETWORKS' NETWORK





FINAL WORD

*Good communication
will never replace
good science!*



THANKS
FOR YOUR
ATTENTION

Guillaume Lobet
guillaume.lobet@ulg.ac.be
@guillaumelobet

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