



Responsible Authorship

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This lesson is presented by Lesego Makhafola

h-Index

Impact Metrics



WEB OF SCIENCE®



Short title-Author



Impact metrics



- **Citation-based metrics** = number of times your publications has been cited in other research publications
- **Altmetrics** = people's interaction with your research in traditional- and social media
- **Journal metrics** = impact of a specific journal in terms of the number of citations received by its published articles

(McMaster University, 2019:online)

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Citation based metrics are usually used for measuring the impact of a specific researcher department or institution. journal metrics are used for measuring the impact of a specific journal for the measure of a specific journal and it will give that journal an impact Factor or a journal impact Factor

H-index: explained



- "H-index means there are h papers that have each been cited at least h times (Web of Science, 2019:online)
- "The largest number h such that at least h articles in that publication were cited at least h times each" (Google Scholar, 2019:online).
- "For example, a publication with five articles cited by, respectively, 17, 9, 6, 3, and 2, has the h-index of 3" (Google Scholar, 2019:online)
- = Number of papers matches number of citations (3 papers have been cited at least 3 times)

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An H index is the number at which the number of citation matches with the number of papers or documents so if at least three of the papers have been cited at least three times the h-index will be 3

Scopus Results (163 publications)



Hancke, Gerhard P.

[View potential author matches](#)

Author ID: 7003547023

<http://orcid.org/0000-0002-4026-687X>

Affiliation(s):

Universiteit van Pretoria, Pretoria, South Africa [View more](#)

Other name formats: Hancke, Gerhard P. Hancke, Gerhard Hancke, G. P. Hancke, G.

Subject area:

Engineering Computer Science Physics and Astronomy Mathematics Materials Science Energy Chemistry
Biochemistry, Genetics and Molecular Biology Social Sciences Decision Sciences

Documents by author

163

[Analyze author output](#)

Total citations

5596 by 4891 documents

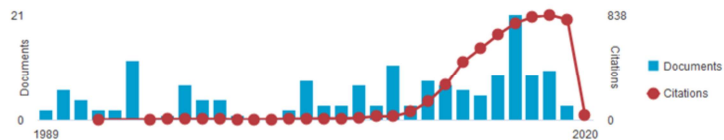
[View citation overview](#)

h-index

24

[View *h*-graph](#)

Document and
citation trends:



Short title-/



Did authors h-index is 24 which means that at least 24 out of the 163 documents have been cited at least 24 times

Google Scholar Profile (195 publications)



Google Scholar

Gerhard Hancke
University of Pretoria
Verified email at up.ac.za
Advanced Sensor Networks

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Cited by [VIEW ALL](#)

All Since 2014

Metric	All	Since 2014
Citations	8872	6968
h-index	31	27

h10-index 56 46

Bar chart showing citations from 2012 to 2019:

Year	Citations
2012	~100
2013	~200
2014	~300
2015	~400
2016	~500
2017	~600
2018	~700
2019	~800

TITLE	CITED BY	YEAR
Smart grid technologies: Communication technologies and standards VC Gungor, D Sahin, T Kocak, S Ergut, C Buccella, C Cecati, GP Hancke IEEE transactions on industrial informatics 7 (4), 529-539	2092	2011
Industrial wireless sensor networks: Challenges, design principles, and technical approaches VC Gungor, GP Hancke IEEE Transactions on industrial electronics 56 (10), 4258-4265	1594	2009
Opportunities and challenges of wireless sensor networks in smart grid VC Gungor, B Lu, GP Hancke IEEE transactions on industrial electronics 57 (10), 3557-3564	1338	2010
A survey on smart grid potential applications and communication requirements VC Gungor, D Sahin, T Kocak, S Ergut, C Buccella, C Cecati, GP Hancke IEEE Transactions on industrial informatics 9 (1), 28-42	910	2012
The role of advanced sensing in smart cities GP Hancke, B Silva, GP Hancke Jr Sensors 13 (1), 393-425	399	2012

Short title-Author

If an author does not have a Google Scholar profile you will not be able to view the office compilation of works on Google Scholar. so it is advisable that researchers create a Google Scholar profile for themselves and also make sure that it is visible to the public. to increase the visibility of the author's research as well as increase the accessibility of the research which can in turn lead to an increase in citations H index and download of the author's publications.



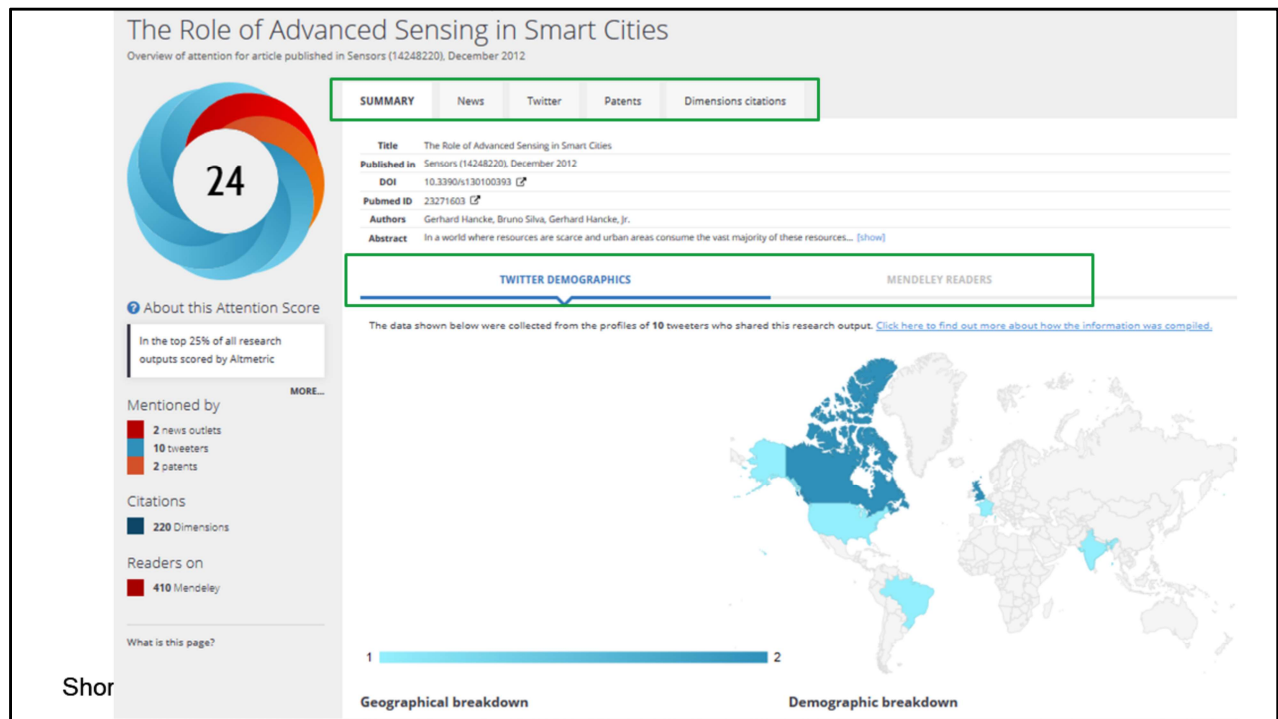
- Metrics and qualitative data that complements traditional citation-based metrics
- Altmetrics showcase the attention and influence of research
- Include: peer reviews on faculty, citations on Wikipedia and in public policy documents, discussions on research blogs, bookmarks on reference managers (i.e. Mendeley), mainstream media coverage, and mentions on social media (i.e. Twitter) (Altmetric.com, 2019:online)
- How? = Altmetric bookmarklet, altmetric badges, altmetric API
- <https://youtu.be/M6XawJ7-880>

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The screenshot shows a web browser window with the URL <https://www.mdpi.com/1424-8220/13/1/393>. In the top-left corner of the browser, a bookmarklet labeled "Altmetric it!" is highlighted with a green box and a green arrow. The MDPI website header is visible, including the MDPI logo and navigation links: Journals, Information, Author Services, Initiatives, About, and Sign In / Sign Up. Below the header is a search bar with the text "Search for Articles:" and input fields for "Title / Keyword", "Author / Affiliation", "Sensors", and "All Article Types", followed by a "Search" button. The breadcrumb trail reads: Journals / Sensors / Volume 13 / Issue 1 / 10.3390/s130100393. The article page for "sensors" is displayed, featuring a sidebar with options: "Submit to this Journal", "Review for this Journal", and "Edit a Special Issue". The article title is "The Role of Advanced Sensing in Smart Cities" by Gerhard P. Hancke^{1,*}, Bruno De Carvalho e Silva¹, and Gerhard P. Hancke, Jr.^{1,2}. The article is from Sensors 2013, 13(1), 393–425. The Altmetric score badge on the right shows a score of 24, with a breakdown: "Picked up by 2 news outlets", "Tweeted by 10", and "Referenced in 2 patents". A green arrow points to this badge. The article menu on the left includes "Article Overview", "Abstract", "Share and Cite", "Article Metrics", "Related Articles", and "Order Article Reprints". The article is licensed under CC BY.

Once you have installed the bookmarklet for altmetric you will be able to get a specific document's altmetric score. the altmetric score shows people's social interactions with that specific article which include: tweets, mendeley readership, news reach and citations.



Collaboration/reach



Impactstory



- An open-source website that assists researchers explore and share the impact their research has online (Impactstory, 2019:online).
- It can be used to track the impact of: articles, datasets, blog posts, posters, software, and lab websites by: monitoring citations, tweets, download statistics, blogs, and attributions in research articles (e.g. acknowledgements and mentions within methods) (Piwowar, 2013:159).

Example: Impactstory profile



Ethan White   
University of Florida Associate Professor

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TIMELINE

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3 Online mentions
over 1 years



2

1

PUBLICATIONS

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Ten simple rules for a successful remote postdoc

2019

3



Automated data-intensive forecasting of plant phenology throughout the United States

2019 Ecological Applications

Short title-Author





Ethan White

University of Florida Associate Professor

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6 ACHIEVEMENTS



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100 PUBLICATIONS

Ten simple rules for a successful remote postdoc

2019

3

[full text]

Automated data-intensive forecasting of plant phenology throughout the United States

2019 Ecological Applications

[full text]

Filter by genre

preprints (2)

datasets (97)

article (1)

Coauthors

Lex Nederbragt

OVERVIEW ACHIEVEMENTS TIMELINE PUBLICATIONS

3 ONLINE MENTIONS OVER 1 YEARS

The rise of computer programming has changed how researchers conduct science.

These postdocs share their ...

3 months ago by Wellcome Trust

Ten simple rules for a successful remote postdoc

Rule #11: Don't work in your pajamas?

3 months ago by Wildlife Job Search

Ten simple rules for a successful remote postdoc

Filter by channel

Facebook pages (2)

Blog posts (1)

References used

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Activity: Altmetrics evaluation



- Identify one researcher you know and do the following:
- Check to see if they have a Google Scholar Profile and note their citation count and h-index
- Use Altmetric to find one of the articles authored by the researcher to see their social impact

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You are allowed to use the same researcher that I used in my example to get the current researcher information of the specific researcher.

What is next?



Funder Compliance Reporting

Short title-Author



In the next lesson you will be looking at fund compliance reporting which will be presented by Dr Martie van Deventer