



BIP! Finder: Facilitating Scientific Literature Search by Exploiting Impact-Based Ranking

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2: University of the Peloponnese, Greece

- Keyword-based search engine for papers
- It supports filtering, bookmarking & visualisations



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 Find!

Order by: Popularity Influence Year Combine with keyword relevance: Yes No

2872 results (144 pages)

« 1 2 3 4 5 »

💡 Click on entries for comparison

Title	Venue	Year	Impact
Efficient string matching: an aid to bibliographic search ⓘ	<i>context</i> 👁 Commun ACM	1975	🔥 🏛️ 📌
A guided tour to approximate string matching ⓘ	<i>context</i> 👁 ACM Comput Surv	1999	🔥 🏛️ 📌
Fast Pattern Matching in Strings ⓘ	<i>context</i> 👁 SIAM J Comput	1973	🔥 🏛️ 📌

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What makes it different?

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What makes it different?

It supports ranking & comparing papers based on different aspects of their impact

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Popularity = short-term impact
(does the paper has a hype right now?)



Influence = long-term impact
(is the paper fundamental for its discipline?)

Both based on citation network analysis

Why is this important?

No one-size-fits-all impact measure

- Oversimplification, there are several aspects
- Each important for different applications

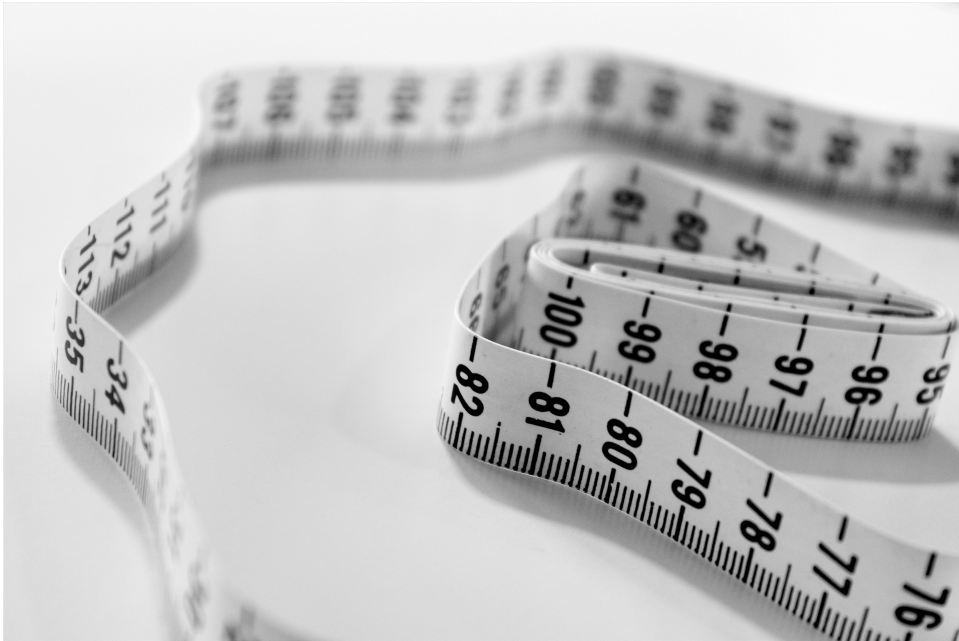
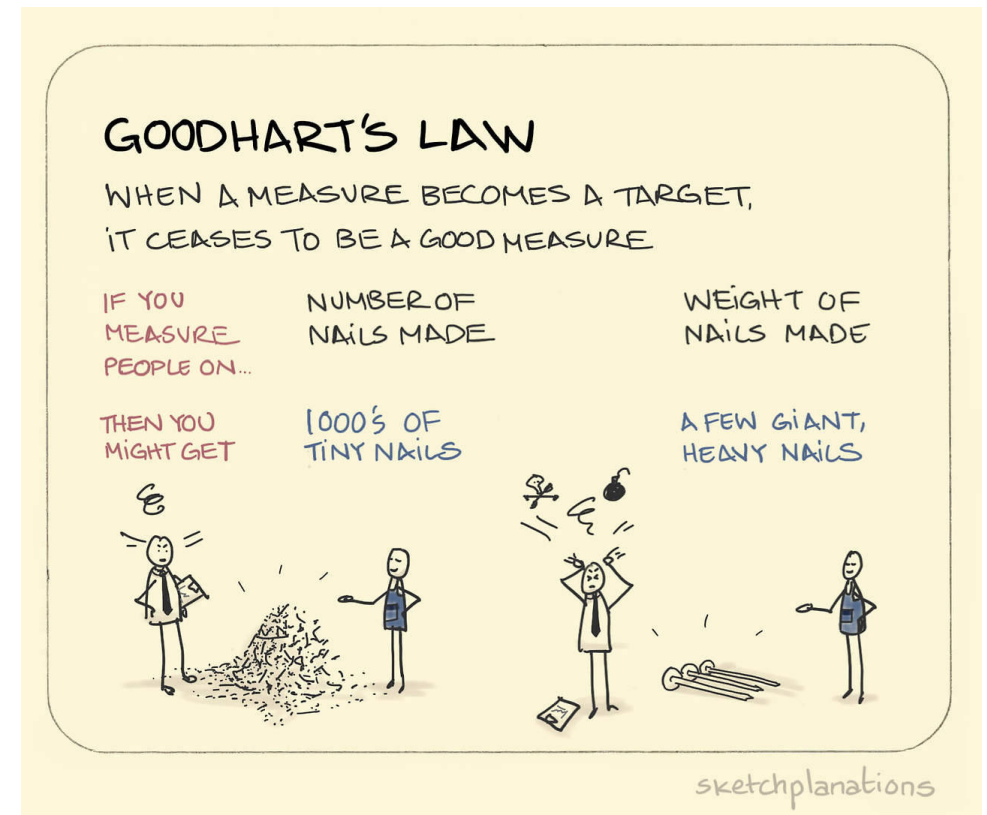


Photo by [Siora Photography](#) on [Unsplash](#)

One measure is easy to be manipulated

- Goodhart's law



More details? Come & talk to us!



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Facilitating Scientific Literature Search by Exploiting Impact-Based Ranking

CIKM2019 BEIJING CHINA November 23-27, 2019 Thanasis Vergoulis, Serafeim Chatzopoulos, Ilias Kanellos, Panagiotis Deligiannis, Christos Tryfonopoulos, Theodore Dalamagas

#search

Q what makes it different?

Order by: Popularity Influence

popularity = short term impact
- does it have a hype right now?

influence = long term impact
- is it fundamental for its discipline?

it supports ranking with different aspects of scientific impact

#data

~450M citations
>45M articles

OpenCitations COCI dataset + metadata from several sources (Open Academic Graph, Crossref, Unpaywall, Mendeley, etc.)

#why?

- different applications = different needs
- no one-size-fits-all impact measure
- Goodhart's law: more metrics are needed
- Underestimated issue for most academic search engines

#how?

- citation network analysis
- Influence: PageRank [1]
- Popularity: RAM [2]
- See our work in [3] for details

#other_features

- article comparison
- intuitive infographics
- citation history
- bookmark mechanism

#more_info?

bip.imsi.athenarc.gr
@BipFinder

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References:
[1] R. Motwani, L. Page, S. Brin, T. Winograd. The Pagerank Citation Ranking: Bringing Order to the Web. Technical Report, Stanford InfoLab, 1999.
[2] Runt Guo, Yang-Ting Kou, Chun-Nian Hsu, Shou-De Lin, Kristina Lerman. Time-aware Ranking in Dynamic Citation Networks. In IEEE ICMMW, pages 373-380. IEEE, 2011.
[3] I. Kanellos, T. Vergoulis, D. Sacharidis, T. Dalamagas, Y. Vassiliou. Impact-Based Ranking of Scientific Publications: A Survey and Experimental Evaluation. TKDE 2019, DOI: 10.1109/TKDE.2019.2941206 (early access)

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All 3-rd party icons where downloaded from FlatIcon, "fire" was designed by Good Ware, "bank-building" by Freepik, "search" and "network" by Smashicons, "worldwide" by mavadee and "twitter" by Pixel perfect.

Funding:
We acknowledge support of this work by the project "Moving from Big Data Management to Data Science" (MIS 5002437/3) which is implemented under the Action "Reinforcement of the Research and Innovation Infrastructure", funded by the Operational Programme "Competitiveness, Entrepreneurship and Innovation" (NSRF 2014-2020) and co-financed by Greece and the European Union (European Regional Development Fund).

ATHENA
Research & Innovation
Information Technologies

University of the Peloponnese

Our (distributed) implementations for impact-based ranking algorithms:
<https://github.com/diwis/PaperRanking>

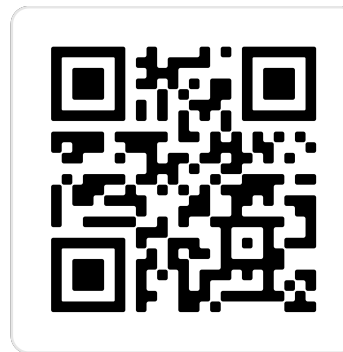
Our experimental evaluation of impact-based ranking algorithms:
I. Kanellos, T. Vergoulis, D. Sacharidis, T. Dalamagas, Y. Vassiliou: Impact-Based Ranking of Scientific Publications: A Survey and Experimental Evaluation. TKDE 2019, DOI: 10.1109/TKDE.2019.2941206 (early access)

Our open API:
<http://bip.imsi.athenarc.gr:4000/documentation>

Try it out!

Email: bip@athenarc.gr

Website: bip.imsi.athenarc.gr



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