

# landscape of hydrology: surface water and groundwater interactions

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presented

- ▶ at Faculty of Engineering, Universitas Sriwijaya
- ▶ 13-14 Nov 2018
- ▶ link to slide (open the PDF file)
- ▶ link to full papers

got any papers?

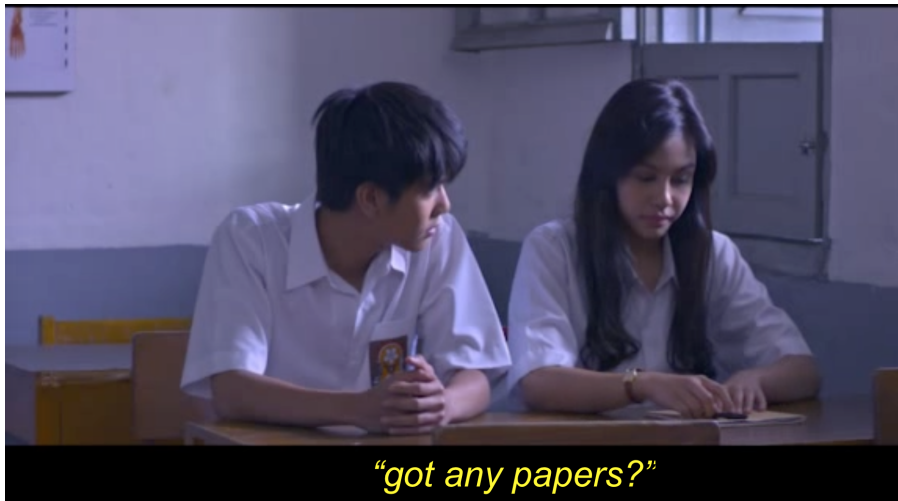


Figure 1: dilan1990

let's shift our mindset

publish (in top journals) or perish

to

#terbukaatautertinggal

## meet the (core) team

this work is part of our project funded by Kemristekdikti in 2017 and 2018

- ▶ Dasapta Erwin Irawan (Institut Teknologi Bandung) (ORCID)
- ▶ Deny Juanda Puradimaja (GS),
- ▶ Ahmad Darul (GS),
- ▶ Budi Brahmantyo (alm) (GS),
- ▶ and a bunch of undergrad and master students

# goals

to give you a clue of:

1. what happens in the hydrological literature?
2. can we classify all those papers?
3. who wrote them?
4. are they connected?
5. what can we learn from them?

## methods

a complete and detail instruction is provided in the full paper.

- ▶ we used Scopus database, 30 Dec 2017,
- ▶ scopus is paid database, access provided by ITB
- ▶ vosviewer, a free visualization tool made by CWTS Leiden

## methods (2)

using scopus

- ▶ keywords: surface water AND groundwater AND interactions
- ▶ filter: in title
- ▶ download the search results, in RIS format or you could always download a portable format like csv or bibtex then load it to zotero ref manager. you could exporte the library to RIS later on.





## clusters of keywords (2)

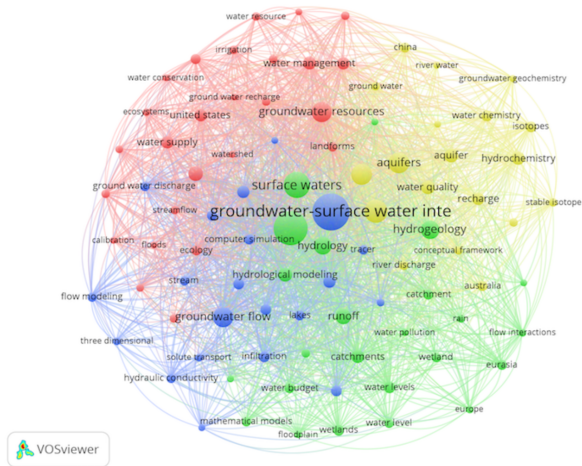


Figure 3: cluster of keywords 2

# clusters of authorship (1)

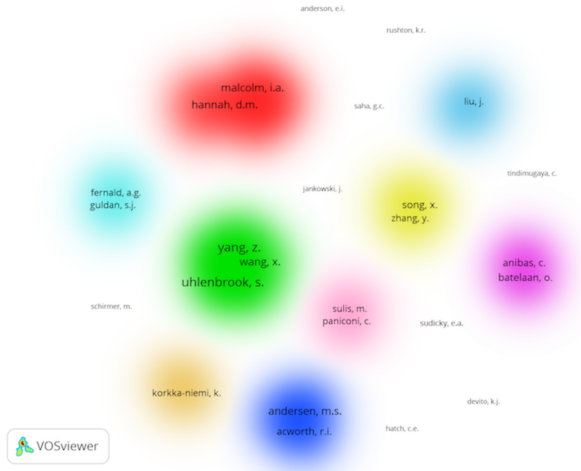


Figure 4: cluster of authorship 1

## clusters of authorship (2)

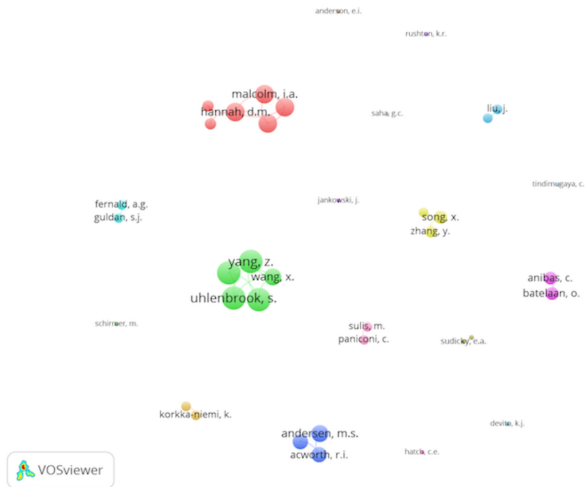


Figure 5: cluster of authorship 2

## remarks

- ▶ Many authors have contributed their knowledge to this subject and rapid growth started in early 2000's.

## remarks

- ▶ Closely connected keywords but less collaboration (cross-country collaboration) among scientist in this field.

## remarks

- ▶ There are weak (or underrepresented) papers to connect "water resource management" with other keywords.

## remarks

- ▶ There are several preliminary-identified gaps in this corpus: geophysical method, tropical region, more water-related geohazards (like land subsidence and landslide), more systemic study based on local geological setting, such as: volcanic hydrogeological system, groundwater system in coastal area).



## remarks

- ▶ Each gap is an opportunity for Indonesian authors to explore the original- ity of Indonesia that have been deeply covered by our own ignorance.

## discussions

I invite questions, comments, feedback.

you can send me emails to: `dasaptaerwin3` at gmail

or mention me on Twitter:

`[@dasaptaerwin]`(<https://twitter.com/dasaptaerwin>)