

# stacks of papers: the role of IR in advancing science

Dasapta Erwin Irawan

Nov 13, 2018

presented

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

got any papers?

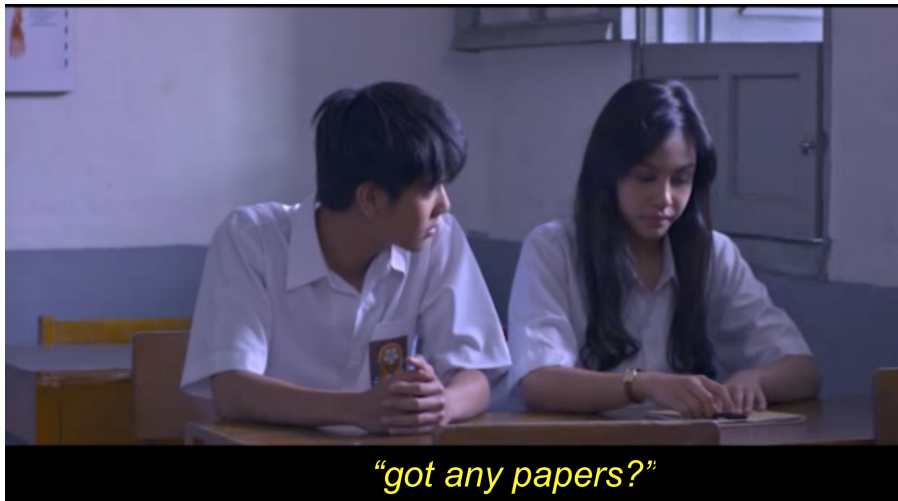


Figure 1: dilan1990

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

- ▶ Dasapta Erwin Irawan (Institut Teknologi Bandung) (ORCID)
- ▶ Dini Sofiani Permatasari (GS)
- ▶ Lusiana Marlina Nurani (GS)
- ▶ Aidina Annisa (IG)

# goals

to give you a clue of:

1. how big Indonesia is, in terms of science and publication,
2. how it stands internationally,
3. who's been writing articles about Indonesia,
4. how to go OA to maximize your impact?
5. how IR (institutional repository) might help you?

# methods

## general

- ▶ we used Web of Science (WOS) and Dimensions (DIM) databases, 09 Nov 2018,
- ▶ WOS is paid database, access provided by ITB
- ▶ DIM is a free database

## methods (2)

using WOS

- ▶ keywords: Indonesia,
- ▶ cascade filtering: in title, open access only, article and proceeding papers only



## overview

- ▶ filter: in title
- ▶ results: 22,118 docs, only 4,760 OA
- ▶ source data: filter1\_intitle\_type.txt

by type

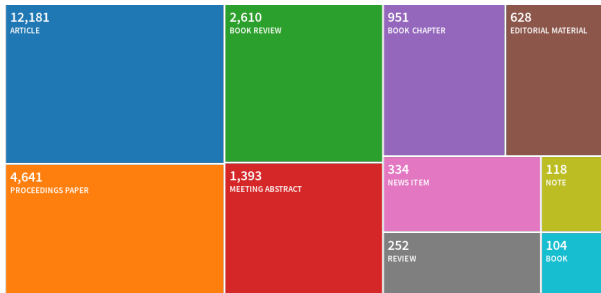


Figure 2: treemap

# Using Dimensions database

## methods

- ▶ access to Dimensions, 09 Nov 2018,
- ▶ keywords: Indonesia,
- ▶ cascade filtering: in title and abstract only, open access only, article and proceeding papers only

## overview

- ▶ filter: in title and abstract
- ▶ results: 88,138 docs, 36,745 OA
- ▶ source data: dim\_intitle\_type.txt

by year

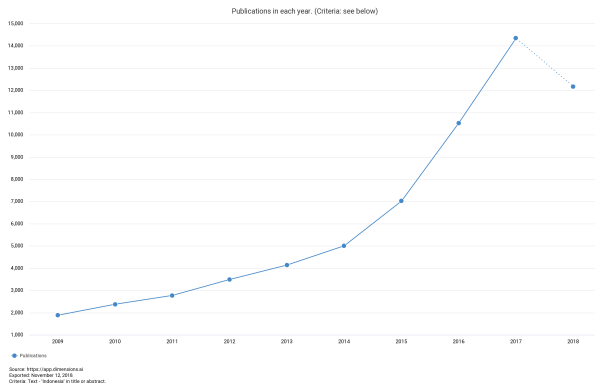


Figure 3: byyear

# top 10 field of research

## Fields of Research

related to your search

Name	↓ Publications	FCR	RCR
Fields of Research code	Relevant	Mean	M...
<a href="#">Applied Economics</a> 1402	5,215	0.95	1.19
<a href="#">Public Health and Health Services</a> 1117	5,048	0.93	1.06
<a href="#">Historical Studies</a> 2103	4,742	0.82	0.71
<a href="#">Sociology</a> 1608	3,109	0.72	0.55
<a href="#">Environmental Science and Management</a> 0502	3,075	1.16	0.57
<a href="#">Political Science</a> 1606	2,933	0.94	0.63
<a href="#">Ecology</a> 0602	2,291	1.13	0.59
<a href="#">Law</a> 1801	2,164	0.38	0.36
<a href="#">Clinical Sciences</a> 1103	2,142	0.90	0.93
<a href="#">Specialist Studies In Education</a> 1303	1,976	0.37	0.73
<a href="#">Geology</a> 0403	1,956	1.66	0.82

Figure 4: by field

# top 10 authors

## Researchers

related to your search

Name	↓ Publications	FCR	RCR
Organization, Country	Relevant	Mean	M...
<a href="#">Bachti Alisjahbana</a> Padjadjaran University, Indonesia	78	1.68	0.94
<a href="#">Justus M Van Der Kroef</a> University of Bridgeport, United States	76	0.00	0.00
<a href="#">Emiliana Tjitra</a> Ministry of Health, Indonesia	74	3.00	1.89
<a href="#">Michael J Bangs</a> Kasetsart University, Thailand	70	1.59	1.18
<a href="#">Reinout Van Crevel</a> Radboud University Nijmegen Medical Centre, Netherlands	69	1.82	1.11
<a href="#">Meine Van Noordwijk</a> Wageningen University & Research, Netherlands	65	3.44	0.56
<a href="#">J Kevin Baird</a> University of Oxford, United Kingdom	62	2.50	1.63
<a href="#">Purnomo</a> United States Department of the Navy, United States	62	1.47	0.68
<a href="#">Enny Kenangalem</a> Menzies School of Health Research, Australia	57	3.83	2.18
<a href="#">Teja Tschardtke</a> University of Göttingen, Germany	51	4.28	1.31

Figure 5: by researcher

## Source titles

related to your search

Name	↓ Publications	FCR	RCR
	Relevant Mean	M...	
IOP Conference Series Earth and Environmental Science	1,297	0.34	0.00
Bulletin of the Global Volcanism Network	753	0.00	0.00
SSRN Electronic Journal	635	0.00	0.00
Bulletin of Indonesian Economic Studies	601	1.90	0.07
Journal of Physics Conference Series	587	0.29	0.00
Jurnal Hukum & Pembangunan	522	0.00	0.00
IOP Conference Series Materials Science and Engineering	516	0.19	0.00
Journal of Southeast Asian Studies	425	1.68	0.05
Advanced Science Letters	395	0.13	0.00
Biodiversitas Journal of Biological Diversity	359	0.00	0.00
Procedia - Social and Behavioral Sciences	349	0.60	0.00
The Southeast Asian Journal of Tropical Medicine and Public Health	334	0.55	0.25
The Journal of Asian Studies	300	3.14	0.00
Indonesia	300	1.94	0.00
MATEC Web of Conferences	293	0.06	0.00
Paediatrica Indonesiana	292	0.04	0.01
PLoS ONE	285	2.67	0.93
Bijdragen tot de taal- land- en volkenkunde / Journal of the Humanities and Social Sciences of ...	276	0.72	0.00
Studia Islamika	274	0.09	0.00
Indonesia and the Malay World	267	1.08	0.00
AAPG Bulletin	259	2.42	0.00
Zootaxa	253	0.43	0.09



# sum of citations

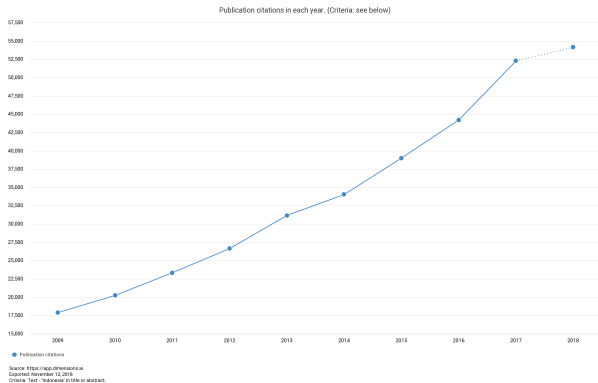


Figure 7: by citations

# cited/not cited

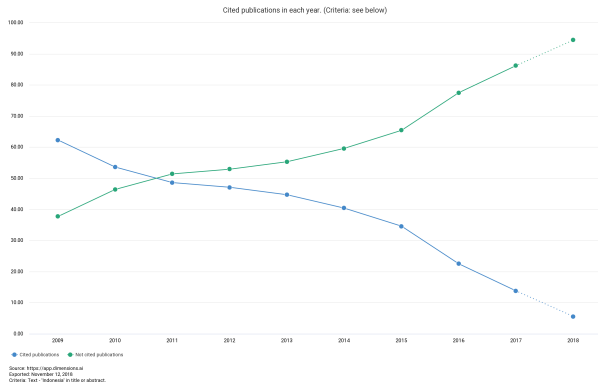


Figure 8: by cited/not cited

## highest citation

- ▶ title: Estimating Wealth Effects Without Expenditure Data—Or Tears: An Application to Educational Enrollments in States of India
- ▶ journal: Demography
- ▶ year: 2001
- ▶ authors: Deon Filmer (World Bank Group) and Lant H. Pritchett (Harvard University)
- ▶ citations: 2.5 K
- ▶ JIF 2017: 2.5+

# average citations per publications

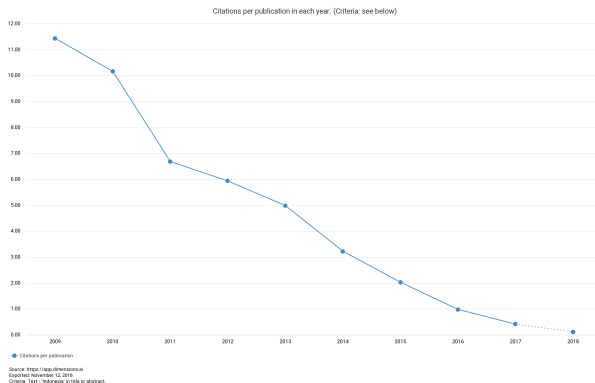


Figure 9: by cited/not cited

# RCR Score

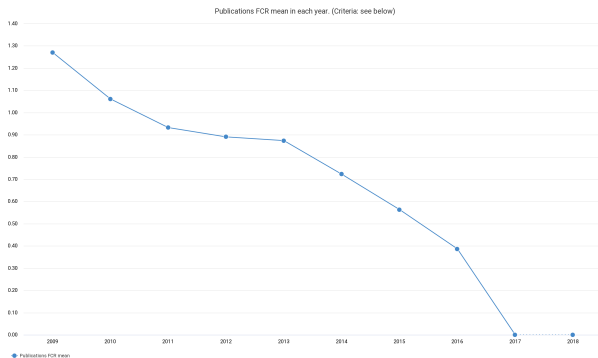
The Relative Citation Ratio (RCR) is a citation-based measure of scientific influence of a publication. It is calculated as the citations of a paper, normalized to the citations received by NIH-funded publications in the same area of research and year [ref](<https://dimensions.freshdesk.com/support/solutions/a>



# FCR Score

The Field Citation Ratio (FCR) is a citation-based measure of scientific influence of one or more articles. It is calculated by dividing the number of citations a paper has received by the average number received by documents published in the same year and in the same Fields of Research (FoR) category.

[ref](<https://dimensions.freshdesk.com/support/solutions/a>



looking at the OA docs

- ▶ 36,745 total docs

## Source titles

related to your search

Name	↓ Publications	FCR	RCR
	Relevant Mean	Mean	M...
IOP Conference Series Earth and Environmental Science	1,112	0.34	0.00
<a href="#">SSRN Electronic Journal</a>	635	0.00	0.00
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IOP Conference Series Materials Science and Engineering	516	0.19	0.00
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Procedia - Social and Behavioral Sciences	349	0.60	0.00
MATEC Web of Conferences	293	0.06	0.00
PLoS ONE	285	2.67	0.93
Studia Islamika	274	0.09	0.00
Russian Journal of Agricultural and Socio-Economic Sciences	236	0.00	0.00
Paediatrica Indonesiana	222	0.04	0.00
Kesmas National Public Health Journal	215	0.01	0.00
Jurnal Humaniora	195	0.01	0.00
Procedia Environmental Sciences	193	0.64	0.00
Binus Business Review	153	0.02	0.00
EKUITAS (Jurnal Ekonomi dan Keuangan)	153	0.01	0.00
Procedia Engineering	145	0.51	0.00
Unisia	144	0.00	0.00
JOURNAL OF INDONESIAN ISLAM	137	0.16	0.00
Jurnal Dinamika Hukum	129	0.05	0.00
Journal of Geophysical Research	129	3.94	0.00



## Researchers

related to your search

Name	↓ Publications	FCR	RCR
Organization, Country	Relevant	Mean	M...
<a href="#">Emiliana Tjitra</a> Ministry of Health, Indonesia	62	3.26	2.00
<a href="#">Enny Kenangalem</a> Menzies School of Health Research, Australia	54	4.02	2.28
<a href="#">Ric N Price</a> University of Oxford, United Kingdom	47	4.09	2.66
<a href="#">Bachti Alisjahbana</a> Padjadjaran University, Indonesia	46	2.03	1.11
<a href="#">Nicholas M Anstey</a> Charles Darwin University, Australia	44	3.78	2.11
<a href="#">Reinout Van Crevel</a> Radboud University Nijmegen Medical Centre, Netherlands	36	2.18	1.19
<a href="#">J Kevin Baird</a> University of Oxford, United Kingdom	33	2.82	1.91
<a href="#">Din Syafruddin</a> Eijkman Institute for Molecular Biology, Indonesia	33	1.37	0.92
<a href="#">Shoichiro Fukao</a> Kyoto University, Japan	32	2.49	0.00
<a href="#">Meine Van Noordwijk</a> Wageningen University & Research, Netherlands	31	4.51	0.56
<a href="#">Vivi Setiawaty</a> Ministry of Health, Indonesia	30	1.37	1.37
<a href="#">Hiroyuki Hashiguchi</a> Kyoto University, Japan	28	2.04	0.00
<a href="#">Toshitaka Tsuda</a> Kyoto University, Japan	27	2.82	0.00
<a href="#">Taniawati Supali</a> University of Indonesia, Indonesia	27	2.57	1.38

Figure 13: researcher

## Fields of Research

related to your search

Name Fields of Research code	↓ Publications	FCR	
	Relevant	Mean	M...
<a href="#">Public Health and Health Services</a> 1117	2,428	0.96	1.27
<a href="#">Applied Economics</a> 1402	1,931	0.68	1.04
<a href="#">Historical Studies</a> 2103	1,328	0.41	0.83
<a href="#">Sociology</a> 1608	1,297	0.33	0.80
<a href="#">Environmental Science and Management</a> 0502	1,238	1.07	0.66
<a href="#">Specialist Studies in Education</a> 1303	1,110	0.22	1.03
<a href="#">Law</a> 1801	1,076	0.15	0.60
<a href="#">Clinical Sciences</a> 1103	1,071	0.89	1.20
<a href="#">Religion and Religious Studies</a> 2204	1,061	0.13	0.35
<a href="#">Genetics</a> 0604	848	0.75	0.93
<a href="#">Ecology</a> 0602	829	1.05	0.65
<a href="#">Political Science</a> 1606	794	0.45	0.77
<a href="#">Banking, Finance and Investment</a> 1502	777	0.19	0.12
<a href="#">Medical Microbiology</a> 1108	725	1.25	1.49
<a href="#">Business and Management</a> 1503	645	0.39	0.66

by year

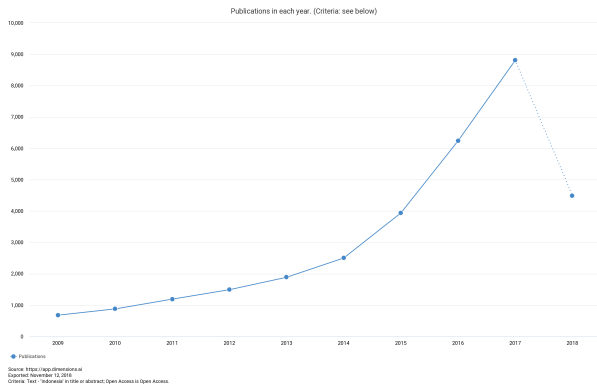


Figure 15: byyear

by year

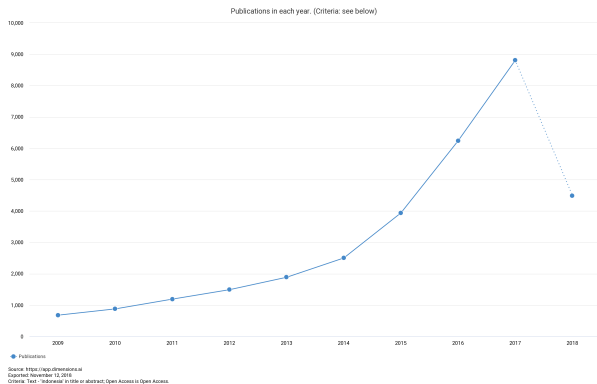


Figure 16: byyear

# sum of citations

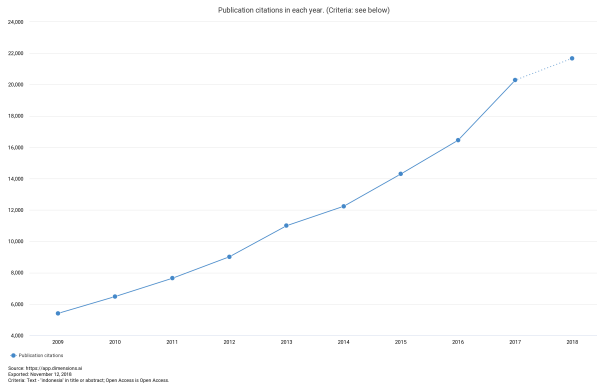


Figure 17: by citations

# average citation

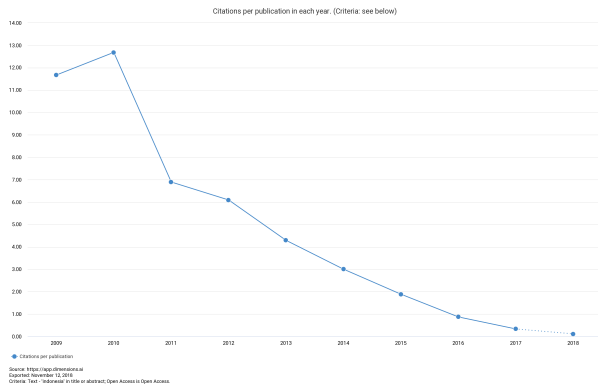


Figure 18: by citations

## highest citation

- ▶ title: Variations in Tropical Sea Surface Temperature and Surface Wind Fields Associated with the Southern Oscillation/El Niño
- ▶ journal: Monthly Weather Review
- ▶ year: 1982
- ▶ authors: Eugene M. Rasmusson and Thomas H. Carpenter
- ▶ citations: 1.6 K
- ▶ JIF 2017: 3.2+

what about another country: eg Nigeria, Japan, Thailand, Malaysia

- ▶ why don't we have a go



what about another country: eg USA, UK, Canada, etc

- ▶ why don't we have a go.

## remarks

- ▶ upstream vs downstream (closer to user)
- ▶ OA means more readers (sometimes led to more citations)
- ▶ how to go OA?

## remarks (2)

- ▶ there are more papers about Indonesia: ID vs EN language papers
- ▶ local topic vs international interests
- ▶ there are more ways to disseminate your results than only put it as papers

## how to go OA?

- ▶ publish in APC-based journals or gold OA journals (if you have the money)
- ▶ what if you have less or no funding:
  - ▶ publish in no-APC journals or diamond OA journals
  - ▶ publish in non-OA/paywalled journals but the preprint/pre-peer reviewed version (or accepted version) to your institutional repository (IR) or open-free repository (eg: INArxiv) but pls **check the journal's self-archiving policy** – green OA

OR

you could just post your whole research files to IR and cite it in your papers (ref).

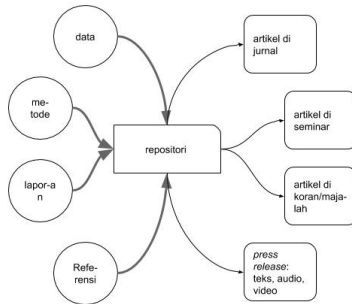


Figure 19: IR role in research

## 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>)