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

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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?

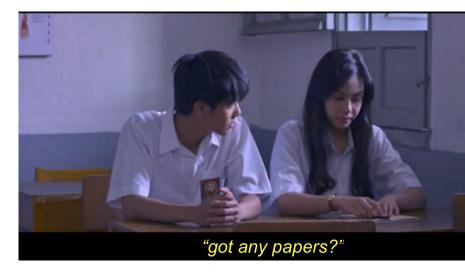


Figure 1: dilan1990

# 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)
- Lusia Marliana 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

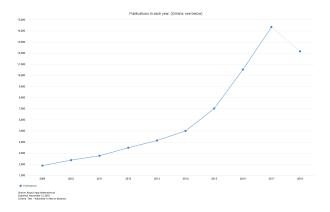


Figure 3: byyear

# top 10 field of research

### Fields of Research

↓ Publications		RCR
5,215	0.95	
5,048	0.93	1.06
4,742	0.82	0.71
3,109	0.72	0.55
3,075	1.16	0.57
2,933	0.94	0.63
2,291	1.13	0.59
2,164	0.38	0.36
2,142	0.90	0.93
1,976	0.37	0.73
1,956	1.66	0.82
	Retevant 5,215 5,048 4,742 3,109 3,075 2,933 2,291 2,164 2,142 1,976	Relevant Mean   \$.215

Figure 4: by field

# top 10 authors

University of Göttingen, Germany

#### Researchers related to your search Name **↓** Publications FCR RCR Relevant Mean M., 78 1.68 0.94 Bachti Alisjahbana Padjadjaran University, Indonesia Justus M Van Der Kroef 0.00 0.00 University of Bridgeport, United States 3.00 1.89 Emiliana Tiitra Ministry of Health, Indonesia Michael J Bangs 70 1.59 1.18 Kasetsart University, Thailand Reinout Van Crevel 1.82 1.11 Radboud University Nijmegen Medical Centre, Netherlands Meine Van Noordwijk 3.44 0.56 Wageningen University & Research, Netherlands J Kevin Baird 62 2.50 1.63 University of Oxford, United Kingdom Purnomo 1.47 0.68 United States Department of the Navy, United States 57 3.83 2.18 Enny Kenangalem Menzies School of Health Research, Australia Teia Tscharntke 4.28 1.31

Figure 5: by researcher

### sources

#### Source titles

Name		FCR	
	Relevant	Mean	M.
P Conference Series Earth and Environmental Science	1,297	0.34	0.0
ulletin of the Global Volcanism Network	753	0.00	0.0
SRN Electronic Journal	635	0.00	0.0
ulletin of Indonesian Economic Studies	601	1.90	0.0
ournal of Physics Conference Series	587	0.29	0.0
urnal Hukum & Pembangunan	522	0.00	0.0
P Conference Series Materials Science and Engineering	516	0.19	0.
ournal of Southeast Asian Studies	425	1.68	0.
dvanced Science Letters	395	0.13	0
odiversitas Journal of Biological Diversity	359	0.00	0
rocedia - Social and Behavioral Sciences	349	0.60	0
ne Southeast Asian Journal of Tropical Medicine and Public Health	334	0.55	0
ne Journal of Asian Studies	300	3.14	0
donesia	300	1.94	0
ATEC Web of Conferences	293	0.06	0
aediatrica Indonesiana	292	0.04	0
LOS ONE	285	2.67	0
jdragen tot de taal- land- en volkenkunde / Journal of the Humanities and Social Sciences	of 276	0.72	0
tudia Islamika	274	0.09	0
donesia and the Malay World	267	1.08	0
APG Bulletin	259	2.42	C
potaxa	253	0.43	0

# sum of citations

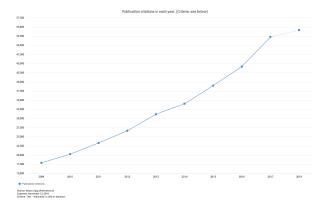


Figure 7: by citations

# cited/not cited

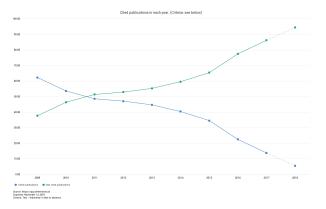


Figure 8: by cited/not cited

# 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

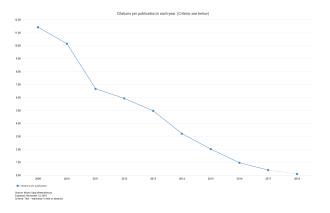
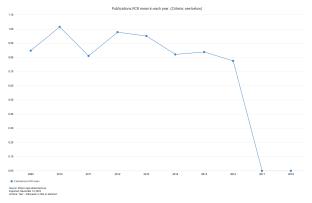


Figure 9: by cited/not cited

### 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

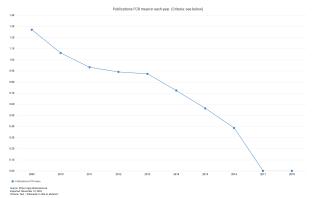
[ref](https://dimensions.freshdesk.com/support/solutions/a



### **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

ame	↓ Publications	FCR	
	Relevant	Mean	. M
DP Conference Series Earth and Environmental Science	1,112	0.34	0.
SRN Electronic Journal	635	0.00	0.
ournal of Physics Conference Series	587	0.29	0
urnal Hukum & Pembangunan	519	0.00	0
DP Conference Series Materials Science and Engineering	516	0.19	C
iodiversitas Journal of Biological Diversity	359	0.00	c
rocedia - Social and Behavioral Sciences	349	0.60	(
MATEC Web of Conferences	293	0.06	(
LoS ONE	285	2.67	(
tudia Islamika	274	0.09	
ussian Journal of Agricultural and Socio-Economic Sciences	236	0.00	
aediatrica Indonesiana	222	0.04	(
esmas National Public Health Journal	215	0.01	
urnal Humaniora	195	0.01	
rocedia Environmental Sciences	193	0.64	
inus Business Review	153	0.02	
KUITAS (Jurnal Ekonomi dan Keuangan)	153	0.01	
rocedia Engineering	145	0.51	
nisia	144	0.00	
OURNAL OF INDONESIAN ISLAM	137	0.16	
urnal Dinamika Hukum	129	0.05	
ournal of Geophysical Research	129	3.94	

# researcher

#### Researchers

Name	↓ Publications		RCI
Organization, Country	Relevant	Mean	М.
Emiliana Tjitra Ministry of Health, Indonesia	62	3.26	2.0
Enny Kenangalem Menzies School of Health Research, Australia	54	4.02	2.2
Ric N Price University of Oxford, United Kingdom	47	4.09	2.6
Bachti Alisjahbana Padjadjaran University, Indonesia	46	2.03	1.1
Nicholas M Anstey Charles Darwin University, Australia	44	3.78	2.1
Reinout Van Crevel Radboud University Nijmegen Medical Centre, Netherlands	36	2.18	1.1
J Kevin Baird University of Oxford, United Kingdom	33	2.82	1.9
Din Syafruddin Eijkman Institute for Molecular Biology, Indonesia	33	1.37	0.9
Shoichiro Fukao Kyoto University, Japan	32	2.49	0.0
Meine Van Noordwijk Wageningen University & Research, Netherlands	31	4.51	0.5
Vivi Setiawaty Ministry of Health, Indonesia	30	1.37	1.3
Hiroyuki Hashiguchi Kyoto University, Japan	28	2.04	0.0
Toshitaka Tsuda Kyoto University, Japan	27	2.82	0.0
Taniawati Supali University of Indonesia, Indonesia	27	2.57	1.3

Figure 13: researcher

# field

#### Fields of Research

Name	↓ Publications		RCF
Fields of Research code	Relevant	Mean	М
Public Health and Health Services 1117	2,428	0.96	1.27
Applied Economics 1402	1,931	0.68	1.04
Historical Studies 2103	1,328	0.41	0.8
Sociology 1608	1,297	0.33	0.8
Environmental Science and Management 0502	1,238	1.07	0.6
Specialist Studies In Education 1303	1,110	0.22	1.0
Law 1801	1,076	0.15	0.6
Clinical Sciences 1103	1,071	0.89	1.2
Religion and Religious Studies 2204	1,061	0.13	0.3
Genetics 0604	848	0.75	0.9
Ecology 0602	829	1.05	0.6
Political Science 1606	794	0.45	0.7
Banking, Finance and Investment 1502	777	0.19	0.1
Medical Microbiology 1108	725	1.25	1.4
Business and Management	645	0.39	0.6

# 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).

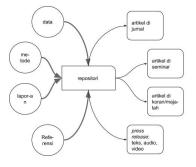


Figure 15: IR role in research

### 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)