## Personal development in academic achievements

#### Pengembangan diri dalam ranah akademik

Aula Timur, Wednesday, 4th October 2017, 10.00-11.30

#### Djoko T Iskandar

School of Life Sciences & Technology

Institut Teknologi Bandung



## Content of presentation

Indonesian education in the World constellation.

The change of Research Outcomes concept.

Process of a research product.

Parameters to take in to considerations. Ethics.

References.

Recommendations.



#### Points to pounder



We are a part of the luckiest community in Indonesia.

We belong to the super elite community, helas ... not really elite.

We are a part of human capital of Indonesia.

Our contribution means a lot for your country.

We are deemed to contribute for our country.



#### Indonesian universities performed poorly in international university rankings

The Shanghai Jiao Tong Ranking rated no Indonesian universities among its global top 500.

The Times Higher Education rated no Indonesian universities among its top 400 global universities or top 100 Asian universities in 2013-2015. For 2018, ITB is in the 801-1000th; followed by UGM, and UI among 1102 Universities.

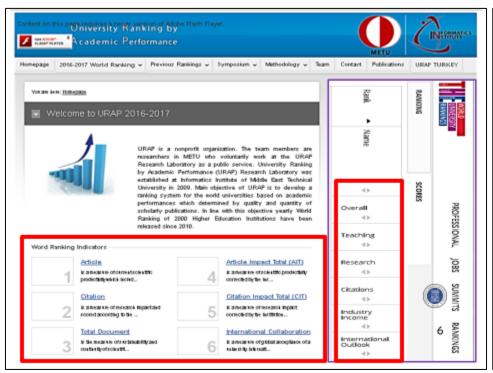
The Universitas 21 Ranking in 2013-2017 edition, rated Indonesia at the bottom out of 50 Asian countries which grades universities on (1) investment, (2) research output, (3) gender balance, (4) international connectivity and other measures. It scored particularly poorly on the first two metrics.

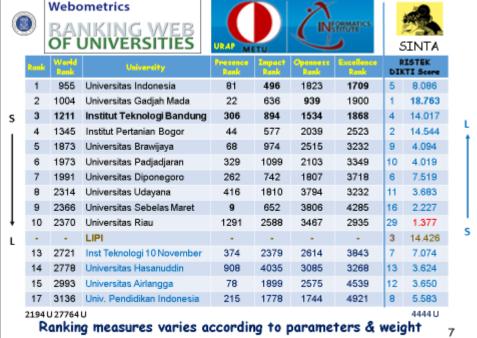
The Q5 World Ranking in 2013 rated UI is in the 64th in Asia (309th globally), ITB in the 129th (461-470), UGM in the 133rd (501-550), and Unair in the 145th (701+). In 2016, UI is in the 67th Asia, ITB in the 86th, UGM in the 105th, and Unair in the 190th (701+).

The Academic Ranking of World Universities 2017 only listed (1) ITB and (2) UI as > 800 of 981 universities in the World



The University Ranking by Academic Performance did not list any Indonesian Universities among 1000 others.





#### Life Sciences covers 10 of 21 broad subject categories based on Academic Ranking of World Universities

Pharmacology	Clinical Medicine				
Neuroscience	Microbiology				
Molecular Biology & Genetics	Biology & Biochemistry				
Plant & Animal Sciences	Ecology / Environment				
Immunology	Agricultural Sciences				
Chemistry	Mathematics				
Physics	Space Studies				
Geosciences	Economics & Business				
Engineering	Psychology /Psychiatry				
Material Sciences	Social Sciences				
Computer Sciences					

#### Revolutionary change of Research Outcomes Concept



- Research report
- · Seminar, Popular papers
- Publish
- Go International
- Citations
- · h Index + others
- Ranking
- Cooperation & Rewards





## Oliver H. Lowry

Biochemist, Washington

Query date: 2017-08-30

Papers: 230

Citations: 247.883

Years: 80

Cites/year: 2744.58 Cites/paper: 954.63/28.0 Cites/author: 59676.54 Cites/author/year: 745.95 Papers/author: 96.51 Authors/paper: 3.10/3.0

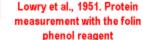
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h-index: 88 (99%) q-index: 230 (100%)

★ Highest cited paper:

210.923



1910-1966



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#### Graham Colditz

Epidemiologist, St. Louis

Query date: 2017-8-30

\* Papers: 2042

★ Citations: 270.276

Years: 38

Cites/year: 5820.76 Cites/paper: 224.34 Cites/author: 56.551 Cites/author/year: 1528

Papers/author:297 Authors/paper: 3.93 h-index: 271 (93%) g-index: 440 (100%)

Highest cited paper: 6.790

Generated by Publish or Perish





1954-(Obesity & Diabetes) 53 papers per year



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**e**sînta



Score Component	Code	Weight	
Number of Journal articles in Scopus	A	40	4
h-Index in Scopus	F	16	
Number of non Journal in Scopus	В	15	4
Number of citations in Scopus	D	4	
h-Index in Google Scholar	E	4	
Number of citations in Google Scholar	C	1	

Scoring Formula:  $((A\times40)+(B\times15)+(C\times1)+(D\times4)+(E\times4)+(F\times16))/Constanta$ 

Sinta relies very highly on number of articles in Scopus, including non citable conference papers and book chapters, less on quality.

Principal author is not taken into consideration.

Application of weight is highly redundant, as most figures are inter-dependent, hence scored repeatedly.

There is a prejudice assumption that Google Scholar is not good.



#### Some records are not verified or outdated

Sinta	Ranked Author	score	h Scopus	1º Author	Citations	h Google S	1º Author	Gtations
1	May Sandage	278	23	0	25.769	117	0	72.143
2		86	17	2	3871	34	0	5682
3		84	19	2	1147	21	4	2002
4	42	84	17	9	1557	21	6	2755
- 5	name.	80	39	777	7777	61	0	12.970
6	-	79	18	1	1434	22	7	1902
7		74	17 (29)	8	381	34	9	4385
8	NAVY PROFES	74	13	2	762	18	5	1153
9		73	27	7	3724	45	11	8903
10	Non-Stories	73	16	1	926	18	6	1511
11		73	16	4	898	19	9	1367
12		73	14	272	7272	22	19	2265
12	no .	72	25	11	1781	11	?	2727
14	1450	69	18	6	1177	18	12	1524
15	DOTA MINES	67	21	3	2397	26	5	3725
16		67	19	0	1018	19	1	1535
17	118pm	67	17	4	2943	18	4	4097
18		66	20	5	1384	26	5	2435
19	in/ faile	66	9 (14)	2	604	19	6	1586
20	NUTY	65	22	6	2006	25	8	2443

1st Author scores are counted from papers contributed to h-index

#### Details featured in Scopus documents (ITB) 100 (65) [ 12 (7) | 50 (28) Entry: first 100 of 39.500 47 132 523 10 923 13 697 15 11

Seminars & books have little contributions to most indexes, but highly considered by Sinta rank system

154 (50)



14

518

638

1192 (212) 282

15 15

18 (7)

103

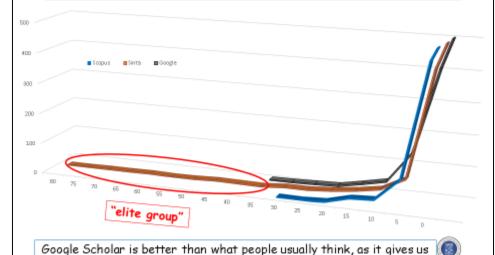
#### Facts about ITB (Sinta, Scopus, Google)

п	Score	Sinta	Score	Sinta	h Scopus	h Google
in Sinta	81-278	0/4	36-40	4/33	0/3	0/0
Based on 617 Staff listed in S	76-80	1/2	31-35	3/34	0/0	1/2
	71-75	1/7	26-30	9/50	1/1	2/2
	66-70	2/6	21-25	9/132	0/4	4/5
	61-65	2/11	16-20	15	4	7
	56-60	3/10	11-15	24	24	22
	51-55	1/7	6-10	37	28	38
	46-50	2/15	2-5	77	98	136
	41-45	5/22	0- 1	422	462	407
	"elite	group"		40.000		

± 50% of ITB Staff have not yet participated in Sinta, but 17 lecturers are listed in the first 100 of Sinta rank.

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## Ranks comparison (617 ITB Staff)



about the same trend with similar cutting edge compared to Scopus.

Sinta expanded the already best scholars into 70% of its range.

#### Different concepts in the society

- Government officials
  - Secured, to have a decent life.
  - Teachers / Lecturer.
    - -To teach the best you can do for the next generation.
- Scientist
  - To contribute to Science (from data to concept)

Most applicable to h-index

- Technocrat
- To use scientific information for benefit.



- Academicians / Entrepreneur
  - Findings of new phenomenon and breakthrough.

Are we ready to follow the direction driven by politics and economy?



#### Comparison between the three measures

					<i>6</i> 5 =1	<i>6</i> 5 ≥2				Sinta ≥2		
40.000	4.000	1.900	138	6	15.300	10.050	443	39	6.672	4.035	750	295
%	10.00	4.75	0.35	0.02	38.25	25.13	1.11	0.10	16.68	10.09	1.88	0.74

Indonesian scholars are better represented in the Google Scholar rank system (38%) compared to Scopus (10%) or Sinta (17%).

Google scholar also shows a relatively good cutting edge (GS ≥10 by 482 scholars, Scopus by 144 and Sinta by 1.045), indicating that having a high h-index in Google Scholar is not superfluous compared to Scopus.

The high Sinta rank (>20) can only be achieved by exceptional scholars (295 of 40.000), with preference to those with high number of articles in journals and conferences, even these articles are not contributing to h-index or not even cited. Sinta favor and extend categories of high ranks, but annihilated the less productive and young ones.

The majority of Ristekdikti Staff are not directly suitable to be measured by h-index.

Based on Ristekdikti Staff listed in Sinta per 2/10/2017

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# Comparing researchers using indexes is potentially misleading

It is misleading to compare the performance of scientist (researchers) from different areas (fields). Each discipline has a unique community size and different citation trends.

The larger is the community, the higher is the probability to be cited. **Medicine** and **Biochemistry** is always in the frontline. In the other hand, scientist worked on **earthworms** or **millipedes** might have a very low h-index.

A paper with too many authors is misleading as the contribution of each author is difficult to evaluate.

High citation does not always correlate with the high h-index.

An author with a **high h-index** or similar measures, even with a combination of low number of publications / low citations counts, basically means that he (or she) is productive and his work is good.



His /her leaderships should shown by being the principal author.

A researcher, if never being the principal contributor, is a free rider.

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## Basic Principles

A good work must comply academically (reasoning, sophistically, statistically, etc.).

A good work must pass peer reviewed process by someone with neutral interest.

A good reviewer is competent in this field. The higher is his/her competence, the best he/she can provide constructive advices.

Conference is a **preliminary** to publication, the main goal is to receive inputs from outsiders.

A publication is considered as useful, if it is cited by others (self citation to a lesser extent).

Do not perform something considered as unethical (salami publication, strictly data mining, over self citation, data recycling, data manipulation, etc.).

This presentation is mainly based on my own & my coworkers experiences



## How to start

Choose from a certain subject or object which lack the very basic information.

Choose a big group (objects) that has few competitors.

Indonesia is a Mega-diversity country, no reason for not working with indigenous species.

Look for the frontline of your object(s).

Choose according to your strength.

Better be a king of an ant, rather than an elephant tail.



Contact the most knowledgeable person on this subject / in this field.

Choose the appropriate media.



#### Who is the best in the world?

#### Browse references of a good article.

- Choose whose names stood out.
- Concentrate on references which are less than 10 years.

#### Examine these persons with good browsers.

- · Use Scopus, Google Scholar, Research Gate, Publish or Perish, etc.
- Restrict his/her profile for the last 5 10 years.
- · He/she should be the principal author in the major articles.

#### Find his/her articles on line. Success?? ->

- Google this person.
- Find his/her contact address /Email from articles.
- Find his/her Institution.
- Find his/her website profile.
- Asked his/her papers personally.



Study these articles as a standard to your work

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#### How to measure your own work?

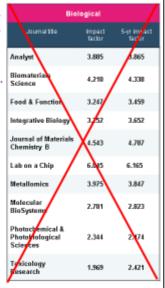
Examine a volume of several journals of the same subjects (objects). Pick the most recent volumes.

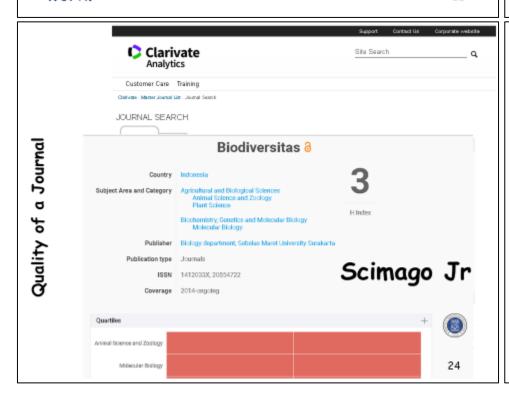
Browse the impact factor of each journal (use Clarivate, Scopus, Scimago Jr, Publish or Perish, Google Scholar, DOAJ, Copernicus, etc). Do not use the figures claimed or mislead by the journal itself.

Tell yourself, (1) which article is the best and which is the least important; (2) which journal is the best? What kind of parameters did you use?

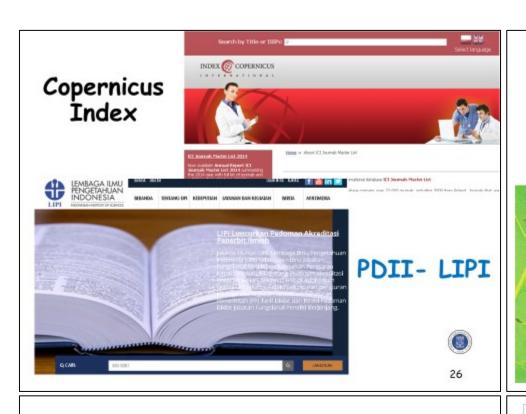
Tell yourself about your own work, is it within the range of some articles of those journals (Subject, object, extensity, discussion, quality of the work).

If yes, then your work is potentially accepted by those journals.









#### What is a good work?

Good title, informative, published in good and appropriate journal.

Being conceptual.

Provide new information (new data is not considered as new).

Provide new insight.

Complete analysis and synthesis.

Discussed on multiple aspects.

Might change previous theory.

Used by many scholars in your field as well as from other disciplines (proven @ by many citations per year).

## What make your work interesting

Go International (mastering English).

Wide audiences (geographic area, multi/inter disciplines, used by many scholars).

Conceptual (new theory, new insight, universally accepted).

Impacted on human well being.

Open multiple windows.

Ready to use (potential applicable).

Easily accessed.

Make your own profile! Contribute to web groups: (Scopus, Research Gate, Google Scholar, etc).



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## How to write a good manuscript

#### Good Title

- Exact and Challenging.
- · No methods or locality, if not really needed.
- Elegant bragging is usually needed.

#### Good Abstract

- To the point, show the importance of your work.
- No introduction.
- No excessive explanations about methods.
- Do not mention about something you did not do yourself.

#### Good Key words

- Provide additional information not mentioned in the Title & Abstract.
- Emphasize on something "eye-catching"

Relevant and updated References Always consult Information for Authors



#### Write in a convenient order

Title: specific, challenging.

Abstract: what, why, how, significance.

Keywords: Different from the title and abstract.

Introduction: Background, key information only,

research questions and motivation.

Experimental: brief but complete.

Results: clear figures, tables, informative.

Discussion: summarize key results, assess value, place in context, discuss significance.

Conclusion: preferable ranked according to the importance of findings.

References: not too many, avoid excessive self citation.



Some journal adopt its own arrangement

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#### Choose a good title

Pengaruh zat pengatur tumbuh terhadap perkembangan larva katak.  $\rightarrow$  0 citation

Apakah hormon berpengaruh pada perkembangan larva katak. > 0 citation

Kadar kritis stilbestrol pada pertumbuhan larva katak. → 5 citations

Konsentrasi kritis stibestrol dalam menghambat perkembangan gonad pada larva tiga jenis katak (Amphibia, Ranidae, Hylarana). > 15 citations

Avoid using non measurable words such as: analisis. estimasi, identifikasi, kajian, kemungkinan, model, optimasi, pengaruh, pengukuran, proses, potensi, perancangan, studi, usulan, etc. > not interesting



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## Elegant bragging in the title

The largest or smallest, utmost, beauty, the only, unusual, extreme, most efficient, etc.

Might apply but not always.

Eye catching words, superlative, "aggressive"

Huge geographic area although not really covered.

Large number of samples.

New feature, previously not in existence.

A given character not considered previously as important.



#### Good Keywords

Keywords are designed as a filter to choose the appropriate publications according to your need among a very high number of listed articles.

Increase the number of keywords, more articles will be filtered and listed only the more specific articles to conform your need.

A keyword which was already figured in the title will not serve as a filter for your purposes.

#### Good References

Updated references is preferred.

Do not use seminar papers and to a lesser extent unpublished manuscripts (i.e. unpublished thesis).

Avoid using your own articles as references, if it is not really relevant to this work.

Write references in a proper way as indicated.



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#### Examples to Title & Key words

Chan, K.O., et al., 2017. Species delimitation with gene flow: A methodological comparison and population genomics approach to elucidate cryptic species boundaries in Malaysian torrent frogs. Molecular Ecology 26(1):1-16. Q1, H 187

Key words: Amolops, FASTSIMCOAL2, hidden species, migration rate, single-nucleotide polymorphism site, frequency spectrum.

Wostl, E., et al., 2017. Taxonomic revision of the Philautus (Anura: Rhacophoridae) of Sumatra with the description of four new species. Herpetological Monographs, 31(1):70-113. Q1, H 31.



**Key words:** Anuran taxonomy, tree frogs, biodiversity, biogeography, Sunda Shelf.

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#### A paper has a shelf life (AWCR)

Some papers are immortal, always have citations since it was published, even after the author passed away longtime ago. This is mainly applicable to conceptual papers.

An amazing and/or awesome findings might have a very high view (viral), but usually only lasted for the first three months.

A paper that has a very low or no citation within the first five years might not be cited anymore or not at all.

Salami papers and book reviews are seldom cited.

Data of more than 5 years old are usually considered as outdated.

The age-weighted citation rate (AWCR) was inspired by Bihui Jin's note. The AR-index: complementing the h-index, ISSI Newsletter, 2007, 3(1), p. 6. The AWCR measures the number of citations to an entire body of work, adjusted for the age of each individual paper. It is an age-weighted citation rate, where the number of citations to a given paper is divided by the age of that paper. Jin defines the AR-index as the square root of the sum of all age-weighted citation counts over all papers that contribute to the h-index.

## Quality of your work (content)

Low outreach, little use (→ go international).

Unfinished works should be avoided at all cost.

Conceptual is favorable.

Impacted on human well-being is more often cited.

Ready to use is important.

Wide range of interest, high citations.

Amazing finding, low citations??

Different aspects, different appreciations.

Proper journal audiences is a must.



#### Data is an integral part of a paper

Data presentation is the most common feature produced by Indonesian scholars since fifty years ago, but nowadays it is not acceptable by most journals.

Linking your data with sources from other literature is a must.

Are the methods, discussions and conclusions in line with the hypothesis?

Statistical analysis might vary from univariate to multivariate or even with a much more sophisticated tool.

What is the inter-relationships of your results in connection with other phenomenon?

What is the significance of your work?

What is the most important part of your data?

What kind of concepts have been addressed?



# Omics Technology

#### Low outreach, few citations

(1979) A new color variation of Gonyosoma oxycephalum. The Snake, Q0, SJR 0.0 → 0 citation

(2001) Two new species of the genus *Oreophryne* from Irian Jaya, Indonesia (Amphibia, Anura, Microhylidae). Spixiana, Q3, SJR 0.29 → 17 citations

(2003) The herpetological type specimens of the Museum Zoologicum Bogoriense collection. Hamadyad, Q3, SJR 0.1 → 5 citations

(2007) A new large green species of Litoria (Anura: Hylidae) from western New Guinea. Zootaxa, Q2, SJR 0.53 → 1 citation

(2009) A new species of the microhylid frog genus *Oreophryne* from the Mamberamo Basin of northern Papua Province, Indonesian New Guinea. Vertebrate Zoology, Q2, SJR 0.56 → 7 citations

(2014) A new species of Hemiphyllodactylus Bleeker, 1860 (Squamata: Gekkonidae) from Pulau Enggano, southwestern Sumatra, Indonesia. Zootaxa, Q2, SJR 0.53 → 3 citations

(2010) Book Review: Asien—Draconinae 2, Leiolepidinae, by Ulrich Manthey. Herpetological Review, Q3, SJR 0.3 → 1 citation



Including papers in bahasa Indonesia & seminars

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#### Conceptual is favorable

(1985) Electromorphs and phylogeny in muroid rodents. Evolutionary Relationships Among Rodents. Q0, SJR 0.0 → 49 citations

(2000) Molecular systematics and biogeography of the fanged frogs of Southeast Asia. Molecular Phylogenetics and Evolution. Q1, SJR 2.00 → 81 citations

(2003) Phylogenetics of fanged frogs: testing biogeographical hypotheses at the interface of the Asian and Australian faunal zones. Systematic Biology. Q1 SJR 7.63 → 185 citations

(2010) Phylogeography and historical demography of *Polypedates leucomystax* in the islands of Indonesia and the Philippines: Evidence for recent human-mediated range expansion? *Molecular*Phylogenetics and Evolution. Q1, SJR 2.0 → 56 citations

(2011) Adaptive radiation and ecological opportunity in Sulawesi and Philippine fanged frog (*Limnonectes*) communities. American Naturalist. Q1, SJR 2.81→ 50 citations

(2013) Stochastic faunal exchanges drive diversification in widespread Wallacean and Pacific island lizards (Squamata: Scincidae: Lamprolepis smaragdina). Journal of Biogeography. Q1, SJR 2.41 → 22 citations



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#### Unquestionable giant dataset

2010. The impact of conservation on the status of the world's vertebrates (25.780 species). Science 330, 1503. Q1, SJR 10.11, → 794 citations.

Savard et al. 2006. Phylogenomic analysis reveals bees and wasps (Hymenoptera) at the base of the radiation of Holometabolous insects. (185 nuclear genes) Genome Research. Q1, SJR 12.25, → 238 citations

Pyron, R.A. & Wiens, J.J., 2011. A large-scale phylogeny of Amphibia including over 2800 species, and a revised classification of extant frogs, salamanders, and caecilians. Molecular Phylogenetics and Evolution 61, Q1, SJR 2.00, → 807 citations.

Pyron et al., 2013. A phylogeny and revised classification of Squamata, including 4161 species of lizards and snakes (12 genes, 12.900 bp). BMC Evolutionary Biology 13, Q1, SJR 1.81, → 641 citations.

Zheng, Y. & Wiens, J.J., 2016. Combining phylogenomic and supermatrix approaches, and a time-calibrated phylogeny for squamate reptiles (lizards and snakes) based on 52 genes and 4162 species. Molecular Phylogenetics and Evolution 94, Q1, SJR 2.00, → 61 citations.

Feng et al., 2017. Phylogenomics reveals rapid, simultaneous diversification of three major clades of Gondwanan frogs at the Cretaceous-Paleogene boundary (629 species, 95 nuclear genes). PNAS, Philadelphia Q1, SJR 6.32, 

2 citations.

## Papers with 100+ coauthors

Hoffmann et al. (+178 coauthors) 2010. The impact of conservation on the status of the world's vertebrates (25.780 species). Science 330, 1503. Q1,  $\rightarrow$  794 citations.

Chatrchyan et al. (+149 coauthors) 2012. Observation of a new boson at a mass of 125 GeV with the CMS experiment at the LHC. Physics Letter B. 761, 1. Q1,  $\rightarrow$  13.425 citations.

Rocha et al. (+123 coauthors) 2014. Specimen collection: An essential tool. Science 344, 6186. Q1, → 90 citations.

Ceríaco et al. (+493 coauthors) 2016. Photography-based taxonomy is inadequate, unnecessary, and potentially harmful for biological sciences. Zootaxa 4196: 435-455, Q2, >> 22 citations.

Wijedasa et al. (+138 coauthors) 2017. Denial of long-term issues with agriculture on tropical peatlands will have devastating consequences. Global Change Biology 23.3: 977-982. Q1, → 11 citations.



#### Ready to use is important

(1998) The Amphibians of Java and Bali. Book Q0, SJR 0.0 → 116 citations (1998) Amfibi Jawa dan Bali. Book Q0, SJR 0.0 → 108 citations

(2000) Turtles and crocodiles of insular Southeast Asia and New Guinea, Book Q0, SJR 0.0 → 29 citations

(2000) Kura-kura dan buaya Indonesia dan Papua Nugini, Book QO, SJR 0.0 > 52 citations

(2000) Preliminary Checklist of Southeast Asian and New Guinean Herpetofauna: Amphibians. Treubia Q0, SJR 0.0 → 97 citations

(2002) A Checklist of Southeast Asian and New Guinean Reptiles. Part I. Serpentes. Book Q0, SJR 0.0 > 87 citations

(2006) Conservation of amphibians and reptiles in Indonesia: Issues and problems. Amphibian and Reptile Conservation. Q0, SJR 0.0 → 67

(2009) Conservation value of cacao agroforestry for amphibians and reptiles in South-East Asia: combining correlative models with follow-up field experiments. Journal of Applied Ecology. Q1, SJR 0.74 -> 48 citations

(2010) Effects of land-use change on community composition of tropical amphibians and reptiles in Sulawesi, Indonesia. Conservation Biology. Q1, SJR 2.49 > 59 citations

## Easy accessed is useful

(2000) Life After Logging. CIFOR Book 2nd ed. QO. SJR 0.00. > 298 citations

http://www.researchgate.net/profile/Erik\_Meijaard/publicat ion/232660127\_Life\_after\_logging\_Reconciling\_wildlife\_con servation\_and\_production\_forestry\_in\_Indonesian\_Borneo/li nks/0fcfd50a43ea6b1cfd000000.pdf

(2002) Hutan Pasca Pemanenan. CIFOR Book. QO.  $SJR 0.00 \rightarrow 23$  citations

http://www.cifor.org/publications/pdf\_files/Books/BMei jaard0601Ina.pdf

(2002) The Amphibians and Reptiles of Malinau Region, Bulungan Research Forest, East Kalimantan. CIFOR. Fieldwork Report. Q0, SJR 0.00, → 33 citations

http://www.cifor.org/publications/pdf files/books/ amphibian\_reptiles.pdf

> Available, no charges, downloadable at CIFOR website, written in English, comprehensively treated, completed with figures











## Impacted on human well-being

Health & Biochemistry Energy

Fresh water (clean)

Food (Agriculture, Plantation) Source of Technology & Arts

Primates & Charismatic species

Conservation Beauty



## Opens multiple windows

- Health (Medicine)
- Ecology
- Behavior
- Systematics
- Evolution
- Biogeography



- Conservation
- Development Biology
- Geological History
- Ecological health
- Parasitology







#### Wide range of interest, high citations

(1996) The amphibians and reptiles of Sulawesi, with notes on the distribution and chromosomal number of frogs. Proc. First International Conference on Eastern Indonesian... Q0, SJR 0.0, → 46 citations

(2000) Preliminary Checklist of Southeast Asian and New Guinean Herpetofauna: Amphibians. Treubia. Q0, SJR 0.0, → 92 citations

(2000) Molecular systematics and biogeography of the fanged frogs of Southeast Asia, Molecular Phylogenetics and Evolution, Q1, SJR 2.0, > 81 citations

(2009) Systematics of a widespread Southeast Asian frog. Rana chalconota (Amphibia: Anura: Ranidae). Zoological Journal of the Linnean Society, Q1, SJR 1.37, > 76 citations

(2010) The impact of conservation on the status of the world's vertebrates. Science. Q1, SJR 10.11, 🗲 794 citations

(2010) Phylogeography and historical demography of Polypedates leucomystax in the islands of Indonesia and the Philippines: Evidence for recent human-mediated range expansion? Molecular Phylogenetics and Evolution. Q1, SJR 2.0, > 56 citations

(2013) Stochastic faunal exchanges drive diversification in widespread Wallacean and Pacific island lizards (Squamata: Scincidae: Lamprolepis smaragdina). Journal of Biogeography. Q1, SJR 2.41, → 21 citations

 Das & Haas. (2010). New species of Microhyla from Sarawak: Old World's smallest frogs crawl out of miniature pitcher plants on Borneo (Amphibia: Anura: Microhylidae). Zootaxa, Q2. SJR 0.53. > 23 citations















#### Amazing discovery, low citations?

- 1a. (1978) A new species of Barbourula: first record of a discoglossid anuran in Borneo. Copeia, Q2, SJR 0.45, → 11 citations in 39 years
- 1b. (1995) Note on the second specimen of Barbourula kalimantanensis (Amphibia: Ánura: Discoglossidae). Raffles Bulletin of Zoology, Q2 SJR 0.44, > 8 citations
- 1c. (2008) A lungless frog discovered on Borneo. Current Biology, Q1, SJR 3.73, → 33 citations (3.400.000 viewers in 3 months)
- 2a. (1996) The amphibians and reptiles of Sulawesi, with notes on the distribution and chromosomal number of frogs. Proc. First International Conference on Eastern Indonesian Q0. SJR 0.0. > 44 citations \*\*\*
- 2b. (2014) A novel reproductive mode in frogs: A new species of fanged frog with internal fertilization and birth of tadpoles. PloS One, Q1, SJR 1.3, → 13 citations (300.000 viewers in 3.)
- 3. (2000) A new minute Oreophryne (Anura: Microhylidae) from 7 the mountains of Irian Java, Indonesia. Raffles Bulletin of Zoology, Q2, SJR 0.44, > 18 citations

Other examples ->

Low profile, localized, specific!!

#### Different aspects, different appreciations

(1978) A new species of Barbourula: first record of a discoglossid anuran in Borneo, Copeia, Q2, SJR 0.45, → 11 citations

(1995) Note on the second specimen of Barbourula kalimantanensis (Amphibia: Anura: Discoglossidae). Raffles Bulletin of Zoology, Q2, SJR 0.44, → 8 citations

(2011) The conservation status of Barbourula kalimantanensis Iskandar, 1978. Journal of Threatened Taxa, Q0, SJR 0.0, → 2 citations

(2008) A lungless frog discovered on Borneo. Current Biology. Q1, SJR 3.73, → 33 citations

(2010) An ancient origin for the enigmatic flatheaded frogs (Bombinatoridae: Barbourula) from the islands of Southeast Asia. PLoS One. Q1, SJR 1.3, → 57 citations

Scientific values changed over time











#### Proper journal audiences

(2008) A new species of bent-toed gecko Cyrtodactylus Gray, 1827, (Squamata: Gekkonidae) from the island of Sulawesi, Indonesia. Herpetologica. Q2, SJR 0.59, → 37 citations

Linkem et al., (2008) A new species of benttoed gecko (Gekkonidae: Cyrtodactylus) from Sulawesi Island, Eastern Indonesia.

Herpetologica. Q2, SJR 0.59, → 36 citations





(2009) A new species of bent-toed gecko (Cyrtodactylus: Gekkonidae) from Seram Island, Indonesia, Zootaxa, Q2, SJR 0.53, 24 citations



(2011) A new bent-toed gecko of the genus Cyrtodactylus Gray, 1827 (Reptilia, Gekkonidae) from Mount Tompotika, eastern peninsula of Sulawesi, Indonesia. Zootaxa. Q2, SJR 0.53, → 20 citations

General journal received lower citations

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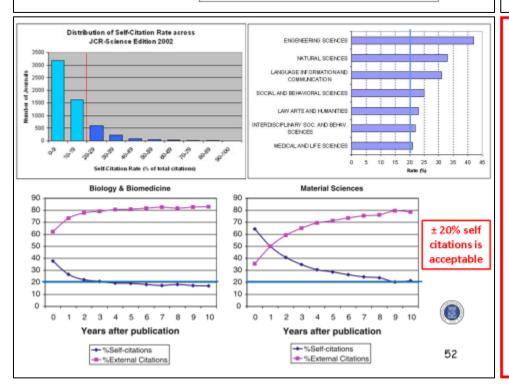
#### Ethics in Research & Publication

- Research goal is to produce new knowledge and to disseminate it openly to public.
  - Ready to be peer-reviewed, if possible by the most knowledgeable person in the world, before & after being
- The results & conclusions should be free from subjectivity and only based on your own research results.
  - Do not publish something that has been published previously, even if it was previously published in a predatory journal.
- Do not publish for the sake of other purposes.
  - Do not perform a research or publish for the sake to compete with someone that is in the middle of publishing on the same research goal & objectives.
- Never manipulate nor recycled any data.
  - Never forget to cite if a part of the publication originated from other sources, even from yourself.



 Raw data should be provided if asked by someone interested in your work.

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#### Avoid over self Citation

Gilchrist J.F., Tansu N. Optimization of light extraction efficiency of III-nitride LEDs with self-assembled colloidalbased microlenses. 2009. IEEE Journal on Selected Topics in Quantum Electronics.

11,030

This paper has 18 self referencing to Tansu And this paper is cited by Tansu 16 times

UPLDADED BY TRENDING

top 2%

Gola Dem

Zhao H., Arif R.A., Ee Y.-K., Tansu N.

Optical gain analysis of strain-compensated InGaN-AlGaN quantum well active regions for lasers emitting at 420-500 nm 2008, Optical and Quantum Electronics. (5-6) 301-306

This paper has 18 self referencing to Tansu And this paper is cited by Tansu 15 times.

#### XI. EVIDENCE OF HIGH SELF CITATION

- . Tansu, N., Zhao, H., Zhang, J., et al 2011. Proceedings of SPIE - The International Society for Optical Engineering 7954, art. no. 795418. This publication has 40 self referencing.
- Li, X.-H., Tong, H., Zhao, H., Tareu, N. 2010 Proceedings of SPIE -The International Society for Optical Engineering 7597, art. no.75970H. This publication has 23 self referencing.
- . Tong, H., Zhang, J., Zhao, H., Liu, G., Handara, V.A., Herbsommer, J.A., Tansu, N. 2010 Proceedings of SPIE - The International Society for Optical Engineering 7602, art. no. 76020U. This publication has 19 self referencing.



SELF CITATION LETTER Volume 1, Issue 2

20th of October 1977; age 33 years old) is the world self-proclaimed youngest professor in history. Nelson Tansu. He is a self-proclaimed expert and genius in nanotechnology and optoelectronic from Indonesia who has become a tenure-tracked Assistant Professor in the University of Lehigh when he was 25 years old. Tansu has eliminated more than 300 doctors to get the position since July 2003. He was the self

proclaimed youngest professors appointed in a high profile university in America, Since his sumame "Tansu" sounds Japanese, Tansu claims that many Japanese Consulates has tried to persuade him to return to Japan to contribute to Japan's economy. BUT, Prof. Tansa declared that he actually holds a Green Passport with the image of Garada Pancasila, Tansa's Doctorate dissertation received the award as "The 2003 Harold A. Peterson Best ECE Research Paper Award" winning over 300 other Doctorate dissertations. In total, he has received 11 scientific international awards and has published over 200 articles in international journals and more than 1200 self citations. Currently he is a visiting professor in 18 higher education and research institutions. He is also active and often invited as a speaker in many international events in USA, Canada, Europe and Asia.

#### 2014 Self Citation Winner

- Nelson Tansu
  Born: 20 Oktober 1977, Median
  Indonesia
  Affiliation at the time of the
  award: Lehigh University, USA
  Prize motivation: "for the
  invention of efficient oriation
  methods (self otation, self
  plaguarism & coerrier citation)





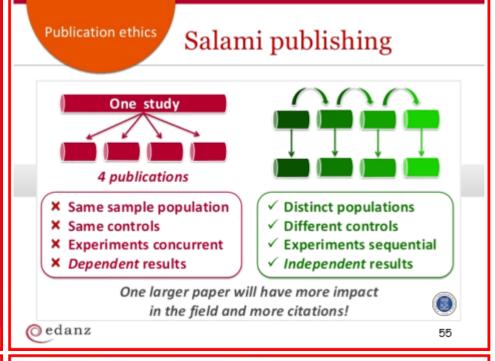
www.selfcitation.wordpress.com; www.slideshare.net; www.docstoc.com; www.academia.edu

## Manipulation of Rankings

- Self-citation
- Journals publish more review articles to increase IF.
- Some journals encourage citation from same journal



Bury, S, Peter, F. & Maimets, I. 2008







## Checking the degree of similarity

















There is not yet any consensus to what extent is a similarity considered as plagiarism. At least it should not apply to similarities in standardized methods.



Biota

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#### Style of References

- Oxford Standard for Citation of Legal Authorities (OSCOLA)
- American Mathematical Society Style (AMS), AMS-
  - Modern Humanities Research Association Style (MHRA)
    - American Psychological Association Style (APA)
      - Modern Language Association Style (MLA)
      - American Institute of Physics Style (AIP)
        - · American Chemical Society Style (ACS)
          - The Chicago Manual of Style (CMO)
            - · Harvard Style
              - Vancouver Style

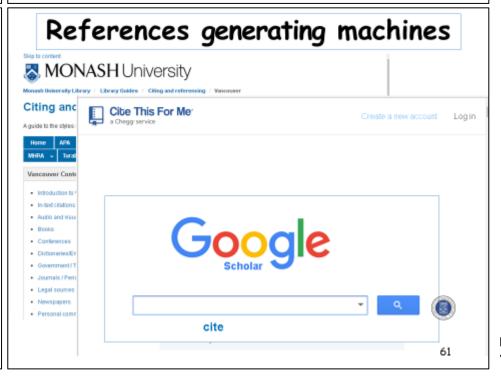


Usually decided by the program or related journal

## Preparing References

- APA Style: Inger, R. F., Stuart, B. L., & Iskandar, D. T. (2009). Systematics of a widespread Southeast Asian frog, Rana chalconota (Amphibia: Anura: Ranidae), Zoological Journal of the Linnean Society, 155(1), 123-147.
- CMO Style: Inger, Robert F., Bryan L. Stuart, and Djoko T. Iskandar. "Systematics of a widespread Southeast Asian frog, Rana chalconota (Amphibia: Anura: Ranidae)." Zoological Journal of the Linnean Society 155, no. 1 (2009): 123-147.
- MLA Style: Inger, Robert F., Bryan L. Stuart, and Djoko T. Iskandar. "Systematics of a widespread Southeast Asian frog, Rana chalconota (Amphibia, Anura, Ranidae)." Zoological Journal of the Linnean Society 155.1 (2009): 123-147.
- Harvard Style: Inger, R.F., Stuart, B.L. and Iskandar, D.T., 2009. Systematics of a widespread Southeast Asian frog, Rana chalconota (Amphibia, Anura, Ranidae). Zoological Journal of the Linnean Society, 155(1), pp.123-147.
- Vancouver Style: Inger RF, Stuart BL, Iskandar DT. Systematics of a widespread Southeast Asian frog, Rana chalconota (Amphibia: Anura: Ranidae). Zoological Journal of the Linnean Society. 2009 Jan 1:155(1):123-47.





#### How to be productive

- Consistent & always expand your horizon.
- Working hard and harder, more than others.
- Do not dream about the unaffordable, most advanced technology, many cheaper aspects are available to be explored.
- Start with the most common, work on the uncommon later.
- Have a good idea about what you are working with.
  - Have a good idea what occurs in Indonesia and neighboring countries.
  - Publish your work in the highest category.
    - Collaborate with others on matter you are unable to handle yourself.
      - As a young scientist, do not afraid of making errors.



 Ask several expats (senior, experienced) to correct your broken English.

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#### Lesson learnt

- · Be consistent, time is running out.
- Be diligent, start is bo.o.o.o.ring, but later.....
   everything is interesting.
  - Work with indigenous species, even common species might hide some surprises.
    - Expand your view, have a helicopter view, avoid using 'horse spectacle"
      - · Examine your work from other point of view.
        - Work on conceptual aspectssss.
          - Ready to accept harsh criticisms.
            - Be "thick faced"
            - Collaborate.
            - Avoid seminars.
            - Do not publish in non impacted journals, shoot for the highest.



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## Make your own profile



- Most publications are downloadable (hyperlinked).
- Your Email is the contact source that someone can asked you directly for the pdf of your articles, hence more likely to be cited.
- Your Email is also an opportunity to obtain and give advices i.e. from students.
- To discussion among scientists of the same interest.
- Your profile is also a window to national and international cooperation.

#### G. PUBLICATIONS

- Iskandar, D.T., Evans, B.J., McGuire, J.A. 2014. A novel reproductive mode in frogs: A new species of fanged frog with internal fertilization and birth of tadpoles. PLOS One. 9 (12): e115884. doi:10.1371/journal.pone.0115884 [http://www.plosone.org/article]
- L. Grismer, A. Riyanto, D. T. Iskandar, J. A. McGuire. 2014. A new species of Hemiphyllodactylus Bleeker 1860 (Squamata, Gekkonidae) from Pulau Enggano, southwestern Sumatra, Indonesia. Zootaxa 3821 (4): 485-495) (pdf)
- Rocha, L. A., A. Aleixo, G. Allen, F. Almeda, C. C. Baldwin, M. V. L. Barclay, J. M. Bates, A. M. Bauer, F. Benzoni, C. M. Berns, M. L. Berumen, D. C. Blackburn, S. Blum, F. Bolaños, R. C. K. Bowie, R. Britz, R. M. Brown, C. D. Cadena, K. Carpenter, L. M. Ceriaco, P. Chakrabarty, G. Chaves, J. H. Choat, K. D. Clements, B. B. Collette, A. Collins, J. Coyne, J.



