

Appendix 34.A. Alternative Ranking Methods

- Using SciVal and Scopus
- Using InCites and WOS
- Using Clarivate Analytics with ARWU rankings (including Table 34.2)

[Ruth's Rankings 33](#) introduced the researcher modules in InCites and SciVal. Do they help the two Highly Cited lists by providing extra information? I examined both for the time 2012-present.

Using SciVal or Scopus

SciVal calculates a list of the top 500 authors in the world based on Scopus publications, with data on citations, citations per publication, field-weighted citation impact and h-index. The downloaded list also includes a unique URL for each author. Lists are available for 25 broad subject areas, for individual countries or institutions. SciVal also generates lists of the top 100 for very specific topics, such as “electronic beams”. SciVal links back to Scopus to get specific author information, such as affiliations and subject areas. See Example 34.1. on how to track an author.

Example 34.1. From Scopus Name Identifier to Author output in Scopus to List of authors in SciVal

I was told that Huang Wei, from Nanjing Tech, had the most citations in physics for that university.

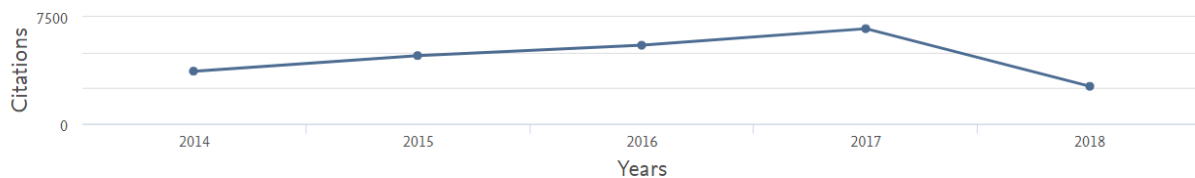
[Use name identifier](#)

	Author	Documents	Subject area	Affiliation	City	Country/Territory
<input type="checkbox"/> 1	Huang, Wei Wei, H. Huang, W. Wei, Huang	783	Materials Science ; Chemistry ; Physics and Astronomy; ...	Nanjing Institute of Technology	Nanjing	China
	View last title ▾					
<input type="checkbox"/> 2	Huang, Wei Huang, W. HUANG, Wei	576	Materials Science ; Chemistry ; Engineering; ...	Nanjing University of Post and TeleCommunications	Nanjing	China
<input type="checkbox"/> 6	Huang, Wei Huang, W.	244	Materials Science ; Chemistry ; Engineering; ...	Nanjing Tech University	Nanjing	China
	View last title ▾					
<input type="checkbox"/> 7	Huang, Wei Huang, W.	238	Chemistry ; Materials Science ; Physics and Astronomy; ...	Nanjing University	Nanjing	China
	View last title ▾					

Combine the names in Scopus and produce a citation overview

1,746 cited documents [+ Add to list](#)

Date range: 2014 to 2018 Exclude self citations of all authors Exclude citations from books [Update](#)



Sort on: [Date \(newest\)](#)

Page Remove

Documents	Citations	<2014	2014	2015	2016	2017	2018	Subtotal	>2018	Total
	Total	15286	3693	4783	5509	6669	2633	23287	0	38573

Go to SciVal to create a list for Physics and Astronomy

	Name	Publications	publication	Citations	h-index
1.	<input type="checkbox"/> Huang, Wei	98	2018	1,521	40
2.	<input type="checkbox"/> Huang, Wei	40	2018	328	30

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SciVal provides a few fixed time ranges, the longest being 2012 to the present. The tops in publications are not necessarily tops in citations. SciVal's most prolific author has one citation and the list includes only 467 authors with more than 10,000 citations. According to InCites there are more than 7,000 names with more than 10,000 citations. InCites has its own issues.

Clarivate Analytics

InCites' indicators for authors are limited to Web of Science documents, Times cited and Affiliation. The user can specify any date range starting from 1980. Names are not disambiguated. I needed 595 names to get a list of the top 500 authors. The most prolific authors, who have joint affiliations, appear more than once and one appeared five times. Only 34 of the top 500 authors have affiliations with East Asian universities. Change the date to 2016 and the top 30 names are Asian, but with no affiliations. CA gives each author full credit for an article, except for physics. Papers with over 500 authors are excluded! By imposing the 500 limit the number 3 researcher in Physics on InCites drops to 249.

Metrics are not available for highly cited papers, so this list cannot be compared with the Highly Cited list.

Author Indices in ARWU

Data from WOS and Essential Science indicators are incorporated in [ARWU's](#) rankings for the Hi/Ci (Highly Cited) indicator. ARWU has two other author-based metrics, Awards and Alumni,

which account for 50% of the weighting. TABLE 34.2. below compares these metrics with the Asia-Pacific institutions in CA's Highly Cited Researchers. Of ARWU's top 500 universities, seven Asia-Pac universities have scores for all three metrics and seventeen have scores for at least two which might be one factor in explaining why ARWU rankings are often lower than rankings from other organizations.

See Appendix 34.B for Times Higher Education top authors in selected fields and Table 34.3 which shows tops in world and US in selected fields.

**TABLE 34.2. Top Asia-Pac universities compared to ARWU author – based metrics
Including top 100 in the world and top 10 from Asia and 5 from Australia in each category**

ARWU World Rank	University	ARWU SCORES				Country	Clarivate HiCI Entries
		HiCi Score	Awards Score	Alum Score			
39	The University of Melbourne	45	13.1	16.8	AU	20	
55	The University of Queensland	40.8		12.4	AU	15	
151-200	China Medical University	37.8			TW	10	
78	Monash University	37.8			AU	8	
101-150	Nanyang Technological University	37.8			SG	14	
48	Tsinghua University	37.8		10.2	CN	15	
101-150	The University of Hong Kong	34.5			HK	12	
91	National University of Singapore	32.7			SG	10	
101-150	Osaka University	30.9		8.8	JP	7	
201-300	City University of Hong Kong	28.9			HK	6	
91	The University of Western Australia	28.9	13.9	13.4	AU	7	
24	The University of Tokyo	28.9	25	38.3	JP	7	
83	University of Sydney	28.9		14.4	AU	9	
71	Peking University	26.7		11.4	CN	13	
101-150	The University of Adelaide	26.7		14.4	AU	7	
101-150	Zhejiang University	26.7			CN	14	
35	Kyoto University	24.4	36.7	31.3	JP	5	
84	Nagoya University	18.9	25	28.7	JP	3	
101-150	Seoul National University	18.9	18.9		KR	3	
97	The Australian National University	18.9	19	13.4	AU	6	
151-200	The Chinese University of Hong Kong	18.9	13.9		HK	2	
151-200	Hokkaido University	10.9	16.1	11.4	JP	1	
401-500	Osaka City University	10.9		15.2	JP	1	
401-500	The University of Tokushima	10.9		13.4	JP	0	
201-300	The University of Auckland	10.9		13.4	NZ	3	
301-400	Victoria University of Wellington	10.9		11.4	NZ	1	
151-200	Tokyo Institute of Technology		29.4	12.4	JP	0	
TOTAL		26	10	18		25	
17 Asia-Pac institutions are either top 100 or have at least two metrics							
Ten awards - Nobel prizes or Fields Medals in Mathematics institution at time of award							
12 Asia-Pac institutions are in the top 100; six have scores for all three metrics							
Two only have a highly cited score							
See Methodology for weightings based on years and multiple institutions or winners							