

# Eight Malaysians among most highly cited

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**T**HE number of Malaysians making the list of highly cited researchers has increased to eight from six last year according to Clarivate Analytics' Highly Cited Researchers list released recently.

Out of the eight researchers, three are from Universiti Sains Malaysia (USM), two each from University of Malaya (UM) and Universiti Kebangsaan Malaysia (UKM), and one from Universiti Tenaga Nasional (UNITEN) (see table).

The annual Highly Cited Researchers list identifies those whose papers have consistently won peer approval from international researchers in the form of high citation counts over the last decade.

This year, the three who are in the list for the first time are Professor Dr Teuku M. Indra Mahlia of UNITEN, Professor Dr Masjuki Hassan and Professor Dr Md. Abul Kalam, both from UM.

Masjuki said he is humbled and happy that his research is finally recognised worldwide although at a later stage of his career.

"I would like to thank UM for supporting my endeavour. I hope this is an inspiration to young researchers in the country."

Masjuki added that the nation has the talents that can lead to great potentials and contribute to research that can benefit the Malaysian population. For this to take place, he stated that funding for research should be increased. Countries such as Japan, the United States and Europe, for instance, spend as much as four per cent of their Gross Domestic Product (GDP) on research and development (R&D).

"At the moment our budget allocation is around 1.76 per cent of our GDP. If we aspire to be a progressive nation in the future, we should increase our R&D budget to at least 2.5 per cent."

Malaysian researchers first made it into the list in 2014. From three researchers in 2014 and 2015, the number increased to six last year.

Md. Abul said that being highly cited is not a sudden accomplishment for him.



Findings from research can lead to advancement beneficial for a progressive nation. Higher Education Minister Datuk Seri Idris Jusoh (first row, eighth from right) with the award recipients of Most Promising Scientific Researchers at Malaysia's Rising Star Award in Putrajaya last year.



**What we are now seeing is China's increasing presence among most cited authors and papers, especially in the physical sciences.**

**DAVID PENDLEBURY**  
Clarivate Analytics  
senior citations analyst

"We have been working for a long time, and the High Impact Research grant gave us access to talented students thus making good research possible."

"I would like to thank UM and its management for granting me various funds and supporting my work," said Md. Abul.

The list features more than 3,300 researchers in 21 fields in Clarivate's Web of Science. This premier web-based environment of scientific and scholarly research literature totals more than 33,000 journals.

For more than two decades, the database has served as the basis for regular listings of researchers whose works are cited at a level markedly higher than average for their fields.

These citations provide a cognitive road map for those seeking to follow the progression of a given finding or advancement that can turn research in a new direction.

Researchers from the US continue to be most represented in the list, with more than 1,644 entries. This is followed by United Kingdom with almost 344 entries.

However, China has the highest increase, showing a 41 per cent jump from last year to 249 authors, putting the nation in third place.

Clarivate Analytics senior citations analyst David Pendlebury said the rise of China in publication output and world share in internationally influential journals indexed in the Web of Science has been a dramatic development during the last 20 years.

"What we are now seeing is China's in-

creasing presence among most cited authors and papers, especially in the physical sciences.

"China's output of materials science papers is now more than twice that of the US, and it is capturing a greater and greater share of top cited papers in the field. In some fields, China has not only caught up, but it is now powering ahead," he added.

Notable institutions on the list are Harvard University (109 entries) followed by Stanford University (47).

The listing also spotlights a ranking of Hot Papers that quickly accumulate a high number of citations soon after publication.

These are the Hottest Researchers whose relatively new work, published over a recent two-year period, has earned unusually high numbers of citations. In recent Hot Researchers listings, two dominant themes have emerged: cancer genomics and solar cells based on the mineral perovskite.

Sharing the top of the list are Michael Grätzel of Ecole Polytechnique Federale de Lausanne, Switzerland and Henry J. Snaith of Oxford University, UK, who both contributed research on perovskite solar cells.

The list features 21 researchers who, since 2014, have each published at least 14 Hot Papers, according to citations tallied as of December 2016.

They have contributed high-impact reports on cancer genomics, cancer treatment, solar cells and gene editing, among other topics.



Md. Abul Kalam



Masjuki Hassan

## CLARIVATE ANALYTICS' HIGHLY CITED RESEARCHERS FOR MALAYSIA 2017

RESEARCHER	FIELD	UNIVERSITY
Dr Abdul Latif Ahmad	Engineering	USM
Dr Abd Karim Alias	Agricultural Sciences	USM
Dr Bassim H. Hameed	Engineering	US
Dr Masjuki Hassan	Engineering	UM
Dr Md. Abul Kalam	Engineering	UM
Dr Siti Kartom Kamarudin	Engineering	UKM
Dr Teuku M. Indra Mahlia	Engineering	UNITEN
Datuk Dr Wan Ramli Wan Daud	Engineering	UKM