

Nano Science, Technology and Industry Scoreboard

Ranking of Countries in Nanotechnology Publications in 2016

2017-01-04

According to StatNano Database, about half of nanotechnology articles have been published by China and the United States in 2016. India, South Korea, and Germany possess the next ranks in this ranking.

According to statistics published on <u>StatNano</u> website, a number of about 137500 nanotechnology articles have been indexed in Web of Science (WoS) Database by the end of December 2016, which is 9.5% of all articles indexed in this database in 2016. <u>China</u> has a share of 34% while <u>USA</u> has a share of 16%.

China keeps the ascending trend in the publication of nanotechnology articles, to the extent that the number of Chinese nanotechnology articles is 2 and 1.2 times greater than that of the <u>United States</u> and <u>European Union</u>, respectively. <u>India</u>, <u>South Korea</u>, and <u>Germany possess</u> the third to fifth ranks. By having a growth rate of 0.8 % in the share of its nanoarticles, <u>Iran possesses</u> the sixth rank higher than <u>Japan</u>. At the end of 2011, <u>Japan possessed</u> the fourth rank in the world in the publication of nanotechnology articles, but now it possesses the seventh rank due to the decrease in the number of its nanotechnology articles. In addition to <u>Japan</u>, other countries such as <u>USA</u>, <u>South Korea</u>, <u>France</u>, and <u>Russia</u> experienced a decrease in the share of nanotechnology articles in 2016 in comparison with the previous year.

Top 20 countries in publication of nanotechnology articles in 2016

Rank	Country	Nano-articles	Share (%)
1	<u>China</u>	47,455	34.51
2	<u>USA</u>	22,337	16.25
3	<u>India</u>	11,066	8.05
4	South Korea	8,386	6.1
5	<u>Germany</u>	7,963	5.79
6	<u>lran</u>	7,583	5.52

7	<u>Japan</u>	6,952	5.06
8	<u>France</u>	5,313	3.86
9	<u>UK</u>	5,038	3.66
10	<u>Spain</u>	4,178	3.04
11	<u>Russia</u>	4,124	3.0
12	<u>ltaly</u>	3,901	2.84
13	<u>Australia</u>	3,406	2.48
14	<u>Canada</u>	3,018	2.19
15	<u>Taiwan</u>	2,831	2.06
16	Saudi Arabia	2,489	1.81
17	<u>Brazil</u>	2,471	1.8
18	<u>Poland</u>	2,300	1.67
19	<u>Singapore</u>	2,170	1.58
20	<u>Turkey</u>	2,056	1.5

Nine countries out of 20 are located in Asia and Oceania, and in general, more than half of nanotechnology publications belong to the countries in Asia and Oceania. Brazil is the only country from Latin America in the top 20 countries. Egypt is the top African country in this ranking by publishing 1423 nano-articles and possessing the 25th rank. By possessing the 35th rank, South Africa is the second African country.



Geographical distribution of nanotechnology publications in 2016

The following table shows the share of nanotechnology articles to total articles published by each country (Local Share) in 2016. Asian countries have the highest share in this indicator too, and almost all of them have a share of higher than the world average (9.5%). Iran and Saudi Arabia have the highest ratio of nano-articles to all articles, and they experienced huge growth in the publication of nano-articles by giving propriety to nanotechnology research. The United States, as the second top country in publication of nanotechnology articles, possesses a share of only 6 % in the ratio of nano-articles to all articles in 2016.

Share of nano-articles to all articles published by each country in 2016

(For top 20 countries with the most number of nano-articles)

Rank	Country	Share (%)
1	<u>Iran</u>	22.91
2	Saudi Arabia	18.11
3	<u>Singapore</u>	17.72
4	<u>India</u>	17.13
5	<u>China</u>	16.83
6	South Korea	15.71
7	<u>Russia</u>	12.48
8	<u>Taiwan</u>	11.99
9	<u>Japan</u>	9.56
10	Poland	9.07
11	<u>Germany</u>	8.09
12	<u>France</u>	7.94
13	<u>Spain</u>	7.64
14	Turkey	7.06
15	<u>Italy</u>	6.45
16	<u>USA</u>	6.13
17	<u>Australia</u>	5.84
18	<u>Brazil</u>	5.8
19	<u>UK</u>	5.2
20	<u>Canada</u>	4.87

Visit the full table **here**.