

Nano Science, Technology and Industry Scoreboard

Top 20 Countries in Nanotechnology Publications

2015-01-04

Over nine percent of all scientific articles published in 2014 are allocated to nanotechnology, and China, USA and India have published the highest number of ISI-indexed nanotechnology articles in 2014.

According to the statistics published in <u>StatNano website</u>, approximately 1.3 million articles have been indexed in Web of Science Database in 2014, among which about 9% are related to nanoscience and nanotechnology.

China still possesses the first rank and has distanced from other countries by having continuous growth in the number of ISI-indexed nanotechnology articles. More than one-third of nanotechnology articles have been published by the Chinese researchers while the American and Indian researchers possess the second and third ranks by publishing 17.3% and 7.3% of the nanotechnology articles, respectively. Table 1 presents the top 20 countries in the production of nanoscience. Saudi Arabia has had the largest growth in this regard since 2013 by having a growth of 31%, which results in possessing the 19th rank in 2014 while it ranked 23rd in 2013. After Iran, Saudi Arabia possesses the second rank in the production of nanotechnology articles among the Islamic countries. India has had the second largest growth after the Saudi Arabia by having a growth of 12%.

Table 1: Top 20 Countries in Production of Nanoscience in 2014

Rank	Country	No. Nanotechnology Articles	Share (%)
1	<u>China</u>	38146	32.27
2	<u>USA</u>	20437	17.29
3	<u>India</u>	8678	7.34
4	South Korea	7572	6.41
5	Germany	7192	6.08
6	Japan	6745	5.71
7	<u> Iran</u>	5026	4.25
8	France	4836	4.09
9	≣ UK	3978	3.36
10	<u>Spain</u>	3642	3.08

11	<u>Italy</u>	3456		2.92
12	<u>Taiwan</u>	3139		2.66
13	<u>Russia</u>	3060		2.59
14	<u>Australia</u>	2859		2.42
15	Canada	2691		2.28
16	Singapore	2130		1.80
17	Brazil	1892		1.60
18	Poland	1747		1.48
19	Saudi Arabia	1601		1.35
20	Switzerland		1545	1.31

Table 2 demonstrates the number of all scientific articles published by the top 20 countries. Based on the statistics, <u>USA</u> ranked first by possessing a share of more than 26% of all scientific articles in 2014. China, <u>Germany</u> and <u>UK</u> possess the second to the fourth ranks. Among the top countries in this regard, <u>China</u> has had the largest growth since 2013 by a growth of 4.6%, but it still ranks second in the overall table. <u>India</u>, <u>Switzerland</u> and <u>Iran</u> have had a growth of two and one positions in this ranking respectively.

Table 2: Top 20 Countries in Publication of Scientific Articles in 2014

Rank	Country	No. Articles	Share (%)
1	<u>USA</u>	342322	26.37
2	<u>China</u>	226497	17.44
3	<u> Germany</u>	90458	6.97
4	≣ UK	85453	6.58
5	<u>Japan</u>	68659	5.29
6	France	61624	4.75
7	<u>Canada</u>	56271	4.33
8	<u>Italy</u>	53776	4.14
9	<u>India</u>	50147	3.86
10	<u>Australia</u>	49719	3.83
11	<u>Spain</u>	48947	3.77
12	South Korea	48218	3.71
13	Brazil	33984	2.62
14	<u>Netherlands</u>	32791	2.53
15	Russia Russia	25889	1.99
16	<u>Switzerland</u>	24526	1.89
17	<u>Taiwan</u>	24361	1.88

18	<u> Iran</u>	23767	1.83
19	<u> Turkey</u>	23029	1.77
20	Sweden	22322	1.72

An observation to the ratio of nanotechnology articles to all scientific articles (Local Share) published by various countries shows that similar to the previous years, the Asian countries pay more attention to nanotechnology. As is seen in Table 3, there are eight Asian countries among the top 10 countries in this indicator. Moldova, Iran and Singapore possess the first to the third ranks in this ranking.

Table 3: Top 20 Countries in Share of Nanotechnology Articles out of All Scientific Articles in 2014 (for the countries that published over 50 nano-articles in 2014)

Rank	Country	Share of Nanotechnology Articles from All Articles (%)
1	<u>Moldova</u>	25.78
2	<u> Iran</u>	21.15
3	Singapore	19.49
4	Bahrain	18.34
5	<u>Iraq</u>	17.67
6	<u>India</u>	17.31
7	<u>China</u>	16.84
8	<u>Ukraine</u>	16.33
9	Saudi Arabia	16.13
10	South Korea	15.7
11	<u>Belarus</u>	14.7
12	Malaysia	14.28
13	<u>Taiwan</u>	12.89
14	Egypt	12.84
15	Romania Romania	11.87
16	Russia	11.82
17	Latvia	10.82
18	Vietnam	10.74
19	□ Thailand	9.91
20	<u>Bulgaria</u>	8.65