

Nano Science, Technology and Industry Scoreboard

## 2020's Statistical Review on Nanotechnology Publications

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Almost 9 percent of the whole scientific publications of 2020, indexed in the Web of Science database, have been relevant to nanotechnology. In addition to China, USA, India, and Iran as the head participants of nanoscience generation, Vietnam and Saudi Arabia are the countries with the most progressive performance in the nanotechnology field this year.

Two decades have passed since the US national nanotechnology initiative program was designed and started, during which the number of nanotechnology-related publications (nano-articles) has actually grown from around 22,000 to 191,000 articles each year.

According to StatNano monthly evaluation accomplished in WoS databases by using a "nanotechnology specific search string", there have been 191304 nano-articles indexed in WoS that had to have a 9 percent growth compared to last year. The mentioned articles are 8.8 percent of the whole produced papers in 2020.

In line with <u>China</u>'s trend in the past few years, this country is placed in the first stage with 78000 nano-articles (more than 40 percent of all nano-articles in 2020), and the US is at the next stage with 24425 papers. These countries have published nearly half of the whole world's nano-articles.

In the following, <u>India</u> with 9 percent, <u>Iran</u> with 6 percent, and <u>South Korea</u> and <u>Germany</u> with 5 percent are the other head publishers, respectively. It's remarkable that prioritizing nanotechnology in <u>Iran</u>, has led to this country's steady placement among the five pioneers of the nanotechnology field in recent years, and approximately 20 percent of all articles provided by Iranian researchers in 2020 are relative to this area of technology.

According to the 25 top countries selected by this indicator, <u>Vietnam</u> and <u>Saudi Arabia</u> had significant progress in the field. <u>Vietnam</u> has moved from the 31st to 24th stage, and additionally, we can point out <u>Saudi Arabia</u> moving from 15th to 11th stage.

In the past year, around 17 percent of all scientific publications in <u>Vietnam</u> had been related to nanotechnology and it can clearly describe the mentioned improvement. It's notable that among African countries, only <u>Egypt</u> is located between the first 20 pioneers. In the following, the second African country would be <u>South Africa</u> in the 33rd stage with 1324 nano-articles.

The top 25 nano-article publisher countries and their share of the total number of nanoarticles published in 2020 are listed in the table below.

RankCountry		Nano-artic	:lesShare (	%)Rank change compared to 2019
1	<u>China</u>	78314	40.9	-
2	<u>USA</u>	24425	12.8	-
3	<u>India</u>	17212	90.	-
4	<u>lran</u>	11546	6.0	-
5	South Kore	<u>a</u> 9696	5.1	-
6	<u>Germany</u>	8766	5.1	-
7	<u>Japan</u>	7924	4.1	-
8	<u>UK</u>	6176	3.2	1+
9	<u>Russia</u>	5960	3.1	-1
10	<u>France</u>	5905	3.1	-
11	Saudi Arabia5138		2.7	4+
12	<u>Australia</u>	4913	2.6	-1
13	<u>Spain</u>	4904	2.6	-1
14	<u>ltaly</u>	4827	2.5	-1
15	<u>Canada</u>	4155	2.2	-1
16	<u>Brazil</u>	3936	2.1	-
17	<b>Egypt</b>	3887	2.0	2+
18	<u>Turkey</u>	3538	1.9	-1
19	<u>Pakistan</u>	3475	1.8	2+
20	<u>Taiwan</u>	3465	1.8	-2
21	<u>Poland</u>	3057	1.6	-1
22	<u>Malaysia</u>	2595	1.4	-
23	<u>Singapore</u>	2455	1.3	-
24	<u>Vietnam</u>	2223	1.2	7+
25	<u>Netherland</u>	<u>s</u> 1937	1.0	-

## Source

ISI Indexed Nano-articles Indicator

