

مرور آماری پیشرفت‌های پنج ساله چین در زمینه‌ی تحقیق و توسعه ^۴

۱۰ آذر ۱۳۹۹



دستاوردها و جایگاه جهانی چین در زمینه‌ی تحقیق و توسعه، چاپ مقالات علمی، ثبت اختراع، ایجاد شرکت‌های نوآفرین و غیره طی برنامه‌ی پنج ساله‌ی سیزدهمین این کشور (۲۰۲۰-۲۰۱۶) در قالب اینفوگرافی و آمار بسیار جالب و قابل تامل، ترسیم شده است.

CHINADAILY JINGJIN
Y.COM.CN

TECHNOLOGICAL AND SCIENTIFIC PROGRESS

DURING THE 13TH FIVE-YEAR PLAN

China has made significant progress in science and technology innovation through implementing the innovation-driven strategy during the period of the 13th Five-Year Plan (2016-20).

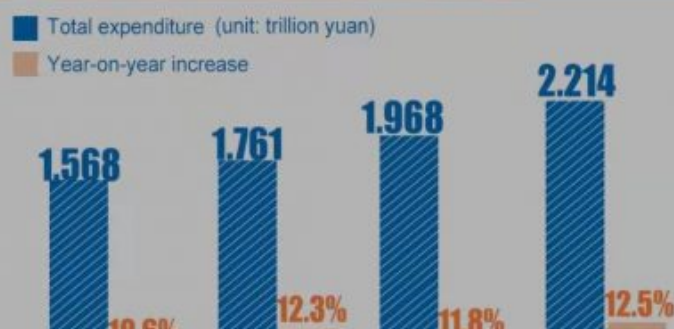
OVERALL DATA:

- China ranks **14th** in Global Innovation Index
- The only middle-income economy included in the **top 30** for years



The contribution rate of scientific and technological progress reached **59.5** percent in 2019, up **4.2** percentage points compared to 2015. It is expected to meet its target of **60** percent this year.

Increased input in R&D:





This figure has seen **double-digit** growth for **four** consecutive years.

China's total expenditure on R&D



2.23%



The investment accounted for 2.23 percent of the country's GDP in 2019, higher than 15 countries from the EU.

133.56 billion yuan 6%



Spending on basic research: 133.56 billion yuan, accounting for 6 percent of the total.

76.4%



1.69 trillion yuan
↑ 11.1%

Expenditure on R&D by enterprises rose **11.1** percent year on year to **1.69** trillion yuan in 2019, accounting for **76.4** percent of the total.

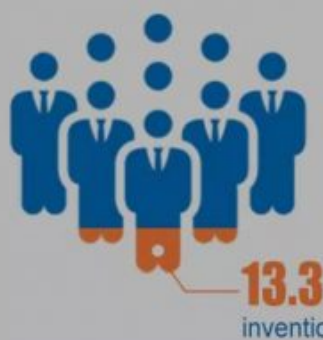
Patents:





In 2019, **361,000** invention patents were granted to domestic users, ranking first in the world, up from

263,000 in 2015.



By the end of last year, China had **13.3** invention patents per **10,000** people.



The country filed **59,000** international patent applications via the Patent Cooperation Treaty in 2019, **twice** that of 2015, becoming the world's top patent filer.



China also ranked **second** both in the number of scientific papers and the total number of top-cited scientific papers.

R&D personnel:



4.61
million people

22.6%

China had **4.61 million people** working in research

and development in 2019, an increase of **22.6 percent** over 2015, maintaining the world's largest pool of R&D personnel for seven years.

GROWING INNOVATION CAPABILITY:

The country features **17** world-leading technology clusters, among which Shenzhen-Hong Kong-Guangzhou and Beijing rank world **second** and **fourth**, respectively



Innovation by enterprises and startups



By Sept 28, some **179** companies have been listed on the science and technology innovation board, raising **267.8** billion yuan.



Enterprises in China's **169** high-tech development zones achieved total revenue of **12** trillion yuan in 2019, accounting for over **10** percent of the country's economy.

MAJOR ADVANCES MADE IN SCIENCE AND TECHNOLOGY:



Successful launch of the **Tiangong II** space lab.

کد خبر: 6307-20201130

Commissioning of the deep-sea manned submersible **Jiaolong**.

The five-hundred-meter aperture spherical telescope **Tianyan**.

The launch of the dark matter probe satellite **Wukong** and the quantum science satellite **Micius**, and the test flight of the airliner **C919**.

Beidou Navigation Satellite System completed and providing full-scale global services.

Chang'e 4 probe made the first-ever soft landing on the far side of the moon.

Over **600,000** 5G base stations built.

BEATING COVID-19:



Science, technology and other innovative efforts have supported **clinical diagnosis, treatment** of the infected, **control and prevention** of the virus, as well as **drug and vaccine development**.

Currently, there are **11 COVID-19 vaccine candidates** in clinical trials in China, with **four** of them having entered phase III clinical trials.



