## Global Innovation Index 2024



## Changsha, China

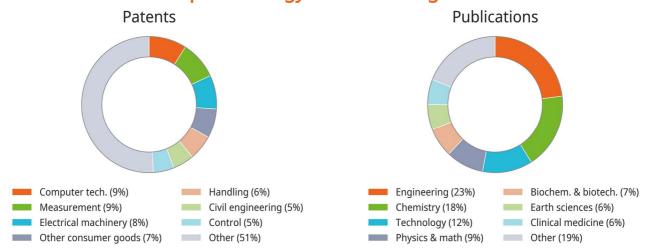
Changsha is the tenth-ranked cluster, out of 26 Chinese clusters, that falls within the top 100 S&T clusters in 2024. It filed 309 PCT applications and published 14,953 scientific articles, both per 1 million inhabitants over the last five years, making it the:

32<sup>nd</sup> largest science and technology cluster in 2024

33rd S&T cluster by intensity (relative to population density) in 2024

Top PCT applicants				Top publishing organizations		
		Patents	Share	Articles Sh	are	
1	CENTRAL SOUTH UNIVERSITY	146	12%	1 CENTRAL SOUTH UNIVERSITY 27,449 45	5%	
2	CHANGSHA UNIVERSITY OF SCIENCE AND TECH.	74	6%	2 HUNAN UNIVERSITY 9,957 16	5%	
3	CHINA TOBACCO	74	6%	NATIONAL UNIVERSITY OF  3 DEFENSE TECHNOLOGY - 7,290 12 CHINA	2%	

## Top technology fields in Changsha



6% of Changsha's PCT patent applications are filed in collaboration with other inventors, with Beijing, Shenzhen-Hong Kong-Guangzhou and Shanghai-Suzhou emerging as the top collaborative locations.

54% of Changsha's scientific articles are published in collaboration with other organizations, with the top three collaborating locations being Beijing, Shenzhen-Hong Kong-Guangzhou and Shanghai-Suzhou.