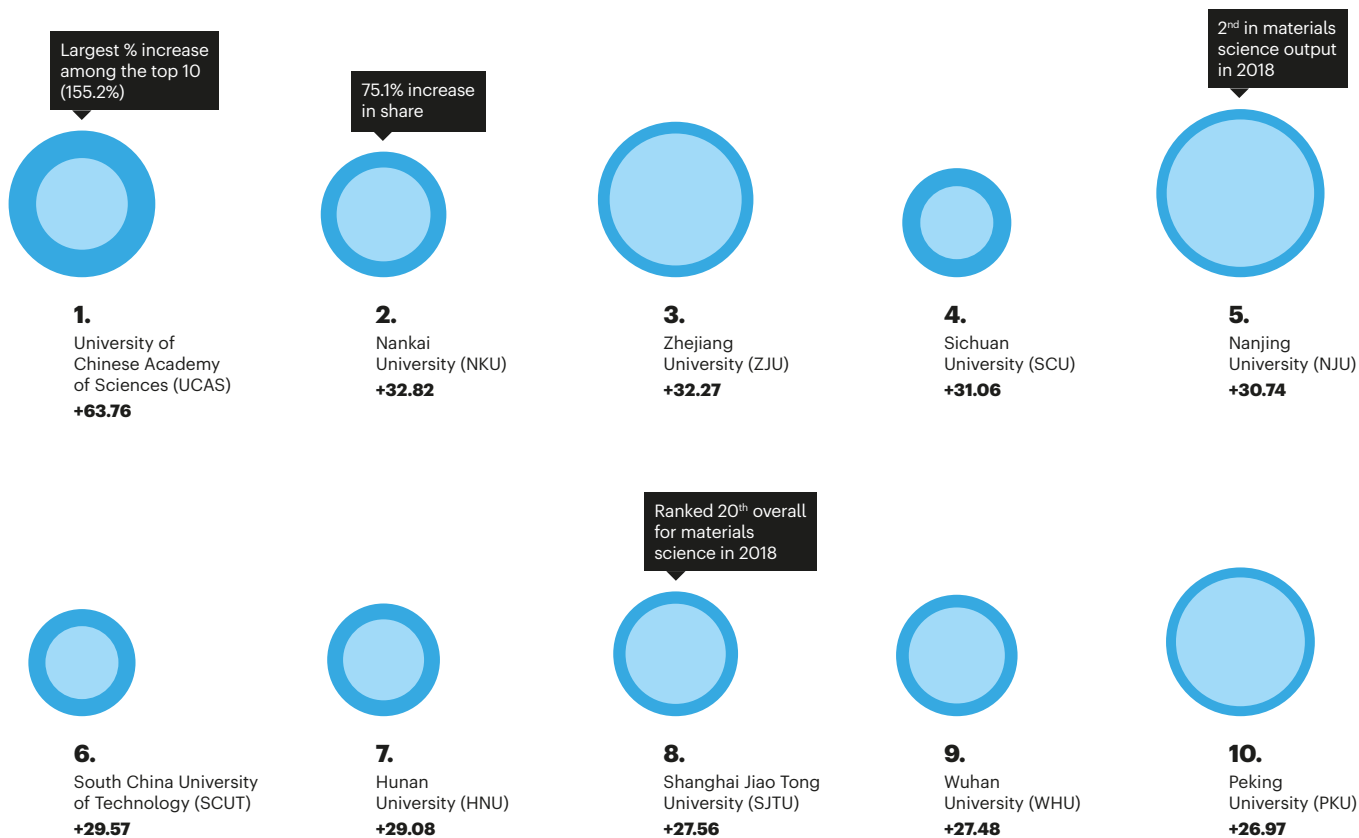


Scaling up

Chinese institutions monopolize the fastest-rising ranks for materials science output in the Nature Index. Data analysis by Bo Wu. Infographic by Denis Mallet.

TOP 10 RISING INSTITUTIONS IN MATERIALS SCIENCE — GLOBAL

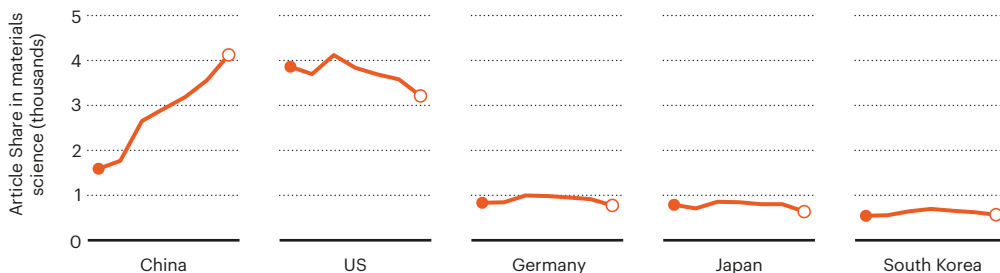
Institutions are ranked by the increase in their Nature Index Share in materials science between 2015 (inner circle) and 2018 (outer circle). The absolute change in their Share over the period is also shown.



TANGIBLE GAINS

In 2013, China's materials science Share in the Nature Index was less than half that of the US's, but China's Share surpassed the US's for the first time in 2018. Australia's Share grew by 42% in the six years to 2018, albeit from a low base. For 5 of the top 10 materials science countries (US, Germany, Japan, UK, and France) Share fell by between 0.9% (UK) and 19.8% (France).

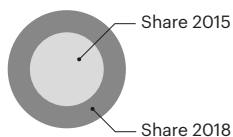
● 2012 ○ 2018



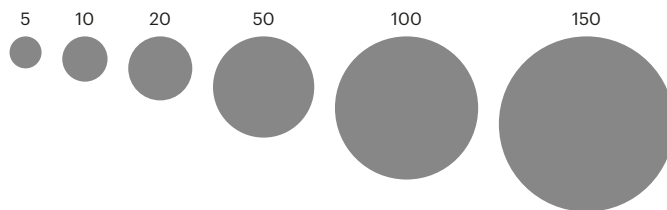
Legend

Institutions are ranked from left to right by the absolute increase in their Nature Index Share for materials science research in journals tracked by the index, 2015–2018. Circles are sized by an institution's Share in the index, which takes into account the proportion of their affiliated authors' contributions to articles published in the Nature Index journals. The absolute change in their Share over the period is also shown.

Growth in Share 2015–2018

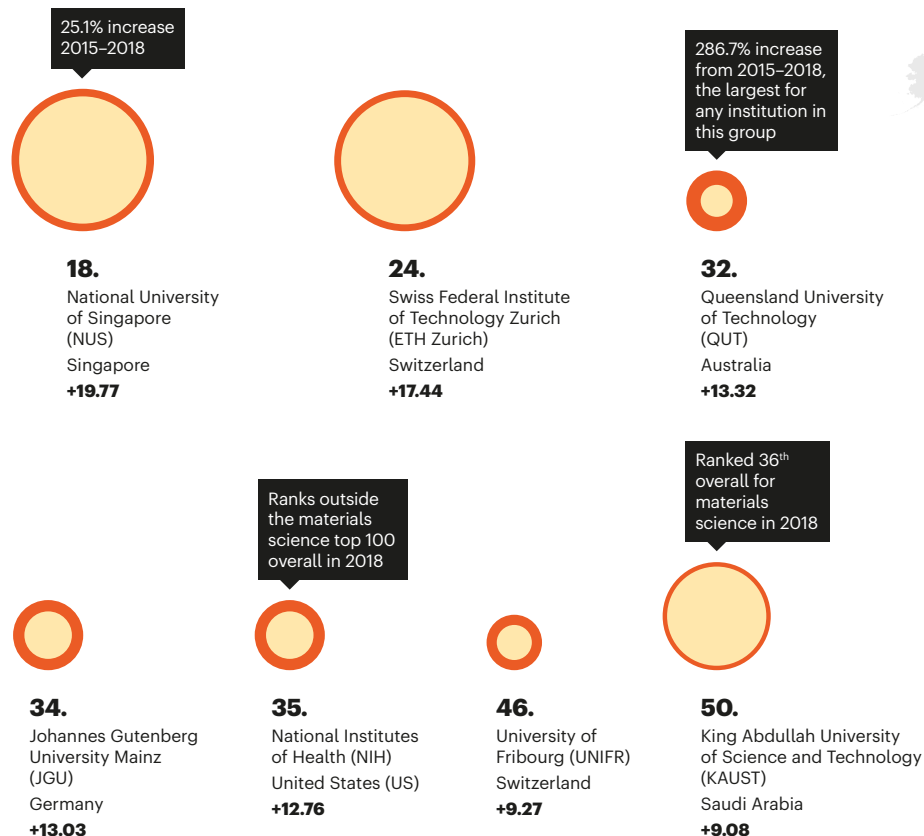


Institution's Share score by bubble size



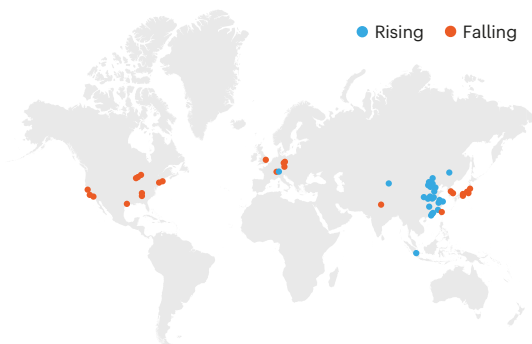
RISING INSTITUTIONS IN MATERIALS SCIENCE TOP 50 OUTSIDE CHINA

Just 7 institutions from outside China were ranked among the 50 institutions worldwide with the fastest-rising output in materials science 2015–2018.



GLOBAL SHIFT

As institutions compete to author the finite number of articles which can appear in the 82 high-quality journals tracked by the Nature Index, the ascendancy of Chinese institutions translates to declines among some international competitors.



WEIGHT OF MATERIALS

Materials science Share as a proportion of total Share in the Nature Index is shown for the top ten countries, ranked left to right by their 2018 materials science Share.

