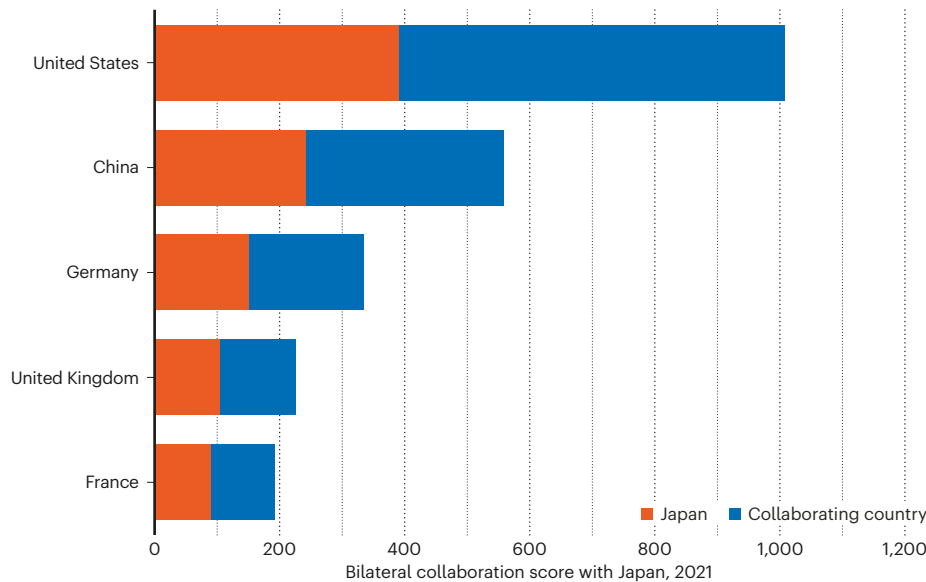


Joint effort

Research cooperation between researchers in Japan and abroad is increasingly important, but the make-up of such collaborations is varying across time and subject area. **Data analysis by Bo Wu. Infographic by Simon Baker and Tanner Maxwell.**

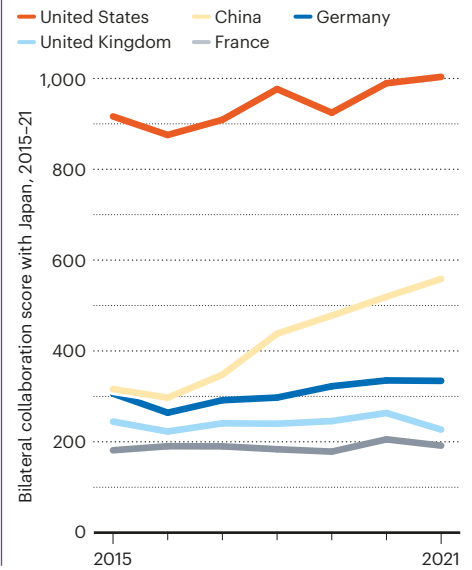
LEADING PARTNERSHIPS

The United States is the main partner for Japan when it comes to internationally co-authored research in the Nature Index, as measured by bilateral collaboration score, followed by China, Germany, the United Kingdom and France.



SHIFTING FOCUS

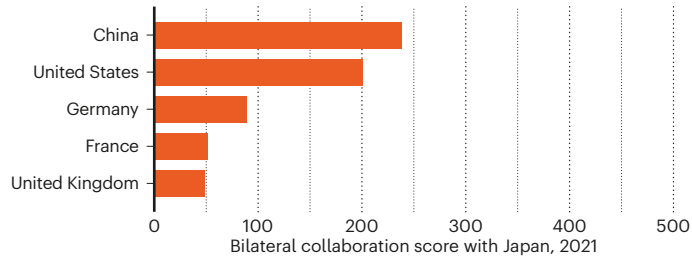
In 2015, Japan had a very similar bilateral collaboration score (BCS) with China (316.0) as it did with Germany (306.1). Since then, the partnership with China has grown more rapidly, reaching a BCS of 558.7 in 2021.



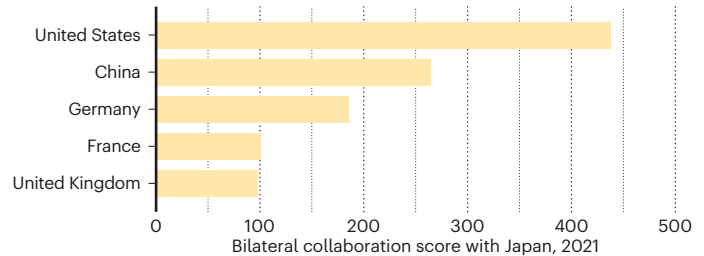
SUBJECT STRENGTHS

The key international research partnerships involving Japan fluctuate across the four subject areas covered by the Nature Index. In chemistry, China was the leading partner in 2021 by bilateral collaboration score, but collaboration was strongest with the United States across other areas, and especially in life sciences.

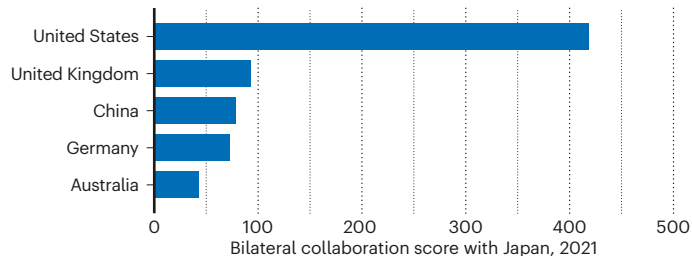
Chemistry



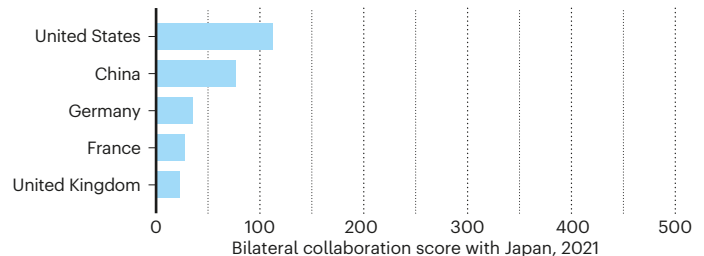
Physical sciences



Life sciences



Earth and environmental sciences



SOURCE: NATURE INDEX