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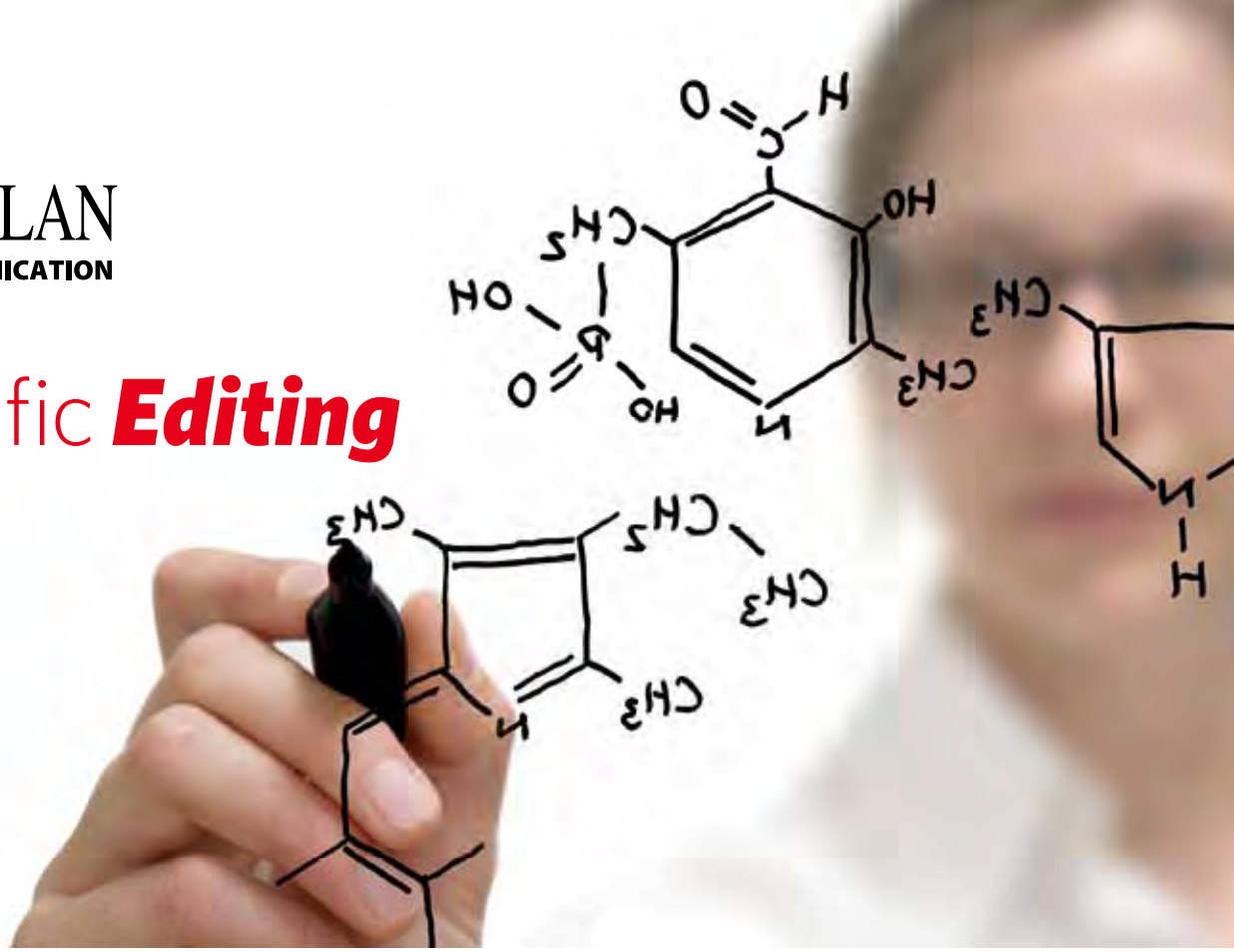

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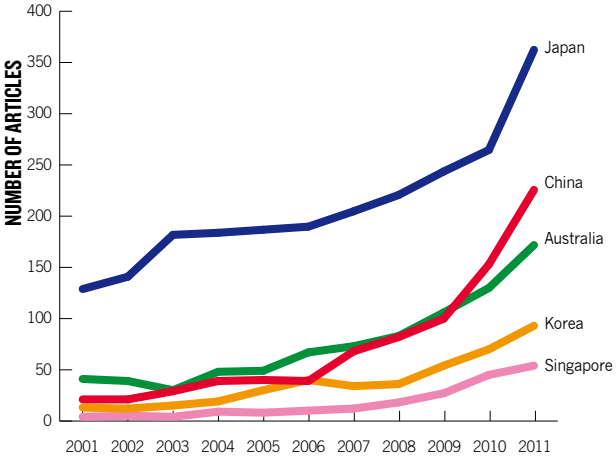
# NATURE PUBLISHING INDEX 2011 – CHINA

## THE RISE OF CHINA CONTINUES UNABATED

*David Swinbanks, Regional Managing Director, Nature Publishing Group*

We at Nature Publishing Group (NPG) are delighted to present here the 2011 rankings of Chinese research institutions and cities based on their output of scientific research articles in Nature-branded primary research journals. The rankings are based on the number of papers published in 2011 with data for 2010 and 2009 also presented for comparison. China's performance is also placed in a regional context in the Asia-Pacific (see Asia-Pacific rankings on p. 24) and in a global context in the Global Top 100 rankings (see www.natureasia.com/en/publishing-index/global/).

China continues its phenomenal rise in output of scientific papers increasing from 126,299 papers in Thomson Reuters (formerly ISI) Web of Knowledge in 2010 to 147,564 in 2011. China's rise in output of papers in Nature-branded primary research journals is also remarkable, jumping from 152 papers in 2010 to 225 in 2011. *Nature Communications* — NPG's new online-only journal which offers authors the option to publish open access with their paper freely available to the world online — is proving particularly popular with Chinese scientists. In 2011, there were 48 papers with a corrected count of 26.38 published in *Nature Communications* with authors from China exceeding the number in the mother journal *Nature*. This reflects the growing popularity of open access publishing in China.




**NATURE PUBLICATIONS ASIA-PACIFIC**

China has three institutions, namely, the Chinese Academy of Sciences, the University of Science and Technology of China, and Peking University, ranked in the Global Top 100 institutions worldwide at positions 23, 76 and 94 (see table on p. 8), respectively, with the Chinese Academy of Sciences rising nine places from 32 in 2010. This reflects the growing global strength of China's scientific research.

The Nature Publishing Index 2011 China takes the raw data of numbers of papers published and breaks them down by institution and city in China, assigning a corrected count to each paper according to the percentage of authors from that institution or city. Institutions and cities are then ranked on the basis of this corrected count. On the index website (www.natureasia.com/publishing-index/china) it is possible to drill down to the abstracts of the papers that make up the counts for each institution.

The index offers a unique insight into some of the highest quality basic research emerging from China. The rankings in this supplement provide snapshots for 2011, 2010 and 2009. To see the very latest results for China, visit the index website at www.natureasia.com/publishing-index/china. The index is updated every week with a moving window of 12 months of data.

There are many ways to assess the output and quality of research from institutions, cities and countries, and Nature Publishing Index is just one. There are several caveats that must be applied in interpreting the index. Nature-branded primary research journals, although covering a broad spectrum of basic research in the life, physical, chemical and geosciences, provide relatively limited coverage of applied sciences, engineering and clinical medicine. The index should therefore be viewed primarily as an index of high-quality basic and not applied research. Having made that note, however, there are of course exceptions, such as the journals *Nature Photonics*, *Nature Materials*, *Nature Nanotechnology* and *Nature Biotechnology*, which cover both domains.

The output of an institution or city or country obviously depends on its size. In this regard, the Chinese Academy of Sciences, which has over 100 institutions and over 40,000 staff and nearly 50,000 students, is much better placed to generate large numbers of papers than say a university, and so this should be borne in mind when making comparisons with other institutions in China. In this supplement, we provide statistics on the numbers of researchers, students and faculty at each institution so readers can more easily take this into account. On the website, we also provide a breakdown of article counts for the individual institutes within the Chinese Academy of Sciences so users of the website can assess the contributions of individual academy institutes.

It must also be borne in mind that NPG launched new Nature-branded titles almost every year, such as *Nature Communications* launched in April 2010 and *Nature Climate Change* launched in April 2011 and this naturally drives up the numbers of papers from institutions and countries worldwide. But the increase in number of papers in Nature-branded primary research journals, which amounts to a 29% increase from 2,597 papers in 2009 to 3,343 papers in 2011, is far outstripped by the 227% increase in numbers of papers from China in this same period.

With these caveats, we believe the index provides an extremely powerful tool to assess and find some of the best basic research coming out of China, and, because all the raw data and abstracts to the research articles behind the index are freely available on the index website, institutions and science policy makers are free to make their own interpretations and analysis of the index data, provided they cite the index as the source.

This print publication is only intended to be a guide to the Nature Publishing Index website and how it can be used to draw results and information from China. Our interpretations and presentations of rankings should not be viewed as definitive or final. This publication is just the starting point of many different ways to interpret and mine the data on China in the index. We warmly welcome feedback (by email to feedback@natureasia.com), and we hope that the index will become a dynamic entity that responds to input and feedback from users. ■

# EDITORIAL

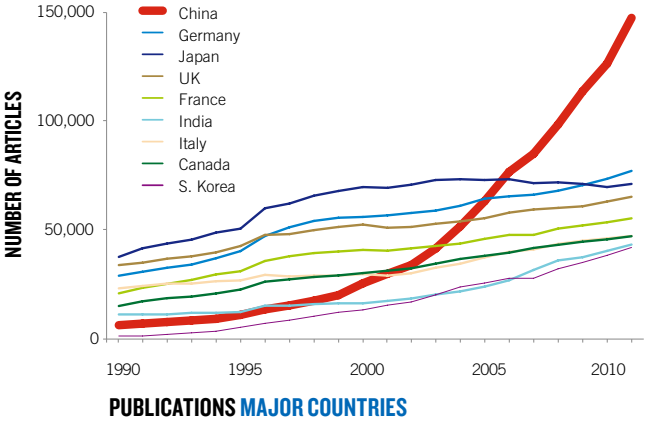
## ENTER A NEW ERA

*Felix Cheung, Editor, Nature China*

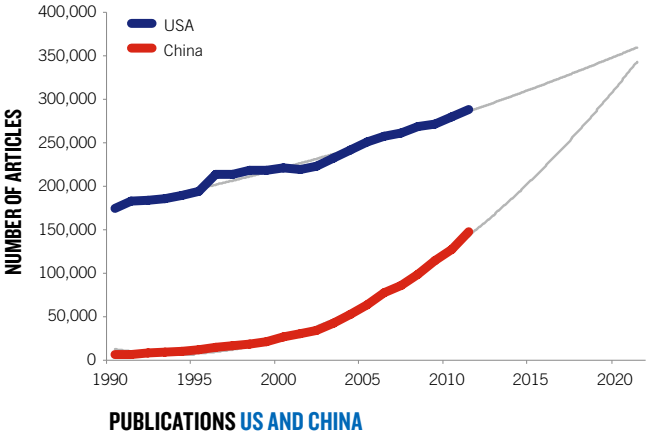
The United States' recession in the late 2000s and the ongoing sovereign debt crisis of the European Union have had a severe impact on the scientific community. Countries that were once the world's scientific superpowers are limiting, if not reducing, their spending on research and development in response to the economic downturn. Researchers of the West are now seeking opportunities in emerging countries, particularly those in Asia, and the result is a reshuffling of rankings that is fuelling a new scientific era. In the midst of this great disruption, many people are asking the question — which country will survive and become the next scientific superpower of the new world? The most common answer from people, it seems, is China.

We recently performed an analysis of research articles published in English-language science, technical and medical journals in the period from 1990 to 2011. We found three striking facts that can paint a clearer picture of current international trends. Firstly, China has increased its number of research articles over the last ten years, from 29,687 in 2001 to 147,564 in 2011, and is now ranked second behind the United States, having surpassed the United Kingdom in 2005, and Germany and Japan in 2006. If the trends continue, China will surpass the United States by 2022.

Secondly, the percentage of highly cited research articles (those within the top 1% by citation) that are authored by researchers based in China has increased over the last ten years, from 1.85% in 2001 to 11.3% in 2011, and is now ranked fourth behind the United States (50.7%), Germany (14.5%), and the United Kingdom (14.3%). Although the United States is still the leading producer of highly cited research articles, our data show that China is fast closing the gap and will overtake Germany and the United Kingdom by 2014.




**PUBLICATIONS MAJOR COUNTRIES**




**PUBLICATIONS US AND CHINA**

Thirdly, the United States is slowly losing its dominance in the sciences, and the percentage of highly cited research articles that are authored by researchers based in the United States has decreased over the last ten years, from 64.3% in 2001 to 50.7% in 2011.

So what is the key take-home message? The key take-home message here is that there has been real and substantive growth in both the quantity and quality of China's scientific research. This conclusion is backed up by a report from the UNESCO Institute for Statistics in 2010, which estimates that China now has roughly the same number of researchers as the United States. Furthermore, an announcement from the National Natural Sciences Foundation of China on 28 March 2012 has revealed that China will increase its annual budget for research and development by 25% over last year's figure to RMB 15 billion (USD 2.4 billion). Given that the two most important elements for pushing scientific research forward — namely people and money — are aplenty in China, it can be anticipated that China's rapid growth in scientific output will continue.

Another important lesson is that China has largely transformed itself from a country that focuses on quantity to one that focuses on quality of scientific research. Previous reports have criticized China for its lack of innovation, but our latest analysis shows that the country has come a long way in this aspect, and that it is now a major producer of highly influential research articles.

However, China must also be aware of factors that might limit its innovation. For example, although there is an understanding at the highest levels of the Chinese government of the importance of protecting intellectual property rights (IPR), in practice protection of IPR is still a lot weaker than in the West. In this regard, China is still behind the United States, which has long nurtured innovation through strong protection of IPR to achieve its success today.

If we look at the past, present and future of China's scientific research, we would come to realise that we are now at a midpoint of a revolution in scientific history. The economic recession has created both risks and opportunities. How other countries can benefit from the growth and changes in China will be a key topic for many in the next ten years.

The Nature Publishing Index offers a unique way to assess the high quality research output of an institution or a city in China. We have analysed the index data and assessed the various strengths of each institution and city. We hope the information will give our readers some guidance on which institutions and places in China are at the forefront of scientific research today. ■

# TOP TEN INSTITUTIONS

The first decade of the 21st century was a period of scientific awakening for China. The country saw the introduction of education reforms, the consolidation of research institutions, the rise of domestic talents and the growth of research and development. The Ministry of Science and Technology has increased the number of state-of-the-art national laboratories in the country from five to 19 and realigned much of the universities' national key disciplines in response to economic and social needs. All these changes have had a cumulative effect in reshaping the research landscape of China.

Scientific research in China has come a long way in the last ten years. Like a giant factory, the country was mass-producing an enormous quantity of research articles in the world's scientific literature. The research strengths of the country have traditionally been biased towards the applied end of the research spectrum. However, China realises the importance of moving up the 'food chain' and in recent years has placed more emphasis on quality rather than quantity. The country has also devoted much of its effort to basic research, particularly in the fields of chemistry, materials and physics.

The energy crisis and other national security problems, for example, have prompted China to focus research on dye-sensitized solar cells, rechargeable batteries and high-temperature superconductors. With the need to stay at the forefront in information technology and communications, the country has also devoted much of its resources to the development of lasers, optics and quantum information.

China is the third-largest country in the world by area. It is one of the world's major carbon emitters, but also acts as one of the world's largest terrestrial carbon sinks. It has the Tibetan Plateau and Himalayas in the west, the Gobi desert in the north, and the East and South China Seas in the east. Mirroring this diversity, China has much to offer in terms of research on climate change, soil erosion, sand storms, tectonics, earthquakes and ocean currents.

In addition, the aging population and emerging public health threats have prompted China to make significant progress in the life sciences, particularly in the fields of genetics, clinical medicine and structural biology. The country has the largest population and the largest hospital network in the world, presenting obvious advantages over other nations in conducting genome-wide association studies, collecting clinical data and running epidemiological surveys. As a result, China now plays an increasingly important role in studies of drug safety and efficacy, hereditary diseases, cardiovascular diseases and diabetes.

According to the latest figures from the Ministry of Education, the number of research institutions in China currently stands at 797, of which 481 are universities and 316 are non-university establishments. These research institutions share the common goals of advancing sciences and contributing knowledge, but at the same time compete fiercely with each other for students, faculty and research grants. As the country now places more emphasis on the quality of research output rather than the quantity, understanding the differences and primary strengths of each of these institutions has become an important topic of discussion.


The Nature Publishing Index offers us a unique way to assess the research output of an institution. Our analysis based on the 2011 rankings shows that the top ten Chinese institutions for high-quality scientific research, in descending order, are the Chinese Academy of Sciences (CAS), the University of Science and Technology of China (USTC), Peking University, Tsinghua University, the Hong Kong University of Science and Technology, Xiamen University, Shanghai Jiao Tong University (SJTU), the University of Hong Kong, Nanjing University and BGI Shenzhen. The majority of these institutions have now established their own areas of expertise. The USTC, Tsinghua University, Xiamen University and Nanjing University, for example, have respectively become leaders in physics, structural biology, chemistry and materials.

Apart from the 2011 rankings, we have also included the 2010 and 2009 rankings for the sake of comparison. The performance of a research institution can vary greatly between calendar years. To smooth out any temporal fluctuations that might occur from time to time, we have included a ranking based on the number of publications in Nature-branded primary research journals over a three-year (2009–2011) period for the very first time.

Interestingly, the three-year rankings have revealed a hierarchy of scientific power in China. At the top of this hierarchy, we have the

## NATURE PUBLISHING INDEX 2011 CHINA — INSTITUTIONS

| 2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES | ASIA-PACIFIC RANK | 2010 RANK | CORRECTED COUNT | ARTICLES | 2009 RANK | CORRECTED COUNT | ARTICLES | Total 2009-2011 RANK | CORRECTED COUNT | ARTICLES |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Chinese Academy of Sciences (CAS) | 22.52 | 62 | 3 | 1 | 14.27 | 41 | 1 | 12.01 | 31 | 1 | 48.80 | 134 |
| 2 | University of Science and Technology of China | 8.58 | 17 | 11 | 3 | 3.83 | 8 | 4 | 2.67 | 8 | 3 | 15.08 | 33 |
| 3 | Peking University | 7.24 | 21 | 13 | 5 | 3.46 | 17 | 3 | 2.82 | 9 | 4 | 13.51 | 47 |
| 4 | Tsinghua University | 6.36 | 16 | 15 | 2 | 6.15 | 16 | 2 | 3.32 | 9 | 2 | 15.83 | 41 |
| 5 | The Hong Kong University of Science and Technology (HKUST) | 3.86 | 5 | 23 | 9 | 1.86 | 3 | – | – | – | 10 | 5.72 | 8 |
| 6 | Xiamen University | 3.77 | 6 | 25 | 10 | 1.83 | 3 | 11 | 1.00 | 1 | 8 | 6.59 | 10 |
| 7 | Shanghai Jiao Tong University (SJTU) | 3.73 | 21 | 28 | 19 | 0.99 | 4 | 5 | 1.76 | 10 | 9 | 6.48 | 35 |
| 8 | The University of Hong Kong | 3.58 | 12 | 29 | 7 | 2.17 | 8 | 8 | 1.36 | 5 | 6 | 7.10 | 25 |
| 9 | Nanjing University | 3.01 | 11 | 35 | 6 | 3.16 | 8 | 7 | 1.41 | 5 | 5 | 7.58 | 24 |
| 10 | BGI Shenzhen | 2.97 | 11 | 36 | 4 | 3.59 | 9 | 19 | 0.52 | 1 | 7 | 7.08 | 21 |

CAS — a scientific superpower (in a China context) that is responsible for producing approximately 22% of China's research articles in Nature-branded primary research journals. The supremacy of the CAS is evident from its size, its dominance in a wide range of research fields, and its ability to influence major decision-making in China's research and development.

Beneath this giant are three top-tier universities, namely the USTC, Peking University and Tsinghua University, each of which contributes approximately 6–7% of China's research articles to Nature-branded primary research journals. These top-tier institutions are becoming world renowned establishments which not only have the ability to exert influence on a global scale, but also possess research strengths that could lead China into a new era and may cause lesser institutions to change their course.

Then immediately below this upper tier is a mid-tier of elite universities and research institutions each of which contributes approximately 2–3% of China's research articles to Nature-branded primary research journals. They tend to focus their efforts on excelling in particular research areas, whether it might be material physics as in the case of Nanjing University or medical genetics at SJTU, and they carve out a niche for themselves by pursuing a narrower range or particular types of research. These mid-tier institutions come in a variety of shapes and sizes, and, alongside the top-tier institutions, can be a driving force of scientific creativity and a supportive backbone behind the regional economy, such as in the case of BGI Shenzhen which has created a whole new economy based on genetic sequencing and SJTU which provides support to local pharmaceutical companies through its investigations of the medical genetics of various diseases.

We would like to point out that although the Nature Publishing Index rates the CAS as China's top research institution, the number of researchers working at the CAS is three to five times that of most universities in the country. It is therefore important to keep in mind that when making comparisons between the different Chinese institutions, one must take into account the number of researchers working at the institution, data for which we have provided with each description of the top ten institutions.

We would also like to close by stressing that the Nature Publishing Index provides just one way of looking at and ranking the output of high quality research from institutions in China, and in order to achieve an overall assessment of China's research institutions a variety of approaches should be adopted. ■

### HOW TO READ THE NATURE PUBLISHING INDEX CHINA

The Nature Publishing Index China is a ranking based on the number of primary research articles published in the Nature family of journals by institutions and cities in mainland China and Hong Kong. The ranking is based on a corrected count that takes into account the fractional contribution of an institution or a city (by author affiliation) to each published article. The fractional counts are then tallied for the designated period. Only articles printed in the ranking period are included in the calculation of the index (advance online publications are not included until assigned an issue number and sent to press). The Nature Publishing Index 2011 China is based on frozen data for the calendar year 2011: January 1 to December 31.

The Nature Publishing Index China is based on affiliation data drawn from Nature journal articles published on nature.com. There is great variability in the way authors present their affiliations. Every effort is made to count affiliations in a consistent way making reasonable assumptions to determine corrected counts and these assumptions are explained on the website. As such, corrected counts are approximations based on these assumptions and no counts are definitive.

# THE CHINESE ACADEMY OF SCIENCES (CAS)

## THE GIANT MARCHES ON

### CORRECTED COUNT: 22.52 ARTICLES: 62

The Chinese Academy of Sciences (CAS) maintains its number one position at the top of the China rankings. In the Asia-Pacific region, CAS has overtaken the Japan-based institution RIKEN — the runner-up of 2010 — for the very first time, is ranked third behind the University of Tokyo and Kyoto University, and based on current trends is fast closing the gap with Kyoto University. The CAS is ranked 23rd in the world immediately behind the Johns Hopkins University, USA — but ahead of the Swiss Federal Institute of Technology Zurich, Switzerland; the University of Toronto, Canada; the University of London and University College London, UK; and the Rockefeller University, USA. It is one of three Chinese research institutions present in the 2011 Nature Publishing Index Global Top 100 (see table on p. 8).

Founded in 1949 and headquartered in Beijing, the CAS is China's premier research institution dedicated to the advancement of natural sciences. It is also one of the world's largest agglomerations of scientific workers, with close to 100,000 professionals, including principal investigators, technicians and students, conducting research in all facets of science.

The CAS has branch offices in 11 cities — Shanghai, Changchun, Chengdu, Guangzhou, Kunming, Lanzhou, Nanjing, Shenyang, Wuhan, Xi'an and Xinjiang — and more than 100 affiliated institutes dotted throughout the country. In addition, the CAS has two affiliated universities, namely the University of Science and Technology of China (ranked separately in this publication) and the Graduate University of Chinese Academy of Sciences.

The CAS has contributed 62 articles with a corrected count (CC) of 22.52 to Nature-branded primary research journals, including 16 (CC 4.51) articles to the flagship title *Nature*. The published work spans all disciplines of science, but overall, there are 36 (CC 15.35) articles in the life sciences and 26 (CC 7.17) in the physical sciences.

The primary research strengths of the CAS have always been in the areas of chemistry, physics, structural biology, genetics and palaeontology, but this year it has also upped the number of articles in the areas of immunology and plant biology. In the three years of the China Index (2009–2011), the CAS is the largest contributor in China to *Nature*, *Nature Chemical Biology*, *Nature Climate Change*, *Nature Communications*, *Nature Medicine*, *Nature Neuroscience*, *Nature Physics* and *Nature Structural & Molecular Biology*, as well as the second largest contributor to *Nature Chemistry*, *Nature Genetics*, *Nature Geoscience*, *Nature Immunology* and *Nature Materials* (see Top Institutions by Nature Journal on p. 22).

The CAS has more than 100 affiliated institutes, but only 32 have made their names onto the pages of Nature-branded primary research journals: 15 in Beijing, six in Shanghai, two in Qingdao, and one each in Dalian, Fuzhou, Guiyang, Kunming, Lanzhou, Nanjing, Shenyang and Yantai. The top five contributors are Shanghai Institutes for Biological Sciences, the Institute of Physics, the Institute of Botany, the Institute of Biophysics, and the Institute of Vertebrate Paleontology and Paleoanthropology.

The two affiliated institutes that see the biggest improvement from last year are SIBS and the Institute of Botany: the former has increased its number of research articles in Nature-branded primary research journals from six (CC 1.11) articles to 15 (CC 3.74), while the latter has increased from one article (CC 0.20) to five (CC 2.44). Lixin Zhang, in particular, has contributed two wholly authored articles (articles with a CC of 1) on chloroplast signalling to *Nature Communications*.

**CHINESE ACADEMY OF SCIENCES**


| | |
|---|---|
| LOCATION: | BEIJING, SHANGHAI, CHANGCHUN, CHENGDU, DALIAN, FUZHOU, GUANGZHOU, GUIYANG, KUNMING, LANZHOU, NANJING, NINGBO, SHENYANG, SHENZHEN, SUZHOU, TAIYUAN, URUMQI, WUHAN, XI'AN, XIAMEN XINJIANG, XINING, XISHUANGBANNA AND YANTAI |
| ESTABLISHED: | 1949 |
| STAFF: | 45,400 |
| STUDENTS | |
| PHD: | 20,919 |
| MASTERS: | 27,142 |

The CAS is responsible for more than one-fifth of China's annual contribution, by CC, to Nature-branded primary research journals. Between 2009 and 2011, the CAS has accumulated more articles and a higher CC in Nature-branded primary research journals than the sum of Tsinghua University, Peking University and the University of Science and Technology. Given its sheer size and volume of people, we anticipate that the CAS will maintain its domination in China for some time to come. ■

**NATURE PUBLISHING INDEX GLOBAL TOP 100**

| RANK | INSTITUTION | COUNTRY | CORRECTED COUNT | ARTICLES |
|---|---|---|---|---|
| 1 | Harvard University | USA | 129.92 | 289 |
| 2 | Stanford University | USA | 67.48 | 140 |
| 3 | Max Planck Institutes | Germany | 63.87 | 159 |
| 4 | National Institutes of Health (NIH) | USA | 58.11 | 153 |
| 5 | The University of Tokyo | Japan | 42.88 | 109 |
| 6 | French National Centre for Scientific Research (CNRS) | France | 42.51 | 203 |
| 7 | University of California Berkeley | USA | 37.60 | 91 |
| 8 | Yale University | USA | 36.92 | 84 |
| 9 | University of California San Diego (UCSD) | USA | 34.27 | 103 |
| 10 | University of California San Francisco (UCSF) | USA | 34.15 | 91 |
| 20 | Kyoto University | Japan | 23.98 | 56 |
| 23 | Chinese Academy of Sciences (CAS) | China | 22.52 | 62 |
| 76 | University of Science and Technology of China | China | 8.58 | 17 |
| 94 | Peking University | China | 7.24 | 21 |

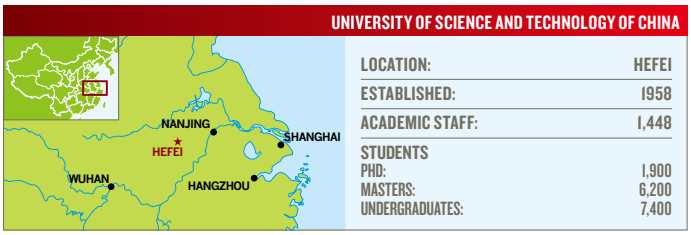
The data for the Global Top 100 is drawn from the beta website of the Nature Publishing Index Global Top 100 (www.natureasia/publishing-index/global). We welcome feedback from readers on the website and the way results are presented.

Results for organizations that include numerous sub-entities (e.g. the Max Planck Institutes) are presented as aggregates of all contributing entities in the beta index. An exception to this rule is the University of California System, for which each of the ten universities of the system are presented individually. On aggregate count, the University of California System has a corrected count in excess of 142 and would be ranked number one.

# UNIVERSITY OF SCIENCE AND TECHNOLOGY OF CHINA

## THE QUANTUM LEAP

**CORRECTED COUNT: 8.58 ARTICLES: 17**




Founded in 1958 and located in Hefei, Anhui Province, the University of Science and Technology of China (USTC) is the youngest member of the C9 league – an elite alliance comprising nine Chinese universities, China's equivalent of the Ivy League. It is one of only two universities that are under the administration of the CAS (most universities in China are under the administration of the Ministry of Education), and the only university in China with two national laboratories (there are only 19 of these state-of-the-art facilities in the country).

Coming in at second place in the 2011 China rankings, the USTC has defied all expectations and contributed 17 (CC 8.58) articles to Nature-branded primary research journals. With a 124% increase in CC, the USTC has successfully progressed from third place to second and, as a result, pushed Peking and Tsinghua University — widely regarded as the two top universities in China — down to the third and fourth position respectively. It is one of three Chinese research institutions present in the 2011 Nature Publishing Index Global Top 100 (see table on p. 8).

The USTC publishes articles mainly in the physical sciences. Overall, there are 15 (CC 8.08) articles in the physical sciences and two (CC 0.5) in the life sciences. The primary research strengths of the USTC are in the areas of quantum physics and condensed matter physics. Guangcan Guo, Jianwei Pan and Xianhui Chen, in particular, are responsible for a large slice of USTC's publications in Nature-branded primary research journals: Guo and Pan both study quantum systems, and Chen studies high-temperature superconductors.

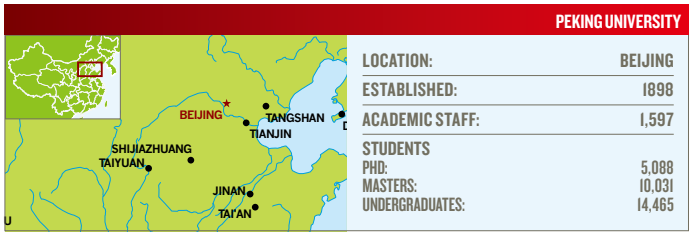
Within the Asia-Pacific, the USTC has moved up five places to 11th, ahead of the University of Queensland, Australia. In the three years of the China Index (2009–2011), the USTC is the largest contributor to *Nature Photonics* and the second largest contributor to *Nature Communications* and *Nature Physics* (see Top Institutions by Nature Journal on p. 22).

Although the USTC has yet to earn the same level of fame as Peking and Tsinghua University, we have substantiating evidence that all three institutions are actually in the same league when it comes to publishing high-quality research. Between 2009 and 2011, the USTC has accumulated a CC of 15.08, on par with Tsinghua University's CC of 15.83 and ahead of Peking University's CC of 13.51. If the USTC continues to perform strongly in Nature-branded primary research journals, we are confident that its role as a leading research institution will eventually receive recognition. ■

# PEKING UNIVERSITY

## MAINTAINING DIVERSITY

**CORRECTED COUNT: 7.24 ARTICLES: 21**




This year Peking University has excelled in the China rankings by contributing 21 (CC 7.24) articles to Nature-branded primary research journals, including four (CC 0.24) articles to *Nature*, placing it at third place in the rankings ahead of Tsinghua University. Peking University's published work covers a wide range of disciplines, but overall, there are 13 (CC 2.78) articles in the life sciences and eight (CC 4.46) in the physical sciences.

Founded in 1898, Peking University is a leading comprehensive university that offers education and research in all disciplines, ranging from science and engineering to arts, humanities and social sciences. It has 81 national key disciplines — disciplines that are strategically important to the nation and therefore are financially supported by the Ministry of Education (MOE) — and boasts one national laboratory, 49 state key laboratories and ten MOE key laboratories. Thanks to all these facilities, Peking University has become one of the most diverse and best-equipped universities in China.

Peking University is one of three Chinese research institutions present in the 2011 Nature Publishing Index Global Top 100 (see table on p. 8). As a leading comprehensive university, Peking University places its research focus not on one single discipline but on a wide range of disciplines. Because of this, Peking University has achieved a solid performance in multiple areas, including biotechnology, cell biology, chemistry and materials.

Interestingly, the majority of the articles published by Peking University have a low share of authorship; only five articles have a CC greater than 0.5. These numbers suggest that Peking University is conducting high-quality research and publishing in top-ranked journals by collaborating with strategic partners that have complementary interests — a clever approach to increase its competiveness amidst globalization.

Within the Asia-Pacific, Peking University has moved up six places to 13th, ahead of the Australian National University. In the three years of the China Index (2009–2011), Peking University is the largest contributor to *Nature Cell Biology* and the second largest contributor to *Nature Chemical Biology* and *Nature Photonics* (see Top Institutions by Nature Journal on p. 22).

The breadth of disciplines strongly reflects the diversity and balance of top scientists working at Peking University. Although Peking University does suffer a lack of 'identity' — a discipline that it excels in — we believe that this unique quality is what sets it apart from other universities in China. ■

# TSINGHUA UNIVERSITY

## THE RISE OF MATERIAL PHYSICS

**CORRECTED COUNT: 6.36 ARTICLES: 16**

Founded in 1911, Tsinghua University is an institution that places much its focus on education and research in science and engineering. The present Tsinghua University originates from Tsinghua College, an establishment set up by the United States when it remitted a portion of the Boxer indemnity (compensation forced on the Chinese government for the loss of property and life as a result of the 1898–1901 Boxer Rebellion) to China. Because of this, western cultures have had a deep influence on Tsinghua University's early development, especially on its ideology of academic freedom and independence.

In fourth place in the 2011 China rankings, Tsinghua University has contributed 16 (CC 6.36) articles to Nature-branded primary research journals, including five (CC 3.37) articles to *Nature*. It has tied with its own record of last year by contributing the same number of articles — 16 — to Nature-branded primary research journals. Despite a slight increase in the CC, Tsinghua University has dropped two places to fourth in the China rankings as its close competitors — the USTC and Peking University — overtake.

The primary research strength of Tsinghua University has always been in structural biology, and this year it has published seven (CC 3.76) articles in this area. Jiawei Wang, in particular, has contributed five articles on various protein structures to Nature-branded primary research journals: three in *Nature* and two in *Nature Communications*.


Apart from structural biology, the number of articles in material physics has also gone up. Overall, Tsinghua University has published five (CC 2.31) articles in this area. Xiaozhong Zhang, in particular, has contributed an article titled 'Geometrical enhancement of low-field magnetoresistance in silicon' to *Nature*, which has recently been named 'China's top ten scientific and technological progresses in 2011' by the Ministry of Science and Technology. Based on these observations, we have reasons to believe that Tsinghua University is gearing up to become a leader in material physics.

Within the Asia-Pacific, Tsinghua University is ranked 15th ahead of National University of Singapore. In the three years of the China Index (2009–2011), Tsinghua University is the second largest contributor to *Nature* and *Nature Structural & Molecular Biology* (see Top Institutions by Nature Journal on p. 22). ■

# THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

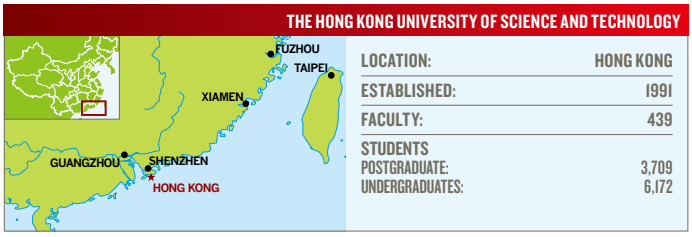
## AIMING FOR QUALITY OVER QUANTITY

**CORRECTED COUNT: 3.86 ARTICLES: 5**

This year the Nature Publishing Index 2011 China ranks the Hong Kong University of Science and Technology (HKUST) as the fifth leading research institution in China and the leading research institution in Hong Kong. Although the HKUST has only contributed five (CC 3.86) articles to Nature-branded primary research journals — the least among the top ten — it finishes high in the rankings by having a high share of authorship for each of its articles.

Founded in 1991, the HKUST is a public university that specialises in science, technology, engineering, management and business. It is the youngest of eight universities in Hong Kong and widely regarded as one of the 'top three' — the other two being the University of Hong Kong and the Chinese University of Hong Kong. Today, the HKUST plays an important role in transforming Hong Kong into a knowledge-based society and driving the local economy through scientific discoveries and technological innovations.

The primary research strengths of the HKUST have always been in the areas of neuroscience, theoretical physics and structural biology, but this year the numbers are high in only neuroscience and theoretical physics. Nancy Ip and Che Ting Chan, in particular, have each contributed two articles to Nature-branded primary research journals: the former in *Nature Neuroscience* and *Nature Cell Biology* and the latter in *Nature Materials* and *Nature Photonics*.




Within the Asia-Pacific, the HKUST has catapulted itself from 34th place to 23rd, ahead of Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia. In the three years of the China Index (2009–2011), HKUST is the largest contributor to *Nature Materials* and the second largest contributor to *Nature Neuroscience* (see Top Institutions by Nature Journal on p. 22).

This year the HKUST manages to finish three places ahead of the University of Hong Kong. It is an amazing feat considering that the number of faculties at the HKUST is less than half of that at the University of Hong Kong. However, between 2009 and 2011, the University of Hong Kong accumulated more articles and a higher CC in Nature-branded primary research journals than that of the HKUST. It remains to be seen if the HKUST can maintain its title as the leading research university in Hong Kong in the years to follow. ■

# XIAMEN UNIVERSITY

## A CASE OF GOOD CHEMISTRY

**CORRECTED COUNT: 3.77 ARTICLES: 6**

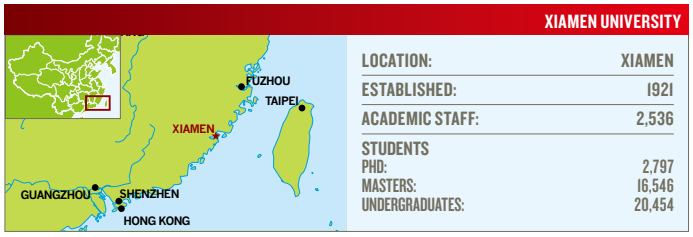
Founded in 1921, Xiamen University is an institution located in the coastal city of Xiamen — approximately an hour by plane from either Shanghai or Hong Kong. It is the one and only university in China that is located inside a special economic zone.

Xiamen University has gained further ground this year in the China rankings by contributing six (CC 3.77) articles to Nature-branded primary research journals, including its first article in *Nature Nanotechnology* and *Nature Geosciences*. It now represents the sixth leading research institution in China, and is well ahead of many traditional elite universities. Within the Asia-Pacific, Xiamen University has leapt from 39th place to 25th, ahead of the Korea Advanced Institute of Science and Technology (KAIST).

One of the most remarkable things about Xiamen University is the rapid rise in its research quality over recent years. It was only in 2008 that Xiamen University published its first article in *Nature Chemical Biology* and *Nature Materials*. Since then, Xiamen University has been a regular contributor to Nature-branded primary research journals.

Chemistry and cell biology continually feature as Xiamen University's key research strengths, but this year the number of articles is particularly high for chemistry. Overall, Xiamen University has contributed four (CC 3.17) articles in the area of chemistry, including one wholly authored article to *Nature Nanotechnology* and two wholly authored articles to *Nature Communications*.

As we mentioned in last year's China index, an interesting characteristic about Xiamen University is that the majority of its articles in Nature-branded primary research journals are wholly authored articles. In fact, since its debut in 2008, Xiamen University has been publishing at least one wholly authored article every year. This '100% made in Xiamen' characteristic reflects the university's relative isolation from other major research institutions — but at the same time underscores the university's ability to do everything in-house. ■




# SHANGHAI JIAO TONG UNIVERSITY

## ENTER THE GWAS

**CORRECTED COUNT: 3.73 ARTICLES: 21**

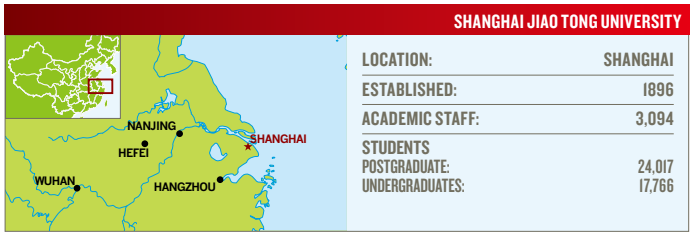
This year Shanghai Jiao Tong University (SJTU) has made a huge improvement in productivity by contributing 21 (CC 3.73) articles to Nature-branded primary research journals, including three (CC 0.20) articles to *Nature*. With a 280% increase in CC, SJTU has skyrocketed from 19th place to seventh in the China rankings and is now trailing behind Xiamen University by 0.04 of a CC. Despite a large increase in the number of articles — second only to the CAS — SJTU has finished in the bottom half of the top ten because the majority of its articles have a low share of authorship; only three articles have a CC higher than 0.5.

Founded in 1896, SJTU is the oldest university among our top ten this year. Student exchange programs and international research collaborations have always been a core part of SJTU's development. In 1978, SJTU sent its first delegation of Chinese scientists to the US. Since then, it has established links with more than over 100 universities in more than 20 countries.

Publishing primarily in the life sciences, this year the SJTU has published 18 (CC 3.50) articles in the life sciences and four (CC 0.23) in the physical sciences. The primary research strength of SJTU is in the area of medical genetics. In fact, out of the 18 articles in the life sciences, 14 are on genome-wide association studies (GWAS) of medical conditions including gastric cancer, lung cancer, endometrial cancer, leukaemia, Graves' disease, schizophrenia, nephropathy, polycystic ovary syndrome, atopic dermatitis, hypertension and metabolic disorders.

The SJTU owes much of its success to two of its affiliated institutions, Ruijin Hospital and the Bio-X Center. This year Ruijin Hospital has contributed five articles to *Nature Genetics* on behalf of SJTU, while the Bio-X Center has contributed four articles to *Nature Genetics* and one article to *Nature Nanotechnology*.

Within the Asia-Pacific, SJTU ranks in the 28th spot, one place behind Korea's Pohang University of Science and Technology (POSTECH), having made a huge climb from last year's 68th spot. In the three years of the China Index (2009–2011), SJTU is the second largest contributor to *Nature Cell Biology* (see Top Institutions by Nature Journal on p. 22). ■



# THE UNIVERSITY OF HONG KONG

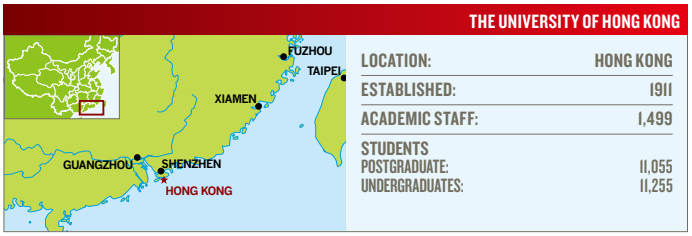
## VIRUSES, BACTERIA, DISEASES AND MORE

**CORRECTED COUNT: 3.58 ARTICLES: 12**

Founded in 1911, the University of Hong Kong (HKU) is the first and foremost university in Hong Kong. For over a hundred years, it has played an important role in advancing society, nurturing leaders, shaping the regional economy and engaging the global scientific community. In particular, the HKU has been instrumental in the diagnosis of emerging pathogens, such as the severe acute respiratory syndrome (SARS) virus, the avian flu H5N1 virus and the 2009 'swine flu' pandemic H1N1 virus, as well as the provision of guidelines and treatment in response to such health threats.

In 2011, the HKU has contributed 12 (CC 3.58) articles to Nature-branded primary research journals, including three (CC 1.60) articles to *Nature*. Despite improvements on all fronts, the HKU has dropped one place to eighth in the China rankings as its close competitor, the HKUST, overtakes. The HKU's published work covers a wide range of disciplines, but overall, there are nine (CC 2.42) articles in the life sciences and three (CC 1.17) in the physical sciences.

Maintaining health and well being have always been a top priority in the minds of the Hong Kong people, especially when SARS and swine flu are still fresh in their memories. Therefore, it should come as no surprise that the primary research strengths of HKU are in the areas of virology, microbiology, infectious diseases and aging-associated diseases. Yi Guan, in particular, has contributed two articles on H1N1 viruses to Nature-branded primary research journals: one in *Nature* and one in *Nature Communications*.




Within the Asia-Pacific, HKU is ranked 29th ahead of Academia Sinica, Taiwan, and the Tokyo Institute of Technology, Japan. In the three years of the China Index (2009–2011), HKU is the third largest contributor to *Nature* (see Top Institutions by Nature Journal on p. 22). The HKU might have temporarily lost its title as the leading research institution in Hong Kong to the HKUST this year, but between 2009 and 2011, it has accumulated a higher number of articles and CC than any of its local competitors. It remains to be seen if HKU can regain its dominance in Hong Kong next year. ■

# NANJING UNIVERSITY

## ON SOLID GROUND

**CORRECTED COUNT: 3.01 ARTICLES: 11**

This year Nanjing University has contributed a respectable 11 (CC 3.01) articles to Nature-branded primary research journals, including its first article to *Nature Physics*. Despite the high number of articles, however, Nanjing University has failed to secure the sixth spot as it did in 2010 because of its low share of authorship in most of the articles; only two of its articles have a CC higher than 0.5. As a result, Nanjing University has dropped three places to ninth in the China rankings — though it is still the sixth leading research institution in China if we consider the total CC over the last three years.

Within the Asia-Pacific, Nanjing University is ranked 35th, behind the University of New South Wales, Australia. In the three years of the China Index (2009–2011), Nanjing University is the largest contributor to *Nature Nanotechnology* (see Top Institutions by Nature Journal on p. 22).

Founded in 1902, Nanjing University is one of the oldest and most prestigious universities in China — and a university of great historical importance. When the country was in need of advanced materials for solving its national problems in the 1980s, Nanjing University lent its expertise in physics to help set up the National Laboratory of Solid State Microstructures (NLSSM). Since then, Nanjing University has become a leading institution in the research of cutting-edge materials, including biomaterials, composites, optical materials and superconductors.

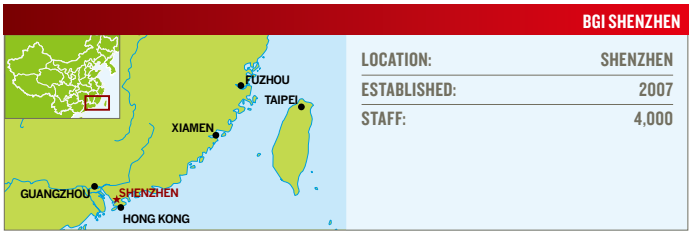

The primary research strengths of Nanjing University continue to revolve around the field of materials science. Of the 11 articles that Nanjing University published this year, nine (CC 2.76) are studies on exotic materials, including mesocrystal microspheres and nonlinear photonic crystals.

Last year the NLSSM was responsible for two-thirds of Nanjing University's contribution, by CC, to Nature-branded primary research journals. This year NLSSM maintains its solid performance by publishing six (CC 2.39) articles — almost the entirety of Nanjing University's publications — in Nature-branded primary research journals. Given the strong publishing presence of the NLSSM, we feel that Nanjing University will remain a research force to be reckoned with at home and abroad. ■

# BGI SHENZHEN

## EVERYTHING IS IN SEQUENCE

### CORRECTED COUNT: 2.97 ARTICLES: 11




In the 2010 China rankings, BGI Shenzhen — formerly known as the Beijing Genomics Institute — took a surprising leap into fourth place ahead of many traditional 'big guns' such as Zhejiang University and Shanghai Jiao Tong University. This year, BGI Shenzhen has relaxed a little by contributing a humble 11 (CC 2.97) articles to Nature-branded primary research journals, of which five (CC 1.19) are to *Nature*, three (CC 0.76) are to *Nature Genetics*, two (CC 0.73) are to *Nature Biotechnology* and one (CC 0.29) is to *Nature Methods*. As a result, BGI Shenzhen has dropped six places and is now clinging onto the bottom rung of the top ten. In the three years of the China Index (2009–2011), BGI Shenzhen is the largest contributor to *Nature Biotechnology* and *Nature Methods* (see Top Institutions by Nature Journal on p. 22).

BGI Shenzhen is a world-class research institution that specialises in high-throughput genome sequencing. It was originally founded in Beijing in 1999, but was later refounded in Shenzhen in 2007 with much support from the local government. Today BGI Shenzhen has branches in Beijing, Shanghai, Hong Kong, Wuhan, as well as the US, Europe and Japan. It has become as much of a research institution as an enterprise, providing commercial services to some of the biggest names in the global pharmaceutical industry.

To describe the success story of BGI Shenzhen as a miracle is no exaggeration. Despite its short history of almost five years, BGI Shenzhen has sequenced an enviable list of genomes, such as those of the SARS virus, humans, silkworms, honeybees, the giant panda, rice, soybeans and cucumbers, and published these results in a variety of high-impact journals, including but not limited to *Nature*, *Nature Biotechnology* and *Nature Genetics*.

BGI Shenzhen publishes articles almost exclusively in the field of genomics. This year in particular, it has reported the genomes of mole rats, Chinese monkeys, the Chinese cabbage, potatoes, hamster ovary cells, roundworms and bladder cancer cells. The majority of these articles have a low share of authorship, which reflects the fact that BGI Shenzhen has become more of a service provider than a project leader. With future expansions underway, it remains to be seen if BGI Shenzhen will increase its annual output of high-quality papers in the years to come. ■

# REGIONAL ROUNDUP

## THE UPS AND DOWNS

China has a record 153 research institutions making the list of the Nature Publishing Index 2011 — 43 more than last year. Of these research institutions, 136 have made a greater contribution to Nature-branded primary research journals, 16 have made a lesser contribution and one has made the same amount of contribution. According to the latest figures from the Ministry of Education, the number of research institutions in China currently stands at 797. This means that the country has 19% of its research institutions contributing to Nature-branded primary research journals in 2011.

The University of Science and Technology of China (USTC) is the most improved among all research institutions in China. It has increased its contribution to Nature-branded primary research journals from eight (CC 3.83) articles last year to 17 (CC 8.58) this year, and is now the second leading research institution and the leading research university in China. Peking University, the Hong Kong University of Science and Technology (HKUST), Xiamen University and Shanghai Jiao Tong University (SJTU) have also improved their CC by approximately 1.8–2.5 times that of last year. Special commendations go to the National Center of Biomedical Analysis and Wuhan University of Technology — although they did not make the list in 2010, they have done so in 2011.

If there are ups, there will also be downs. Southeast University experienced the biggest decline among all research institutions in China. Its amount of contributions has dropped from three articles (CC 2.05) in 2010 to two (CC 0.19) in 2011, precipitating a fall from eighth to 62nd in the China rankings. The Hong Kong Polytechnic University and GlaxoSmithKline Research and Development Center are two notable dropouts this year. These universities appeared in China's top 20 in 2010 but did not return to the chart in 2011.

There are four research institutions that did not make China's top ten this year but are worthy of special mention due to the excellence of their research in particular fields. These include Nankai University, based in Tianjin; Anhui Medical University, based in Hefei; China Earthquake Administration, based in Beijing; and the Second Military Medical University, based in Shanghai. In the three years of the China Index (2009–2011), Nankai University, Anhui Medical University, China Earthquake Administration and the Second Military Medical University are the largest contributors to *Nature Chemistry*, *Nature Genetics*, *Nature Geoscience* and *Nature Immunology*, respectively (see Top Institutions by Nature Journal on p. 22). ■

# TOP TEN CITIES

Many people are aware of the rapid growth of China's research output, but not of the dramatic changes that are happening within the country itself. The Nature Publishing Index offers a unique way to assess the research output of a city. Our analysis shows that the top ten Chinese cities for high-quality basic research, in descending order, are Beijing, Shanghai, Hefei, Hong Kong, Nanjing, Wuhan, Xiamen, Hangzhou, Shenzhen and Xi'an. Not only do these ten cities account for approximately 86% of China's total contribution to Nature-branded primary research journals in 2011, they also mark the locations of 19 of the top 20 institutions in the China rankings. The findings will give researchers, business leaders and science policy makers a greater insight into China's emerging cities of scientific innovation. ■

**NATURE PUBLISHING INDEX 2011 CHINA — BY CITY**

| 2011 RANK | CITY | 2011 CORRECTED COUNT | 2010 RANK | 2010 CORRECTED COUNT | 2009 RANK | 2009 CORRECTED COUNT | Total 2009-2011 RANK | Total 2009-2011 CORRECTED COUNT |
|---|---|---|---|---|---|---|---|---|
| 1 | Beijing | 38.92 | 1 | 23.78 | 1 | 17.32 | 1 | 80.02 |
| 2 | Shanghai | 15.92 | 2 | 9.25 | 2 | 10.03 | 2 | 35.20 |
| 3 | Hefei | 9.59 | 5 | 5.19 | 3 | 4.10 | 3 | 18.87 |
| 4 | Hong Kong | 9.15 | 4 | 5.74 | 4 | 2.77 | 4 | 17.65 |
| 5 | Nanjing | 5.36 | 3 | 6.30 | 5 | 1.91 | 5 | 13.57 |
| 6 | Wuhan | 4.22 | 18 | 0.47 | 9 | 0.57 | 9 | 5.26 |
| 7 | Xiamen | 3.77 | 7 | 1.83 | 6 | 1.00 | 7 | 6.59 |
| 8 | Hangzhou | 3.24 | 8 | 1.63 | 8 | 0.66 | 8 | 5.54 |
| 9 | Shenzhen | 3.02 | 6 | 3.67 | 10 | 0.55 | 6 | 7.24 |
| 10 | Xi'an | 1.87 | 13 | 0.84 | – | – | 12 | 2.70 |
| 11 | Shenyang | 1.64 | 16 | 0.55 | 7 | 0.96 | 10 | 3.16 |
| 12 | Jinan | 1.41 | 14 | 0.78 | 17 | 0.12 | 14 | 2.31 |
| 13 | Guangzhou | 1.28 | 9 | 1.38 | 20 | 0.07 | 11 | 2.73 |
| 14 | Changchun | 1.24 | 25 | 0.11 | 11 | 0.37 | 16 | 1.73 |
| 15 | Tianjin | 1.12 | 10 | 1.29 | 16 | 0.14 | 13 | 2.55 |
| 16 | Qingdao | 1.11 | – | – | – | – | 20 | 1.11 |
| 17 | Chongqing | 1.03 | 23 | 0.15 | 22 | 0.04 | 18 | 1.22 |
| 18 | Fuzhou | 0.88 | 12 | 0.84 | 21 | 0.06 | 15 | 1.78 |
| 19 | Dalian | 0.86 | 22 | 0.16 | 19 | 0.09 | 19 | 1.11 |
| 20 | Changsha | 0.52 | – | – | 18 | 0.12 | 24 | 0.64 |


# BEIJING

## CORRECTED COUNT: 38.92


Beijing is the capital city of China, as well as the political and academic centre of the country. It is the place where governmental bodies make key decisions and to where most of the national funding for scientific research is directed. China has established eight of its 19 national laboratories in Beijing, and the city has since become a hotbed of talented scientists and innovative research.

According to Nature Publishing Index 2011 China by City, Beijing continues to be the leading city for high-quality basic research in China. It is responsible for 35% of the country's total contribution to Nature-branded primary research journals this year — the same percentage as last year.

Among China's top 20 research institutions, seven are located in Beijing. These include the Chinese Academy of Sciences (ranked first in the China rankings), Peking University (ranked third), Tsinghua University (ranked fourth), the National Institute of Biological Sciences (ranked 12th), the National Center of Biomedical Analysis (ranked 14th), the Chinese Academy of Medical Sciences & Peking Union Medical College (ranked 16th) and the Chinese Academy of Geological Sciences (20th). The latter three are new entries to the top 20 this year.

Most of these institutions have their primary research strengths in one or two selective areas: for Tsinghua University, structural biology and material physics; for the National Institute of Biological Sciences, structural biology and cell biology; for the National Center for Biomedical Analysis, cell biology; and for the Chinese Academy of Geological Sciences, geosciences.

Among the CAS-affiliated institutes, six have a CC greater than 1.2 — the minimum requirement for making the top 20 this year. Five of these, namely the Institute of Physics, the Institute of Botany, the Institute of Biophysics, the Institute of Vertebrate Paleontology and Paleoanthropology, and the Institute of Zoology, are located in Beijing. ■

# SHANGHAI

## CORRECTED COUNT: 15.92


Shanghai is the financial centre of China, as well as the largest and most populous city in the country. It is also the city with the most research institutions and the largest population of scientists working in the life sciences. Naturally, many international pharmaceutical companies come to Shanghai to set up their headquarters, representative offices and research centres, and the city has grown to become the national base for drug research and development.

According to Nature Publishing Index 2011 China by City, Shanghai is the second leading city for high-quality basic research in China. It is responsible for 14% of the country's total contribution to Nature-branded primary research journals this year — up 1% from last year.

Among China's top 20 research institutions, three are located in Shanghai. These include Shanghai Jiao Tong University (ranked seventh in the China rankings), Fudan University (ranked 13th) and the Second Military Medical University (ranked 15th). The primary research strengths of these institutions are in the life sciences, particularly medical genetics and immunology.

Shanghai Institutes for Biological Sciences is the leading CAS-affiliated institute for this year. It has a CC of 3.74, which would have ranked seventh in the China rankings if it were an independent institute. The primary research strength of the Shanghai Institutes for Biological Sciences is in the field of immunology. ■

# HEFEI

## CORRECTED COUNT: 9.59


Hefei, the capital and the largest city of Anhui province, is a second-tier city by the definition of population or GDP, but a first-tier city by the definition of 'research power'. For a start, Hefei is home to the University of Science and Technology of China, which, as we have shown in the Nature Publishing Index 2011 China, is the leading research university in the country. Secondly, it has two national laboratories — the National Synchrotron Radiation Laboratory and the Hefei National Laboratory for Physical Sciences at the Microscale — and is the only city, apart from Beijing, with more than one national laboratory.

Last year we ranked Hefei as China's fifth leading city for high-quality basic research, behind Beijing, Shanghai, Nanjing and Hong Kong. This year it has moved two places up to third, having overtaken Nanjing and Hong Kong. The city is responsible for 9% of the country's total contribution to Nature-branded primary research journals this year — up 1% from last year.

The University of Science and Technology of China is the only Hefei-based research institution that has made it into China's top 20. However, this university alone is enough to fulfil 89% of Hefei's total contribution to Nature-branded primary research journals.

Hefei is also home to Anhui Medical University (ranked 27th in the China rankings), Anhui Agricultural University (ranked 66th) and Anhui University (ranked 98th). Anhui Medical University, in particular, is China's leading research institution in dermatology-related medical genetics. In the three years of the China Index (2009–2011), Anhui Medical University is the largest contributor to *Nature Genetics*. ■

# HONG KONG

## CORRECTED COUNT: 9.15


Hong Kong, the former British colony turned special administrative region, is the gateway to mainland China. It is one of the most densely populated cities in the world and receives more than 42 million visitors every year. Because of the large number of human traffic, several major outbreaks of infectious diseases have plagued Hong Kong in recent years. In response, Hong Kong has put in place systems to monitor and survey emerging pathogens and the city has since become a global centre for studying viruses, microbes and diseases.

According to Nature Publishing Index 2011 China by City, Hong Kong is the fourth leading city for high-quality basic research in China. It is responsible for 8% of the country's total contribution to Nature-branded primary research journals this year — same percentage as last year.

Among China's top 20 research institutions, three are located in Hong Kong. These include the Hong Kong University of Science and Technology (ranked fifth in the China rankings), the University of Hong Kong (ranked eighth) and the Chinese University of Hong Kong (ranked 18th). The Hong Kong University of Science and Technology, in particular, sees the largest improvement in performance, having progressed from ninth place last year to fifth this year.

The primary research strengths of these institutions lie in different areas: for the Hong Kong University of Science and Technology, neuroscience and theoretical physics; for the University of Hong Kong, microbiology, epidemiology and medicine; and for the Chinese University of Hong Kong, quantum physics. ■

# NANJING

## CORRECTED COUNT: 5.36


Nanjing, the capital city of Jiangsu province, is a city with a long history and rich culture. It is also a manufacturing base for electronics, fine chemicals and construction materials, a major hub for transportation and communications, as well as a major centre for tertiary education and scientific research. Responding to national needs, China has established the Nanjing National Laboratory of Microstructures — a national laboratory that focuses on the studies of optical materials, material physics, materials chemistry and organic chemistry.

According to Nature Publishing Index 2011 China by City, Nanjing is the fifth leading city for high-quality basic research in China. The city is responsible for 5% of the country's total contribution to Nature-branded primary research journals this year — down 4% from last year.

Nanjing University is the only Nanjing-based research institution that has made it into China's top 20. It is responsible for 56% of the city's total contribution to Nature-branded primary research journals.

Nanjing is also home to Nanjing Medical University (ranked 22nd in the China rankings), Southeast University (ranked 62nd) and Nanjing Agricultural University (ranked 66th). The primary research strengths of these institutions lie in different areas: for Nanjing Medical University, cancer genetics; for Southeast University, metamaterials and optics; and for Nanjing Agricultural University, agricultural biotechnology. ■

# WUHAN

## CORRECTED COUNT: 4.22


Wuhan, the capital city of Hubei province, is the most populous city in Central China. It is a manufacturing base for a variety of heavy industries, including steel and automobile industries. In recent years, however, Wuhan has been venturing into higher-tech areas, such as optoelectronics. In response, China has established the Wuhan National Laboratory for Optoelectronics — a national laboratory that focuses on the studies of laser sciences, biomedical optics, light communication and instruments, terahertz technologies, energy optoelectronics and organic optoelectronics.

According to Nature Publishing Index 2011 China by City, Wuhan is the sixth leading city for high-quality basic research in China. The city is responsible for 4% of the country's total contribution to Nature-branded primary research journals this year — up 3% from last year.

Wuhan University of Technology is the only Wuhan-based research institution that has made it into China's top 20. It is responsible for 30% of the city's total contribution to Nature-branded primary research journals.

Wuhan is also home to Huazhong Agricultural University (ranked 21st in the China rankings), Huazhong University of Science and Technology (ranked 25th) and Wuhan University (ranked 64th). The primary research strength of Huazhong Agricultural University, in particular, lies in plant genetics. ■

# XIAMEN

## CORRECTED COUNT: 3.77


Xiamen, also known as Amoy, is a coastal city in Fujian province. It was a treaty port in the 19th century and one of the four original Special Economic Zones opened to foreign investment and trade. Every year thousands of tourists come to Xiamen for its long stretch of beaches, pleasant climate and its stunning natural scenery. Xiamen University, hailed as one of the most beautiful universities in China, sits in a primary location surrounded by luscious green hills and facing the blue sea.

According to Nature Publishing Index 2011 China by City, Xiamen is the seventh leading city for high-quality basic research in China. The city is responsible for 3% of the country's total contribution to Nature-branded primary research journals this year — the same percentage as last year.

Xiamen University is the only Xiamen-based research institution that has made it into China's top 20 in both the 2010 and 2011 Nature Publishing Index China. It is responsible for almost the entirety of the city's total contribution to Nature-branded primary research journals.

The number of papers that Xiamen University produces has been growing steadily at approximately 25% a year for the last five years, with chemistry and cell biology being its greatest research strengths. ■

# HANGZHOU

## CORRECTED COUNT: 3.24


Hangzhou, the capital city of Zhejiang province, is one of the most popular tourist places in China, attracting more than 3 million international and 70 million domestic visitors every year. The city is famous for its West Lake, its rich natural food resources and its production of silk and tea. People often refer to Hangzhou as 'the land of fish and rice,' 'the land of silk' and 'heaven on Earth'. Hangzhou is also home to Zhejiang University, one of China's oldest and most prestigious institutions for higher education and a member of the 'C9 league'.

According to Nature Publishing Index 2011 China by City, Hangzhou is the eighth leading city for high-quality basic research in China. The city is responsible for 3% of the country's total contribution to Nature-branded primary research journals this year — up 1% from last year.

Zhejiang University is the only Hangzhou-based research institution that has made it into China's top 20. It is responsible for 90% of the city's total contribution to Nature-branded primary research journals.

Hangzhou is also home to Hangzhou Normal University (ranked 61st in the China rankings) and Zhejiang Sci-Tech University (ranked 89th). The former publishes mainly articles in the areas of physics and cell biology, whereas the latter publishes articles in the area of structural biology. ■

# SHENZHEN

## CORRECTED COUNT: 3.02


Shenzhen is one of the earliest Special Economic Zones — and arguably the most successful one — in China. The city has attracted a great deal of investment from high-tech companies, especially those in information technology, microelectronics, pharmaceuticals and biotechnology, after Deng Xiaoping made his highly publicised 'inspection tour' in January 1992. High-quality innovative research was unheard of in Shenzhen until the city published its first article in *Nature* in 2006. Since then, Shenzhen has had a remarkable growth in both its quantity and quality of basic research.

According to Nature Publishing Index 2011 China by City, Shenzhen is the ninth leading city for high-quality basic research in China. The city is responsible for 3% of the country's total contribution to Nature-branded primary research journals this year — down 2% from last year.

BGI Shenzhen is the only Shenzhen-based research institution that has made it into China's top 20. It is responsible for almost the entirety of the city's total contribution to Nature-branded primary research journals. The primary research strengths of BGI Shenzhen are in genomics and sequencing technology. ■

# XI'AN

## CORRECTED COUNT: 1.87


Xi'an, the capital of Shaanxi province, is one of the four great ancient capitals of China — the other three are Beijing, Nanjing and Luoyang. The city is the eastern endpoint of the Silk Road and is renowned for the Terracotta Army.

According to Nature Publishing Index 2011 China by City, Xi'an is the tenth leading city for high-quality basic research in China. The city is responsible for 2% of the country's total contribution to Nature-branded primary research journals this year — up 1% from last year. Although Xi'an finishes low in the rankings, the city has been making steady progress year after year.

No Xi'an-based research institutions have made it into China's top 20 this year. The highest-ranked Xi'an-based research institution is Xi'an Jiaotong University (ranked 23rd in the China rankings), which is responsible for 60% of the city's total contribution to Nature-branded primary research journals. The primary strength of Xi'an Jiaotong University lies in the study of mechanical behaviour of materials.

Xi'an is also home to Northwest University (ranked 31st) and the Fourth Military Medical University (ranked 82nd). Northwest University is particularly strong in palaeontology. ■

# USING THE NATURE PUBLISHING INDEX

## HOW TO FIND THE INFORMATION YOU NEED

**www.natureasia.com/publishing-index**

The Nature Publishing Index is maintained by Nature Publishing Group (NPG), a division of Macmillan Publishers that publishes *Nature*, the international science weekly, and over 30 Nature-branded primary research and review journals covering a broad spectrum of the life sciences, physical and chemical sciences, and clinical medicine. Nature journals are among the most highly cited journals in the scientific literature and are renowned for their publication of high-quality, high-impact research.

The index allows institutions and countries/territories to be ranked according to the number of primary research articles they publish in *Nature* and the 17 Nature research journals in a one-year period. The index presents both raw numbers of articles with author affiliations to a given country or institution, and a *corrected count* that is adjusted according to the relative contribution of each author to each published article based on the percentage of authors from that institution or country in the affiliations of the paper. This corrected count is tallied over a one-year period and used to rank the institutions and countries according to their contribution to Nature journals. Only articles printed in the ranking period are included in the calculation of the index — advance online publications are not included in the index until assigned an issue number and sent to press. The Nature Publishing Index 2011 Asia-Pacific is for the calendar year 2011: January 1 to December 31.

The index, online at **www.natureasia.com/publishing-index**, is updated every week with a moving window of one-year of data. The index website provides links to the abstracts of all articles used to calculate corrected counts, providing the details of individual papers and authors contributing to an institution or country's rank in the index and making the index fully transparent.

The index website also provides data for review articles published in Nature journals for the Asia-Pacific region. Review articles, however, are not included in the annual rankings because reviews are commissioned by Nature journal editors rather than being papers submitted by researchers.

### NATURE PUBLISHING INDEX ASIA-PACIFIC

The Asia-Pacific index is updated weekly and includes articles published in the latest issues of the Nature journals. Users of the index website can subscribe for weekly email alerts to keep up to date with the latest results from the region. A print publication presenting the frozen data for each calendar year is published annually.

### NATURE PUBLISHING INDEX GLOBAL TOP 100

The Global Top 100 is an index of the top 100 institutions based on publications in *Nature* and the Nature research journals. The index is updated annually and is currently in the beta stage of development as the algorithms that underlie the index calculations and determine affiliations undergo continued improvements for accuracy.

### CORRECTED COUNT

The Nature Publishing Index is based on an article's *corrected count* — a calculation that takes into account the number of affiliated institutions per author and the percentage of authors per institution. All authors are considered to have contributed equally to each article. The maximum corrected count for any article is 1.0. The corrected count for a country/territory reflects the total corrected count for all institutions based in that region. The rules governing the calculation of corrected counts with respect to the way affiliations are presented are adjusted regularly to account for new scenarios.

The Nature Publishing Index is based on affiliation data drawn from Nature journal articles published on nature.com. There is great variability in the way authors present their affiliations. Every effort is made to count affiliations in a consistent way making reasonable assumptions to determine corrected counts and these assumptions are explained on the index website. As such, the corrected counts are approximations based on these assumptions and no counts are definitive.

### RANKINGS, GRAPHS AND LISTS

#### COUNTRY RANKINGS

Countries and territories are ranked according to corrected count and can also be filtered by article type using the selector at the top of the page. Clicking on a country name will display a list of institutions within that country/territory.

#### INSTITUTION RANKINGS

The institutional rankings track institutions in the Asia-Pacific region (including India and Australasia) according to corrected count. Data for primary research articles (Articles, Letters and Brief Communications), reviews, or a combination of both, can be viewed by selecting the appropriate tab in the article filter at the top of the page.

By default, the top 25 institutions are listed; clicking on 'Show all' at the bottom of the list will display all of the institutions. Clicking on the number in the 'Articles' column displays a list of all the articles from that particular institution.

Global institutional rankings are also available under the Global Top 100 website. The global index page shows the list of institutions ranked by corrected count, and the list of Nature articles contributing to the corrected count can be accessed by clicking on the number in the 'Articles' column.

## RANKINGS BY NATURE JOURNAL

The journal rankings group all articles from the Asia-Pacific region according to their Nature research journal, and can be filtered by article type. By default, the top five institutions are listed for each journal. Clicking on 'Show All' lists all of the institutions from the Asia-Pacific that have affiliations listed in that journal, and clicking on the number of articles displays a list of the articles from that journal with affiliations from that institution.

## HISTORICAL RANKINGS

The historical rankings track data by Asia-Pacific country for primary research articles (reviews are not included) back to 2000. Clicking on the year at the top of the table will display the rankings for that year based on the corrected count.

## HISTORICAL GRAPHS

These graphs provide a visual representation of the historical data based on primary research articles only. By default, the top five countries are displayed but users can freely select or deselect the countries of their choice. The graph is redrawn after a change in selection. By default, data for the corrected count is displayed; however, data for the number of articles can also be selected. Clicking on 'Show Data' will display the numerical values (rounded to the closest whole number) along the line graph.

## LATEST RESEARCH

The latest research section provides a breakdown of the latest publications in Nature journals from the Asia-Pacific region by country/territory, including journal name and article title.

# HOW TO READ THE INDEX

## ARTICLE FILTER

The index primarily tracks research articles, but data on reviews is also available. At the top of most ranking lists there is an article filter. Since the index focuses on primary research articles, the tab for 'Research Articles' is selected by default. However, clicking on 'Reviews' displays data for review articles, while clicking on 'All' displays both primary research articles and reviews.

**Research Articles** | Reviews | All

| Institution | Corrected Count[2] | Articles[3] |
|---|---|---|
| 1. The University of Tokyo, Japan | 41.42 | 103 |
| 2. ⊞Chinese Academy of Science (CAS), China | 23.34 | 64 |
| 3. Kyoto University, Japan | 22.34 | 54 |
| 4. RIKEN, Japan | 20.29 | 71 |
| 5. Osaka University, Japan | 19.17 | 54 |

Research Articles | **Reviews** | All

| Institution | Corrected Count[3] | Articles[4] |
|---|---|---|
| 1. The University of Tokyo, Japan | 4.05 | 6 |
| 2. The University of Sydney, Australia | 4.00 | 5 |
| 3. Monash University, Australia | 3.50 | 7 |
| 4. The University of Melbourne, Australia | 3.33 | 8 |
| 5. The University of New South Wales, Australia | 3.15 | 7 |

Research Articles | Reviews | **All**

| Institution | Corrected Count[3] | Articles[4] |
|---|---|---|
| 1. The University of Tokyo, Japan | 45.47 | 109 |
| 2. ⊞Chinese Academy of Science (CAS), China | 23.67 | 65 |
| 3. Kyoto University, Japan | 23.34 | 55 |
| 4. RIKEN, Japan | 23.20 | 76 |
| 5. Osaka University, Japan | 19.77 | 54 |

## EXPANDED AFFILIATIONS

Certain organizations, such as the Chinese Academy of Sciences and the Agency for Science, Technology and Research are umbrella agencies with many affiliated institutions. Such organizations are indicated by a plus mark ('+') in the index lists and can be expanded to show the contribution from each constituent institution.

Research Articles | Reviews | **All**

| Institution | Corrected Count[3] | Articles[4] |
|---|---|---|
| 1. The University of Tokyo, Japan | 45.47 | 109 |
| 2. ⊟Chinese Academy of Science (CAS), China | 23.67 | 65 |
| Shanghai Instituted for biological Sciences (SIBS), CAS | 4.16 | 14 |
| Institute of Physics (IOP), CAS | 3.58 | 11 |
| Institute of Botany (IOB), CAS | 2.53 | 6 |
| Institute of Biophysics (IBP), CAS | 2.41 | 5 |
| Institute of Vertebrate Palentology and Paleoanthropology (IVPP), CAS | 1.51 | 3 |

## ARTICLES

The number of articles reflects the total number of articles with author affiliations for a particular institution or country. Institutions and countries are counted once per article. Clicking on the number of articles in any of the index ranking lists brings up a list of all of the articles published by an institution or country/territory in the past year. The articles contributing to the index are listed along with the name of the Nature journal and the corrected count associated with that article. Hovering over the article title reveals the article DOI and clicking on the title opens the article abstract on **nature.com**.

**Research Articles** | Reviews | All

| Journal | Title | CC[2] |
|---|---|---|
| *Nature Communications* | evidence for synchronicity between a rise in atmospheric and Palaeoproterozoic deglaciation | 0.45 |
| *Nature* | imaging of T cells providing immune privilege to the haematopoietic stem-cell niche | 0.13 |

# TOP 100 INSTITUTIONS

## CHINA 2011

### NATURE PUBLISHING INDEX 2011 CHINA — INSTITUTIONS

| 2011 | | | | | 2010 | | | 2009 | | | Total 2009-2011 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RANK | INSTITUTION | CORRECTED COUNT | ARTICLES | ASIA-PACIFIC RANK | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES |
| 1 | Chinese Academy of Sciences (CAS) | 22.52 | 62 | 3 | 1 | 14.27 | 41 | 1 | 12.01 | 31 | 1 | 48.80 | 134 |
| 2 | University of Science and Technology of China | 8.58 | 17 | 11 | 3 | 3.83 | 8 | 4 | 2.67 | 8 | 3 | 15.08 | 33 |
| 3 | Peking University | 7.24 | 21 | 13 | 5 | 3.46 | 17 | 3 | 2.82 | 9 | 4 | 13.51 | 47 |
| 4 | Tsinghua University | 6.36 | 16 | 15 | 2 | 6.15 | 16 | 2 | 3.32 | 9 | 2 | 15.83 | 41 |
| 5 | The Hong Kong University of Science and Technology (HKUST) | 3.86 | 5 | 23 | 9 | 1.86 | 3 | – | – | – | 10 | 5.72 | 8 |
| 6 | Xiamen University | 3.77 | 6 | 25 | 10 | 1.83 | 3 | 11 | 1.00 | 1 | 8 | 6.59 | 10 |
| 7 | Shanghai Jiao Tong University (SJTU) | 3.73 | 21 | 28 | 19 | 0.99 | 4 | 5 | 1.76 | 10 | 9 | 6.48 | 35 |
| 8 | The University of Hong Kong | 3.58 | 12 | 29 | 7 | 2.17 | 8 | 8 | 1.36 | 5 | 6 | 7.10 | 25 |
| 9 | Nanjing University | 3.01 | 11 | 35 | 6 | 3.16 | 8 | 7 | 1.41 | 5 | 5 | 7.58 | 24 |
| 10 | BGI Shenzhen | 2.97 | 11 | 36 | 4 | 3.59 | 9 | 19 | 0.52 | 1 | 7 | 7.08 | 21 |
| 11 | Zhejiang University | 2.96 | 8 | 37 | 12 | 1.58 | 12 | 14 | 0.66 | 4 | 11 | 5.20 | 24 |
| 12 | National Institute of Biological Sciences (NIBS) | 2.91 | 7 | 38 | 17 | 1.04 | 2 | 21 | 0.44 | 1 | 14 | 4.39 | 10 |
| 13 | Fudan University | 2.34 | 14 | 45 | 13 | 1.43 | 9 | 12 | 0.93 | 6 | 12 | 4.71 | 29 |
| 14 | National Center of Biomedical Analysis | 1.82 | 2 | 50 | – | – | – | – | – | – | 23 | 1.82 | 2 |
| 15 | Second Military Medical University | 1.65 | 6 | 54 | 11 | 1.78 | 3 | 9 | 1.04 | 3 | 13 | 4.47 | 12 |
| 16 | Chinese Academy of Medical Sciences & Peking Union Medical College | 1.47 | 14 | 56 | 41 | 0.19 | 4 | 33 | 0.19 | 1 | 22 | 1.85 | 19 |
| 17 | Wuhan University of Technology | 1.27 | 2 | 64 | – | – | – | – | – | – | 31 | 1.27 | 2 |
| 18 | The Chinese University of Hong Kong | 1.25 | 2 | 66 | 24 | 0.71 | 5 | 10 | 1.02 | 4 | 16 | 2.98 | 11 |
| 19 | Jilin University | 1.24 | 3 | 69 | 53 | 0.11 | 2 | 23 | 0.37 | 4 | 24 | 1.73 | 9 |
| 20 | Chinese Academy of Geological Sciences (CAGS) | 1.20 | 3 | 70 | 29 | 0.50 | 2 | 27 | 0.25 | 1 | 20 | 1.95 | 6 |
| 21 | Huazhong Agricultural University | 1.20 | 4 | 72 | 74 | 0.03 | 1 | – | – | – | 33 | 1.23 | 5 |
| 22 | Nanjing Medical University | 1.18 | 5 | 73 | 16 | 1.07 | 3 | – | – | – | 18 | 2.24 | 8 |
| 23 | Xi'an Jiaotong University | 1.12 | 4 | 77 | 23 | 0.80 | 2 | – | – | – | 21 | 1.92 | 6 |
| 24 | Nankai University | 1.03 | 2 | 80 | 15 | 1.24 | 4 | 38 | 0.14 | 1 | 17 | 2.41 | 7 |
| 25 | Huazhong University of Science and Technology (HUST) | 1.00 | 6 | 83 | – | – | – | 25 | 0.35 | 2 | 30 | 1.35 | 8 |
| 26 | Southwest University | 0.87 | 1 | 94 | 46 | 0.15 | 1 | – | – | – | 34 | 1.02 | 2 |
| 27 | Anhui Medical University | 0.73 | 4 | 105 | 14 | 1.36 | 3 | 6 | 1.42 | 3 | 15 | 3.51 | 10 |
| 28 | University of Shanghai for Science and Technology | 0.68 | 1 | 111 | – | – | – | – | – | – | 44 | 0.68 | 1 |
| 29 | Shandong University | 0.67 | 6 | 114 | 26 | 0.63 | 4 | 48 | 0.10 | 1 | 28 | 1.40 | 11 |
| 30 | Ocean University of China | 0.67 | 2 | 115 | – | – | – | – | – | – | 46 | 0.67 | 2 |
| 31 | Northwest University | 0.64 | 2 | 119 | – | – | – | – | – | – | 47 | 0.64 | 2 |
| 32 | Chinese Academy of Agricultural Sciences (CAAS) | 0.62 | 4 | 123 | 27 | 0.63 | 4 | 24 | 0.35 | 2 | 25 | 1.60 | 10 |
| 33 | Shandong Academy of Medical Sciences | 0.62 | 1 | 124 | 48 | 0.15 | 2 | 66 | 0.01 | 1 | 40 | 0.78 | 4 |
| 34 | Fujian Medical University | 0.58 | 2 | 128 | 97 | 0.01 | 1 | – | – | – | 49 | 0.59 | 3 |
| 35 | Sun Yat-sen University | 0.55 | 7 | 132 | 21 | 0.89 | 7 | 56 | 0.06 | 1 | 26 | 1.50 | 15 |
| 36 | Beihang University (BUAA) | 0.50 | 1 | 137 | 39 | 0.25 | 1 | – | – | – | 42 | 0.75 | 2 |
| 37 | City University of Hong Kong | 0.46 | 2 | 144 | – | – | – | – | – | – | 58 | 0.46 | 2 |
| 38 | China University of Geosciences | 0.43 | 4 | 149 | – | – | – | 34 | 0.17 | 3 | 48 | 0.61 | 7 |
| 39 | East China University of Science and Technology (ECUST) | 0.43 | 2 | 150 | – | – | – | – | – | – | 60 | 0.43 | 2 |
| 40 | China Earthquake Administration | 0.41 | 2 | 155 | 34 | 0.32 | 2 | 15 | 0.63 | 1 | 29 | 1.36 | 5 |
| 41 | Shanghai Normal University (SHNU) | 0.40 | 1 | 156 | – | – | – | – | – | – | 63 | 0.40 | 1 |
| 42 | Central South University (CSU) | 0.37 | 4 | 159 | – | – | – | 47 | 0.12 | 2 | 56 | 0.49 | 6 |
| 43 | National Center for Nanoscience and Technology (NCNST) | 0.37 | 2 | 160 | 51 | 0.13 | 1 | – | – | – | 57 | 0.49 | 3 |
| 44 | Soochow University | 0.35 | 5 | 161 | 36 | 0.29 | 2 | 36 | 0.15 | 2 | 39 | 0.79 | 9 |
| 45 | Shenyang Normal University | 0.33 | 1 | 165 | – | – | – | 15 | 0.63 | 1 | 36 | 0.96 | 2 |
| 46 | Beijing Normal University | 0.29 | 4 | 186 | 31 | 0.35 | 2 | 60 | 0.03 | 1 | 45 | 0.67 | 7 |
| 47 | Shantou University | 0.29 | 2 | 187 | 70 | 0.04 | 2 | – | – | – | 70 | 0.33 | 4 |
| 48 | China Medical University (PRC) | 0.27 | 5 | 203 | 67 | 0.04 | 1 | 31 | 0.20 | 2 | 54 | 0.51 | 8 |

| 2011 | | | | | 2010 | | | 2009 | | | Total 2009-2011 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RANK | INSTITUTION | CORRECTED COUNT | ARTICLES | ASIA-PACIFIC RANK | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES |
| 49 | Dalian University of Technology (DUT) | 0.26 | 2 | 204 | 44 | 0.16 | 2 | – | – | – | 62 | 0.42 | 4 |
| 50 | South China University of Technology | 0.25 | 2 | 205 | 42 | 0.17 | 5 | 72 | 0.01 | 1 | 59 | 0.44 | 8 |
| 51 | Beijing Museum of Natural History | 0.25 | 1 | 206 | – | – | – | – | – | – | 71 | 0.25 | 1 |
| 51 | Capital Normal University | 0.25 | 1 | 206 | – | – | – | – | – | – | 71 | 0.25 | 1 |
| 51 | Chengdu University of Technology | 0.25 | 1 | 206 | – | – | – | – | – | – | 71 | 0.25 | 1 |
| 54 | Capital Medical University (CMU) | 0.23 | 3 | 222 | 86 | 0.02 | 2 | 43 | 0.13 | 1 | 66 | 0.38 | 6 |
| 55 | Guangzhou No. 12 People's Hospital | 0.22 | 1 | 227 | – | – | – | – | – | – | 77 | 0.22 | 1 |
| 56 | East China Normal University | 0.21 | 1 | 230 | 54 | 0.11 | 2 | 22 | 0.39 | 2 | 43 | 0.72 | 5 |
| 56 | Shanghai Dong Fang Hospital | 0.21 | 1 | 230 | – | – | – | – | – | – | 78 | 0.21 | 1 |
| 58 | Zhengzhou University | 0.21 | 2 | 233 | 28 | 0.58 | 3 | – | – | – | 38 | 0.79 | 5 |
| 59 | Hebei Normal University | 0.21 | 1 | 235 | – | – | – | 30 | 0.22 | 1 | 61 | 0.43 | 2 |
| 60 | Northwest A&F University | 0.20 | 1 | 238 | – | – | – | – | – | – | 80 | 0.20 | 1 |
| 61 | Hangzhou Normal University | 0.20 | 3 | 243 | – | – | – | – | – | – | 82 | 0.20 | 3 |
| 62 | China Academy of Engineering Physics (CAEP) | 0.19 | 1 | 249 | 82 | 0.02 | 1 | – | – | – | 79 | 0.21 | 2 |
| 62 | Southeast University | 0.19 | 2 | 249 | 8 | 2.05 | 3 | – | – | – | 19 | 2.24 | 5 |
| 64 | Wuhan University | 0.18 | 2 | 253 | 35 | 0.29 | 3 | 58 | 0.05 | 1 | 53 | 0.53 | 6 |
| 65 | Chinese National Human Genome Center at Shanghai | 0.17 | 3 | 260 | 67 | 0.04 | 1 | 18 | 0.54 | 3 | 41 | 0.76 | 7 |
| 66 | Anhui Agricultural University (AHAU) | 0.17 | 1 | 261 | – | – | – | – | – | – | 86 | 0.17 | 1 |
| 66 | Nanjing Agricultural University | 0.17 | 1 | 261 | 83 | 0.02 | 1 | – | – | – | 84 | 0.19 | 2 |
| 68 | Renmin University of China | 0.17 | 3 | 272 | 65 | 0.05 | 1 | 71 | 0.01 | 1 | 76 | 0.23 | 5 |
| 69 | Chinese Academy of Forestry (CAF) | 0.15 | 1 | 277 | – | – | – | – | – | – | 88 | 0.15 | 1 |
| 70 | Lanzhou University | 0.15 | 3 | 278 | 71 | 0.04 | 1 | – | – | – | 83 | 0.19 | 4 |
| 71 | University of Science and Technology Beijing (USTB) | 0.14 | 1 | 289 | – | – | – | – | – | – | 92 | 0.14 | 1 |
| 72 | National Engineering Research Center for Crop Molecular Design | 0.13 | 1 | 294 | – | – | – | – | – | – | 94 | 0.13 | 1 |
| 73 | China Aerospace Science and Technology Corporation (CASC) | 0.13 | 1 | 298 | – | – | – | – | – | – | 99 | 0.13 | 1 |
| 73 | Linyi University | 0.13 | 1 | 298 | – | – | – | – | – | – | 99 | 0.13 | 1 |
| 73 | Shandong University of Science and Technology | 0.13 | 1 | 298 | – | – | – | – | – | – | 99 | 0.13 | 1 |
| 73 | South China Normal University | 0.13 | 1 | 298 | – | – | – | – | – | – | 99 | 0.13 | 1 |
| 77 | Tongji University | 0.12 | 2 | 316 | 57 | 0.09 | 2 | 35 | 0.16 | 2 | 67 | 0.37 | 6 |
| 78 | Chongqing University | 0.12 | 1 | 319 | – | – | – | – | – | – | 104 | 0.12 | 1 |
| 79 | Energy Research Institute (ERI) | 0.11 | 1 | 320 | – | – | – | – | – | – | 105 | 0.11 | 1 |
| 79 | Jiaxing Xinda Biotechnology Company | 0.11 | 1 | 320 | – | – | – | – | – | – | 105 | 0.11 | 1 |
| 79 | Nanchang University | 0.11 | 1 | 320 | – | – | – | – | – | – | 105 | 0.11 | 1 |
| 82 | Fourth Military Medical University | 0.11 | 2 | 339 | 76 | 0.03 | 1 | – | – | – | 93 | 0.14 | 3 |
| 83 | Beijing Institute of Technology | 0.10 | 1 | 344 | – | – | – | – | – | – | 109 | 0.10 | 1 |
| 83 | National Infrastructure of Earthquake Centre | 0.10 | 1 | 344 | – | – | – | – | – | – | 109 | 0.10 | 1 |
| 83 | Shanghai University | 0.10 | 1 | 344 | – | – | – | – | – | – | 109 | 0.10 | 1 |
| 83 | Sichuan Bureau of Surveying and Mapping | 0.10 | 1 | 344 | – | – | – | – | – | – | 109 | 0.10 | 1 |
| 83 | Sichuan Earthquake Administration | 0.10 | 1 | 344 | – | – | – | – | – | – | 109 | 0.10 | 1 |
| 88 | Shanghai Changning Mental Health Center | 0.10 | 2 | 356 | – | – | – | – | – | – | 118 | 0.10 | 2 |
| 89 | Hunan University | 0.08 | 1 | 370 | – | – | – | – | – | – | 123 | 0.08 | 1 |
| 89 | Zhejiang Sci-Tech University | 0.08 | 1 | 370 | – | – | – | – | – | – | 123 | 0.08 | 1 |
| 91 | Dalian Medical University | 0.08 | 2 | 386 | – | – | – | 66 | 0.01 | 1 | 119 | 0.10 | 3 |
| 92 | Jining Medical College | 0.08 | 2 | 387 | – | – | – | – | – | – | 125 | 0.08 | 2 |
| 93 | The General Hospital of Chinese People's Liberation Army | 0.08 | 2 | 399 | – | – | – | – | – | – | 127 | 0.08 | 2 |
| 94 | Xinxiang Medical University | 0.07 | 1 | 407 | 43 | 0.17 | 1 | – | – | – | 75 | 0.24 | 2 |
| 95 | Linyi People's Hospital | 0.07 | 2 | 408 | – | – | – | – | – | – | 128 | 0.07 | 2 |
| 96 | The 90th Hospital of Jinan | 0.07 | 1 | 411 | – | – | – | – | – | – | 131 | 0.07 | 1 |
| 97 | Beijing Hospital | 0.07 | 1 | 412 | – | – | – | – | – | – | 132 | 0.07 | 1 |
| 98 | Anhui University | 0.06 | 1 | 430 | – | – | – | – | – | – | 141 | 0.06 | 1 |
| 98 | Yunnan University | 0.06 | 1 | 430 | 77 | 0.03 | 1 | – | – | – | 121 | 0.08 | 2 |
| 100 | Jiangsu Provincial Center for Disease Control and Prevention | 0.05 | 1 | 436 | – | – | – | – | – | – | 143 | 0.05 | 1 |

# TOP INSTITUTIONS BY NATURE JOURNAL

## CHINA 2009–2011

The flagship journal *Nature* — which celebrated its 142nd anniversary in 2011 — is the mother of a growing family of Nature Publishing Group (NPG) journals. Recently that family welcomed its latest addition in the shape of *Nature Climate Change* which was launched in April 2011. Along with *Nature Communications*, launched in 2010 as the first interdisciplinary journal from NPG since *Nature* itself, this brings the total number of primary research journals included in the Nature Publishing Index to eighteen. Whilst *Nature* and *Nature Communications* are published every week, the Nature research journals, covering a wide range of disciplines in the life, physical and chemical sciences, are published monthly. The top five Asia-Pacific institutions publishing in *Nature* and the Nature research titles **calculated from an aggregate of the past three years of data covering the period (2009–2011)** are presented below.

### NATURE

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Chinese Academy of Sciences (CAS) | 13.56 | 55 |
| 2 | Tsinghua University | 7.07 | 12 |
| 3 | The University of Hong Kong | 3.32 | 9 |
| 4 | National Institute of Biological Sciences (NIBS) | 3.06 | 5 |
| 5 | Peking University | 2.7 | 13 |
| 6 | BGI Shenzhen | 2.16 | 9 |
| 7 | University of Science and Technology of China | 1.69 | 4 |
| 8 | Chinese Academy of Geological Sciences (CAGS) | 1.33 | 4 |
| 9 | Shenyang Normal University | 0.96 | 2 |
| 10 | Shanghai Jiao Tong University (SJTU) | 0.9 | 10 |

### NATURE BIOTECHNOLOGY

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | BGI Shenzhen | 1.74 | 4 |
| 2 | Southwest University | 1.02 | 2 |
| 3 | The University of Hong Kong | 0.94 | 1 |
| 4 | Chinese Academy of Sciences (CAS) | 0.27 | 5 |
| 5 | Shanghai Cancer Institute | 0.26 | 1 |

### NATURE CELL BIOLOGY

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Peking University | 1.99 | 3 |
| 2 | Shanghai Jiao Tong University (SJTU) | 1.95 | 3 |
| 3 | Chinese Academy of Sciences (CAS) | 1.68 | 8 |
| 4 | The Hong Kong University of Science and Technology (HKUST) | 1.55 | 2 |
| 5 | Xiamen University | 1.55 | 2 |

### NATURE CHEMICAL BIOLOGY

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Chinese Academy of Sciences (CAS) | 1.13 | 2 |
| 2 | Peking University | 0.85 | 1 |
| 3 | Shandong University | 0.12 | 1 |
| 4 | Zhejiang University | 0.05 | 1 |
| 5 | Tsinghua-Peking Center for Life Sciences | 0.04 | 1 |

### NATURE CHEMISTRY

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Nankai University | 2 | 2 |
| 2 | Chinese Academy of Sciences (CAS) | 1.44 | 3 |
| 3 | Fudan University | 1 | 1 |
| 3 | Xiamen University | 1 | 1 |
| 5 | Peking University | 0.9 | 1 |

### NATURE CLIMATE CHANGE

| Total 2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Chinese Academy of Sciences (CAS) | 0.38 | 2 |
| 2 | Northwest A&F University | 0.2 | 1 |
| 3 | Ocean University of China | 0.17 | 1 |
| 4 | Chinese Academy of Forestry (CAF) | 0.15 | 2 |
| 5 | Energy Research Institute (ERI) | 0.11 | 1 |

### NATURE COMMUNICATIONS

| Total 2010–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Chinese Academy of Sciences (CAS) | 7.96 | 21 |
| 2 | University of Science and Technology of China | 4.86 | 8 |
| 3 | Peking University | 2.57 | 5 |
| 4 | Tsinghua University | 2.45 | 6 |
| 5 | Nanjing University | 2.39 | 7 |

## NATURE GENETICS

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Anhui Medical University | 3.51 | 10 |
| 2 | Chinese Academy of Sciences (CAS) | 3.42 | 19 |
| 3 | BGI Shenzhen | 2.9 | 7 |
| 4 | Shanghai Jiao Tong University (SJTU) | 2.71 | 14 |
| 5 | Nanjing Medical University | 1.22 | 6 |

## NATURE GEOSCIENCE

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | China Earthquake Administration | 1.15 | 4 |
| 2 | Chinese Academy of Sciences (CAS) | 0.93 | 4 |
| 3 | University of Science and Technology of China | 0.89 | 2 |
| 4 | Chinese Academy of Geological Sciences (CAGS) | 0.62 | 2 |
| 5 | Ocean University of China | 0.5 | 1 |

## NATURE IMMUNOLOGY

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Second Military Medical University | 3.9 | 5 |
| 2 | Chinese Academy of Sciences (CAS) | 2.72 | 6 |
| 3 | Tsinghua University | 1 | 1 |
| 4 | Peking University | 1 | 1 |
| 5 | Zhejiang University | 0.81 | 3 |

## NATURE MATERIALS

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | The Hong Kong University of Science and Technology (HKUST) | 1.65 | 2 |
| 2 | Chinese Academy of Sciences (CAS) | 1.62 | 4 |
| 3 | Nanjing University | 1.27 | 3 |
| 4 | The Hong Kong Polytechnic University | 1 | 1 |
| 5 | Fudan University | 0.66 | 2 |

## NATURE MEDICINE

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Chinese Academy of Sciences (CAS) | 1.18 | 3 |
| 2 | Nanjing Medical University | 1 | 1 |
| 3 | GlaxoSmithKline Research and Development Center | 0.94 | 1 |
| 4 | National Center of Biomedical Analysis | 0.82 | 1 |
| 5 | Central South University (CSU) | 0.28 | 1 |

## NATURE METHODS

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | BGI Shenzhen | 0.29 | 1 |
| 2 | China Agricultural University | 0.13 | 1 |
| 3 | The University of Hong Kong | 0.06 | 1 |
| 4 | Chinese Academy of Medical Sciences & Peking Union Medical College | 0.05 | 1 |

## NATURE NANOTECHNOLOGY

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Nanjing University | 2.19 | 4 |
| 2 | The Chinese University of Hong Kong | 1.5 | 2 |
| 3 | Fudan University | 1.05 | 4 |
| 4 | Xiamen University | 1 | 1 |
| 5 | Shanghai Jiao Tong University (SJTU) | 0.61 | 1 |

## NATURE NEUROSCIENCE

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Chinese Academy of Sciences (CAS) | 2.66 | 6 |
| 2 | The Hong Kong University of Science and Technology (HKUST) | 2 | 2 |
| 3 | Peking University | 0.56 | 2 |
| 4 | Sichuan University | 0.42 | 2 |
| 5 | The University of Hong Kong | 0.27 | 1 |

## NATURE PHOTONICS

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | University of Science and Technology of China | 3.65 | 6 |
| 2 | Peking University | 1 | 1 |
| 3 | University of Shanghai for Science and Technology | 0.68 | 1 |
| 4 | Nanjing University | 0.5 | 1 |
| 5 | The Hong Kong University of Science and Technology (HKUST) | 0.5 | 1 |

## NATURE PHYSICS

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Chinese Academy of Sciences (CAS) | 3.95 | 14 |
| 2 | University of Science and Technology of China | 2.83 | 6 |
| 3 | Tsinghua University | 1.15 | 6 |
| 4 | Peking University | 0.32 | 3 |
| 5 | Nanjing University | 0.21 | 1 |

## NATURE STRUCTURAL & MOLECULAR BIOLOGY

| Total 2009–2011 RANK | INSTITUTION | CORRECTED COUNT | ARTICLES |
|---|---|---|---|
| 1 | Chinese Academy of Sciences (CAS) | 4.3 | 12 |
| 2 | Tsinghua University | 2.06 | 5 |
| 3 | Zhejiang University | 1.25 | 2 |
| 4 | Graduate University of the Chinese Academy of Sciences (GUCAS) | 1.1 | 2 |
| 5 | National Institute of Biological Sciences (NIBS) | 0.55 | 2 |

# TOP 200 INSTITUTIONS

## ASIA-PACIFIC 2011

The complete list of institutions and universities appearing in the Nature Publishing Index from the Asia-Pacific region in 2011 runs to almost 600 contributors — an increase of 42% on the previous year — from 17 countries in the region. Below we present the article and corrected count data for the top 200 universities and institutions in 2011, along with corresponding data for 2010 and 2009 and combined scores for the three years 2009–2011. These data incorporate contributions from Brief Communications for all three years, something which was not the case in previous editions of this report. We hope that the inclusion of this new information, as well as historical and three-year aggregated data will give our readers a more detailed insight into the developing dynamic and long-term trends in the index.

**NATURE PUBLISHING INDEX 2011 ASIA-PACIFIC — INSTITUTIONS**

| 2011 | | | | | 2010 | | | 2009 | | | Total 2009-2011 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RANK | INSTITUTION | COUNTRY | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES |
| 1 | The University of Tokyo | Japan | 42.88 | 109 | 1 | 36.51 | 84 | 1 | 29.47 | 70 | 1 | 108.87 | 263 |
| 2 | Kyoto University | Japan | 23.98 | 56 | 3 | 16.97 | 35 | 2 | 19.57 | 44 | 2 | 60.52 | 135 |
| 3 | Chinese Academy of Sciences (CAS) | China | 22.52 | 62 | 4 | 14.27 | 41 | 5 | 12.01 | 31 | 4 | 48.80 | 134 |
| 4 | RIKEN | Japan | 19.96 | 70 | 2 | 19.76 | 53 | 4 | 12.56 | 42 | 3 | 52.28 | 165 |
| 5 | Osaka University | Japan | 17.31 | 48 | 5 | 13.33 | 35 | 3 | 17.04 | 37 | 5 | 47.68 | 120 |
| 6 | Seoul National University | Korea | 11.27 | 32 | 10 | 4.99 | 18 | 7 | 5.95 | 13 | 7 | 22.21 | 63 |
| 7 | Tohoku University | Japan | 11.01 | 29 | 6 | 8.03 | 22 | 6 | 7.08 | 23 | 6 | 26.12 | 74 |
| 8 | The University of Melbourne | Australia | 9.83 | 46 | 27 | 2.60 | 17 | 12 | 4.26 | 23 | 9 | 16.69 | 86 |
| 9 | Nagoya University | Japan | 9.67 | 26 | 8 | 5.44 | 14 | 9 | 4.86 | 13 | 8 | 19.97 | 53 |
| 10 | National Institute of Advanced Industrial Science and Technology (AIST) | Japan | 9.03 | 22 | 12 | 4.54 | 18 | 28 | 2.09 | 9 | 12 | 15.66 | 49 |
| 11 | University of Science and Technology of China | China | 8.58 | 17 | 16 | 3.83 | 8 | 20 | 2.67 | 8 | 13 | 15.08 | 33 |
| 12 | The University of Queensland | Australia | 7.70 | 34 | 14 | 4.38 | 16 | 11 | 4.35 | 18 | 10 | 16.44 | 68 |
| 13 | Peking University | China | 7.24 | 21 | 19 | 3.46 | 17 | 19 | 2.82 | 9 | 16 | 13.51 | 47 |
| 14 | Australian National University | Australia | 7.18 | 13 | 31 | 2.17 | 10 | 10 | 4.65 | 15 | 14 | 14.01 | 38 |
| 15 | Tsinghua University | China | 6.36 | 16 | 7 | 6.15 | 16 | 16 | 3.32 | 9 | 11 | 15.83 | 41 |
| 16 | National University of Singapore | Singapore | 6.28 | 32 | 17 | 3.76 | 23 | 22 | 2.46 | 9 | 18 | 12.50 | 64 |
| 17 | Monash University | Australia | 5.24 | 17 | 20 | 3.24 | 10 | 18 | 3.05 | 10 | 19 | 11.53 | 37 |
| 18 | The University of Sydney | Australia | 5.00 | 30 | 13 | 4.40 | 23 | 17 | 3.13 | 9 | 17 | 12.54 | 62 |
| 19 | Kyushu University | Japan | 4.58 | 19 | 29 | 2.35 | 10 | 14 | 3.60 | 12 | 21 | 10.53 | 41 |
| 20 | National Institute for Materials Science (NIMS) | Japan | 4.52 | 12 | 33 | 2.08 | 7 | 26 | 2.31 | 5 | 24 | 8.90 | 24 |
| 21 | Hokkaido University | Japan | 4.26 | 16 | 15 | 4.05 | 8 | 31 | 1.67 | 5 | 22 | 9.97 | 29 |
| 22 | The University of Western Australia | Australia | 4.08 | 22 | 113 | 0.49 | 15 | 36 | 1.41 | 11 | 37 | 5.98 | 48 |
| 23 | The Hong Kong University of Science and Technology (HKUST) | China | 3.86 | 5 | 37 | 1.86 | 3 | – | – | – | 39 | 5.72 | 8 |
| 24 | The Commonwealth Scientific and Industrial Research Organisation (CSIRO) | Australia | 3.81 | 13 | 26 | 2.62 | 11 | 49 | 1.12 | 6 | 27 | 7.55 | 30 |
| 25 | Xiamen University | China | 3.77 | 6 | 39 | 1.83 | 3 | 59 | 1.00 | 1 | 32 | 6.59 | 10 |
| 26 | Korea Advanced Institute of Science & Technology (KAIST) | Korea | 3.74 | 13 | 11 | 4.62 | 11 | 23 | 2.43 | 4 | 20 | 10.79 | 28 |
| 27 | Pohang University of Science and Technology (POSTECH) | Korea | 3.73 | 8 | 40 | 1.82 | 6 | 29 | 2.01 | 8 | 26 | 7.56 | 22 |
| 28 | Shanghai Jiao Tong University (SJTU) | China | 3.73 | 21 | 68 | 0.99 | 4 | 30 | 1.76 | 10 | 33 | 6.48 | 35 |
| 29 | The University of Hong Kong | China | 3.58 | 12 | 32 | 2.17 | 8 | 38 | 1.36 | 5 | 28 | 7.10 | 25 |
| 30 | Academia Sinica | Taiwan | 3.52 | 10 | 178 | 0.24 | 2 | 51 | 1.08 | 3 | 44 | 4.84 | 15 |
| 31 | Tokyo Institute of Technology | Japan | 3.46 | 14 | 35 | 2.04 | 9 | 33 | 1.50 | 11 | 30 | 7.00 | 34 |
| 32 | Agency for Science, Technology and Research (A*STAR) | Singapore | 3.24 | 21 | 9 | 5.04 | 24 | 8 | 5.56 | 17 | 15 | 13.84 | 62 |
| 33 | Nanyang Technological University | Singapore | 3.03 | 10 | 46 | 1.64 | 5 | 37 | 1.40 | 5 | 35 | 6.07 | 20 |
| 34 | The University of New South Wales | Australia | 3.02 | 16 | 24 | 2.80 | 15 | 52 | 1.08 | 5 | 31 | 6.90 | 36 |
| 35 | Nanjing University | China | 3.01 | 11 | 22 | 3.16 | 8 | 35 | 1.41 | 5 | 25 | 7.58 | 24 |
| 36 | BGI Shenzhen | China | 2.97 | 11 | 18 | 3.59 | 9 | 103 | 0.52 | 1 | 29 | 7.08 | 21 |
| 37 | Zhejiang University | China | 2.96 | 8 | 48 | 1.58 | 12 | 85 | 0.66 | 4 | 41 | 5.20 | 24 |
| 38 | National Institute of Biological Sciences (NIBS) | China | 2.91 | 7 | 61 | 1.04 | 2 | 117 | 0.44 | 1 | 49 | 4.39 | 10 |
| 39 | Samsung | Korea | 2.86 | 5 | 180 | 0.23 | 2 | 21 | 2.48 | 5 | 40 | 5.57 | 12 |
| 40 | Keio University | Japan | 2.73 | 9 | 21 | 3.23 | 7 | 13 | 3.74 | 10 | 23 | 9.69 | 26 |
| 41 | Korea University | Korea | 2.71 | 12 | 47 | 1.58 | 5 | 27 | 2.15 | 8 | 34 | 6.44 | 25 |
| 42 | NTT Group | Japan | 2.61 | 7 | 50 | 1.50 | 2 | – | – | – | 50 | 4.11 | 9 |

| 2011 | | | | | 2010 | | | 2009 | | | Total 2009-2011 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RANK | INSTITUTION | COUNTRY | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES |
| 43 | Tata Institute of Fundamental Research (TIFR) | India | 2.50 | 4 | 136 | 0.38 | 2 | 59 | 1.00 | 1 | 51 | 3.88 | 7 |
| 44 | National Institutes of Natural Sciences (NINS) | Japan | 2.47 | 4 | 121 | 0.46 | 3 | – | – | – | 67 | 2.93 | 7 |
| 45 | Fudan University | China | 2.34 | 14 | 51 | 1.43 | 9 | 64 | 0.93 | 6 | 46 | 4.71 | 29 |
| 46 | The University of Auckland | New Zealand | 2.25 | 12 | 80 | 0.80 | 5 | 128 | 0.37 | 3 | 58 | 3.42 | 20 |
| 47 | Waseda University | Japan | 2.18 | 6 | 72 | 0.87 | 5 | 102 | 0.53 | 3 | 53 | 3.58 | 14 |
| 48 | Yokohama City University | Japan | 1.90 | 8 | 90 | 0.69 | 4 | 76 | 0.76 | 5 | 59 | 3.35 | 17 |
| 49 | The Graduate University for Advanced Studies (SOKENDAI) | Japan | 1.88 | 9 | 266 | 0.09 | 2 | 114 | 0.48 | 4 | 70 | 2.46 | 15 |
| 50 | National Center of Biomedical Analysis | China | 1.82 | 2 | – | – | – | – | – | – | 90 | 1.82 | 2 |
| 51 | Queensland Institute of Medical Research (QIMR) | Australia | 1.79 | 15 | 77 | 0.83 | 16 | 24 | 2.42 | 12 | 43 | 5.04 | 43 |
| 52 | Tokyo Medical and Dental University | Japan | 1.77 | 10 | 38 | 1.86 | 6 | 25 | 2.39 | 13 | 36 | 6.02 | 29 |
| 53 | Ewha Womans University | Korea | 1.75 | 8 | 106 | 0.53 | 3 | 42 | 1.24 | 2 | 55 | 3.52 | 13 |
| 54 | Second Military Medical University | China | 1.65 | 6 | 41 | 1.78 | 3 | 55 | 1.04 | 3 | 48 | 4.47 | 12 |
| 55 | University of Tsukuba | Japan | 1.57 | 9 | 44 | 1.69 | 4 | 32 | 1.56 | 7 | 45 | 4.82 | 20 |
| 56 | Chinese Academy of Medical Sciences & Peking Union Medical College | China | 1.47 | 14 | 202 | 0.19 | 4 | 183 | 0.19 | 1 | 87 | 1.85 | 19 |
| 57 | Hiroshima University | Japan | 1.46 | 7 | 36 | 1.99 | 6 | 43 | 1.22 | 9 | 47 | 4.67 | 22 |
| 58 | Kobe University | Japan | 1.45 | 5 | 70 | 0.91 | 7 | 45 | 1.18 | 7 | 54 | 3.54 | 19 |
| 59 | Hanyang University | Korea | 1.44 | 6 | 74 | 0.85 | 2 | 86 | 0.66 | 2 | 65 | 2.95 | 10 |
| 60 | Chiba University | Japan | 1.42 | 6 | 162 | 0.28 | 3 | 44 | 1.19 | 3 | 68 | 2.89 | 12 |
| 61 | Nara Institute of Science and Technology (NAIST) | Japan | 1.42 | 4 | 42 | 1.75 | 6 | 245 | 0.10 | 1 | 61 | 3.27 | 11 |
| 62 | Tokyo University of Science | Japan | 1.38 | 5 | 238 | 0.13 | 1 | 400 | 0.02 | 1 | 105 | 1.53 | 7 |
| 63 | Sungkyunkwan University | Korea | 1.36 | 4 | 23 | 2.87 | 6 | 65 | 0.93 | 4 | 42 | 5.16 | 14 |
| 64 | Wuhan University of Technology | China | 1.27 | 2 | – | – | – | – | – | – | 125 | 1.27 | 2 |
| 65 | James Cook University | Australia | 1.26 | 7 | 300 | 0.07 | 2 | 351 | 0.04 | 1 | 116 | 1.37 | 10 |
| 66 | The Chinese University of Hong Kong | China | 1.25 | 2 | 88 | 0.71 | 5 | 58 | 1.02 | 4 | 64 | 2.98 | 11 |
| 67 | Japan Synchrotron Radiation Research Institute (JASRI) | Japan | 1.24 | 5 | 57 | 1.24 | 8 | 231 | 0.13 | 1 | 69 | 2.61 | 14 |
| 68 | Ishikawa Prefectural University | Japan | 1.24 | 3 | 159 | 0.29 | 1 | – | – | – | 106 | 1.53 | 4 |
| 69 | Jilin University | China | 1.24 | 3 | 249 | 0.11 | 2 | 127 | 0.37 | 4 | 98 | 1.73 | 9 |
| 70 | Chinese Academy of Geological Sciences (CAGS) | China | 1.20 | 3 | 110 | 0.50 | 2 | 150 | 0.25 | 1 | 83 | 1.95 | 6 |
| 71 | Yonsei University | Korea | 1.20 | 6 | 103 | 0.55 | 6 | 41 | 1.27 | 3 | 63 | 3.02 | 15 |
| 72 | Huazhong Agricultural University | China | 1.20 | 4 | 355 | 0.03 | 1 | – | – | – | 129 | 1.23 | 5 |
| 73 | Nanjing Medical University | China | 1.18 | 5 | 60 | 1.07 | 3 | – | – | – | 74 | 2.24 | 8 |
| 74 | Macquarie University | Australia | 1.17 | 9 | 49 | 1.52 | 4 | 130 | 0.35 | 3 | 62 | 3.03 | 16 |
| 75 | National Center of Neurology and Psychiatry (NCNP) | Japan | 1.13 | 3 | 125 | 0.43 | 3 | 315 | 0.05 | 1 | 102 | 1.61 | 7 |
| 76 | Japan Atomic Energy Agency (JAEA) | Japan | 1.12 | 6 | 104 | 0.55 | 2 | 245 | 0.10 | 1 | 93 | 1.77 | 9 |
| 77 | Xi'an Jiaotong University | China | 1.12 | 4 | 82 | 0.80 | 2 | – | – | – | 85 | 1.92 | 6 |
| 78 | National Taiwan University | Taiwan | 1.10 | 7 | 278 | 0.08 | 1 | 93 | 0.57 | 2 | 95 | 1.76 | 10 |
| 79 | Japan Agency for Marine-Earth Science and Technology (JAMSTEC) | Japan | 1.04 | 5 | 30 | 2.27 | 5 | 186 | 0.17 | 2 | 57 | 3.48 | 12 |
| 80 | Nankai University | China | 1.03 | 2 | 58 | 1.24 | 4 | 210 | 0.14 | 1 | 72 | 2.41 | 7 |
| 81 | Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) | India | 1.02 | 2 | – | – | – | 330 | 0.04 | 1 | 140 | 1.06 | 3 |
| 82 | Okinawa Institute of Science and Technology Graduate Unversity (OIST) | Japan | 1.01 | 2 | 62 | 1.04 | 3 | – | – | – | 81 | 2.05 | 5 |
| 83 | Huazhong University of Science and Technology (HUST) | China | 1.00 | 6 | – | – | – | 132 | 0.35 | 2 | 118 | 1.35 | 8 |
| 84 | Geospatial Information Authority of Japan (GSI) | Japan | 1.00 | 1 | – | – | – | – | – | – | 146 | 1.00 | 1 |
| 84 | Jawaharlal Nehru University | India | 1.00 | 1 | – | – | – | – | – | – | 146 | 1.00 | 1 |
| 84 | Toyama Prefectural University | Japan | 1.00 | 1 | 194 | 0.20 | 1 | – | – | – | 130 | 1.20 | 2 |
| 87 | National Institute for Environmental Studies (NIES) | Japan | 0.98 | 4 | 165 | 0.27 | 1 | 137 | 0.33 | 2 | 104 | 1.59 | 7 |
| 88 | University of Tasmania | Australia | 0.95 | 7 | 78 | 0.82 | 5 | 125 | 0.38 | 5 | 79 | 2.15 | 17 |
| 89 | JEOL Ltd. | Japan | 0.94 | 3 | – | – | – | 95 | 0.56 | 2 | 107 | 1.50 | 5 |
| 89 | Osaka City University | Japan | 0.94 | 3 | 159 | 0.29 | 1 | 46 | 1.18 | 5 | 71 | 2.41 | 9 |
| 91 | Victoria University of Wellington | New Zealand | 0.94 | 4 | 99 | 0.62 | 4 | 238 | 0.12 | 1 | 99 | 1.68 | 9 |
| 92 | The Tokyo Metropolitan Institute of Medical Science | Japan | 0.94 | 3 | 141 | 0.36 | 2 | 87 | 0.64 | 5 | 84 | 1.94 | 10 |
| 93 | NEC Corporation | Japan | 0.88 | 4 | 352 | 0.04 | 1 | – | – | – | 160 | 0.92 | 5 |
| 94 | Southwest University | China | 0.87 | 1 | 222 | 0.15 | 1 | – | – | – | 143 | 1.02 | 2 |

| 2011 | | | | | 2010 | | | 2009 | | | Total 2009-2011 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RANK | INSTITUTION | COUNTRY | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES |
| 95 | National Taipei University of Technology (NTUT) | Taiwan | 0.86 | 1 | – | – | – | – | – | – | 163 | 0.86 | 1 |
| 96 | The University of Adelaide | Australia | 0.85 | 12 | 79 | 0.81 | 7 | 267 | 0.08 | 3 | 97 | 1.74 | 22 |
| 97 | National Chiao Tung University (NCTU) | Taiwan | 0.83 | 5 | 278 | 0.08 | 1 | 223 | 0.13 | 3 | 141 | 1.04 | 9 |
| 98 | The Walter and Eliza Hall Institute of Medical Research (WEHI) | Australia | 0.78 | 7 | 45 | 1.65 | 7 | 15 | 3.33 | 9 | 38 | 5.76 | 23 |
| 99 | Ajou University | Korea | 0.78 | 2 | 117 | 0.48 | 3 | 356 | 0.03 | 1 | 123 | 1.29 | 6 |
| 100 | La Trobe University | Australia | 0.77 | 3 | – | – | – | 186 | 0.17 | 1 | 159 | 0.94 | 4 |
| 101 | Griffith University | Australia | 0.76 | 4 | 43 | 1.70 | 6 | 73 | 0.81 | 6 | 60 | 3.27 | 16 |
| 102 | High Energy Accelerator Research Organization (KEK) | Japan | 0.74 | 6 | 227 | 0.14 | 1 | – | – | – | 162 | 0.89 | 7 |
| 103 | SA Health | Australia | 0.74 | 3 | 179 | 0.23 | 3 | – | – | – | 154 | 0.97 | 6 |
| 104 | National Astronomical Observatory of Japan (NAOJ) | Japan | 0.73 | 3 | 268 | 0.09 | 1 | 106 | 0.51 | 3 | 120 | 1.34 | 7 |
| 105 | Anhui Medical University | China | 0.73 | 4 | 53 | 1.36 | 3 | 34 | 1.42 | 3 | 56 | 3.51 | 10 |
| 106 | Chungnam National University (CNU) | Korea | 0.73 | 2 | 322 | 0.05 | 1 | 163 | 0.23 | 2 | 144 | 1.01 | 5 |
| 107 | The University of Newcastle | Australia | 0.72 | 4 | – | – | – | 129 | 0.37 | 4 | 138 | 1.09 | 8 |
| 108 | The Centre for DNA Fingerprinting and Diagnostics (CDFD) | India | 0.71 | 2 | – | – | – | – | – | – | 186 | 0.71 | 2 |
| 109 | China Medical University | Taiwan | 0.71 | 5 | 135 | 0.39 | 3 | 352 | 0.03 | 2 | 131 | 1.14 | 10 |
| 110 | Curtin University | Australia | 0.70 | 4 | 301 | 0.07 | 2 | 67 | 0.89 | 3 | 100 | 1.66 | 9 |
| 111 | University of Shanghai for Science and Technology | China | 0.68 | 1 | – | – | – | – | – | – | 190 | 0.68 | 1 |
| 112 | Nagasaki University | Japan | 0.68 | 2 | 119 | 0.47 | 3 | 260 | 0.09 | 1 | 128 | 1.24 | 6 |
| 113 | National Institute of Health, Korea | Korea | 0.68 | 3 | 372 | 0.02 | 2 | 92 | 0.58 | 1 | 124 | 1.28 | 6 |
| 114 | Shandong University | China | 0.67 | 6 | 96 | 0.63 | 4 | 245 | 0.10 | 1 | 114 | 1.40 | 11 |
| 115 | Japan Advanced Institute of Science and Technology (JAIST) | Japan | 0.67 | 1 | 278 | 0.08 | 1 | – | – | – | 178 | 0.75 | 2 |
| 115 | Ocean University of China | China | 0.67 | 2 | – | – | – | – | – | – | 193 | 0.67 | 2 |
| 117 | JT Biohistory Research Hall (BRH) | Japan | 0.67 | 2 | – | – | – | – | – | – | 194 | 0.67 | 2 |
| 118 | National Institute of Informatics (NII) | Japan | 0.64 | 5 | 81 | 0.80 | 2 | – | – | – | 112 | 1.44 | 7 |
| 119 | Northwest University | China | 0.64 | 2 | – | – | – | – | – | – | 201 | 0.64 | 2 |
| 120 | National Cancer Center | Japan | 0.63 | 2 | 128 | 0.42 | 1 | 70 | 0.85 | 3 | 86 | 1.90 | 6 |
| 121 | Tokyo Metropolitan Institiute for Neuroscience | Japan | 0.63 | 1 | 94 | 0.63 | 1 | 108 | 0.50 | 1 | 94 | 1.76 | 3 |
| 121 | Victor Chang Cardiac Research Institute (VCCRI) | Australia | 0.63 | 2 | 52 | 1.43 | 3 | 345 | 0.04 | 1 | 80 | 2.09 | 6 |
| 123 | Chinese Academy of Agricultural Sciences (CAAS) | China | 0.62 | 4 | 97 | 0.63 | 4 | 130 | 0.35 | 2 | 103 | 1.60 | 10 |
| 124 | Shandong Academy of Medical Sciences | China | 0.62 | 1 | 225 | 0.15 | 2 | 403 | 0.01 | 1 | 173 | 0.78 | 4 |
| 125 | Okayama University | Japan | 0.61 | 3 | 59 | 1.12 | 3 | 161 | 0.24 | 2 | 82 | 1.96 | 8 |
| 126 | Chung-Ang University (CAU) | Korea | 0.61 | 2 | – | – | – | 165 | 0.22 | 1 | 166 | 0.83 | 3 |
| 127 | Australian Institute of Marine Science | Australia | 0.60 | 1 | – | – | – | – | – | – | 210 | 0.60 | 1 |
| 128 | Fujian Medical University | China | 0.58 | 2 | 402 | 0.01 | 1 | – | – | – | 212 | 0.59 | 3 |
| 129 | International Centre for Genetic Engineering and Biotechnology (ICGEB) | India | 0.57 | 1 | – | – | – | 191 | 0.17 | 1 | 183 | 0.74 | 2 |
| 130 | Osaka Bioscience Institute | Japan | 0.56 | 1 | 255 | 0.10 | 1 | – | – | – | 195 | 0.66 | 2 |
| 131 | National Institute for Basic Biology (NIBB) | Japan | 0.56 | 3 | 177 | 0.24 | 2 | – | – | – | 169 | 0.80 | 5 |
| 132 | Sun Yat-sen University | China | 0.55 | 7 | 71 | 0.89 | 7 | 310 | 0.06 | 1 | 108 | 1.50 | 15 |
| 133 | University of Otago | New Zealand | 0.54 | 7 | 25 | 2.75 | 9 | 94 | 0.57 | 6 | 52 | 3.86 | 22 |
| 134 | Toyota Motor Corporation | Japan | 0.53 | 2 | – | – | – | – | – | – | 233 | 0.53 | 2 |
| 135 | National Synchrotron Radiation Research Center | Taiwan | 0.52 | 3 | – | – | – | – | – | – | 239 | 0.52 | 3 |
| 136 | National Institute of Biomedical Innovation (NIBIO) | Japan | 0.51 | 3 | – | – | – | – | – | – | 243 | 0.51 | 3 |
| 137 | Beihang University (BUAA) | China | 0.50 | 1 | 171 | 0.25 | 1 | – | – | – | 178 | 0.75 | 2 |
| 137 | Gwangju Institute of Science and Technology (GIST) | Korea | 0.50 | 2 | 93 | 0.65 | 2 | 50 | 1.08 | 3 | 76 | 2.23 | 7 |
| 137 | Ibaraki University | Japan | 0.50 | 1 | 227 | 0.14 | 1 | – | – | – | 202 | 0.64 | 2 |
| 137 | South Australian Museum | Australia | 0.50 | 2 | – | – | – | – | – | – | 245 | 0.50 | 2 |
| 141 | Flinders University | Australia | 0.49 | 3 | 323 | 0.05 | 1 | 344 | 0.04 | 2 | 218 | 0.58 | 6 |
| 142 | Konkuk University | Korea | 0.49 | 2 | 181 | 0.23 | 3 | 241 | 0.11 | 1 | 167 | 0.82 | 6 |
| 143 | Swinburne University of Technology | Australia | 0.47 | 3 | 143 | 0.35 | 2 | 59 | 1.00 | 1 | 89 | 1.82 | 6 |
| 144 | City University of Hong Kong | China | 0.46 | 2 | – | – | – | – | – | – | 260 | 0.46 | 2 |
| 144 | Hitachi, Ltd. | Japan | 0.46 | 1 | 158 | 0.29 | 2 | 54 | 1.05 | 3 | 92 | 1.79 | 6 |
| 146 | National Institute for Physiological Sciences (NIPS) | Japan | 0.45 | 3 | 292 | 0.08 | 2 | 231 | 0.13 | 1 | 197 | 0.66 | 6 |
| 147 | National Health Research Institutes (NHRI) | Taiwan | 0.45 | 1 | – | – | – | – | – | – | 263 | 0.45 | 1 |
| 148 | Panasonic Corporation | Japan | 0.44 | 2 | – | – | – | – | – | – | 265 | 0.44 | 2 |

| 2011 | | | | | 2010 | | | 2009 | | | Total 2009-2011 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RANK | INSTITUTION | COUNTRY | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES | RANK | CORRECTED COUNT | ARTICLES |
| 149 | China University of Geosciences | China | 0.43 | 4 | – | – | – | 185 | 0.17 | 3 | 208 | 0.61 | 7 |
| 150 | East China University of Science and Technology (ECUST) | China | 0.43 | 2 | – | – | – | – | – | – | 270 | 0.43 | 2 |
| 151 | Korea Research Institute of Bioscience and Biotechnology (KRIBB) | Korea | 0.43 | 3 | 83 | 0.76 | 3 | 116 | 0.44 | 1 | 101 | 1.63 | 7 |
| 152 | International Superconductivity Technology Center (ISTEC) | Japan | 0.43 | 1 | – | – | – | – | – | – | 271 | 0.43 | 1 |
| 153 | The Royal Children's Hospital Melbourne (RCH) | Australia | 0.42 | 2 | 245 | 0.12 | 1 | 423 | 0.00 | 1 | 229 | 0.54 | 4 |
| 154 | Kyungpook National University | Korea | 0.42 | 2 | – | – | – | – | – | – | 275 | 0.42 | 2 |
| 155 | China Earthquake Administration | China | 0.41 | 2 | 150 | 0.32 | 2 | 88 | 0.63 | 1 | 117 | 1.36 | 5 |
| 156 | Shanghai Normal University (SHNU) | China | 0.40 | 1 | – | – | – | – | – | – | 280 | 0.40 | 1 |
| 157 | Korea Basic Science Institute (KBSI) | Korea | 0.39 | 3 | 234 | 0.13 | 1 | 39 | 1.29 | 5 | 91 | 1.81 | 9 |
| 158 | DSO National Laboratories | Singapore | 0.38 | 2 | – | – | – | – | – | – | 287 | 0.38 | 2 |
| 159 | Central South University (CSU) | China | 0.37 | 4 | – | – | – | 235 | 0.12 | 2 | 251 | 0.49 | 6 |
| 160 | National Center for Nanoscience and Technology (NCNST) | China | 0.37 | 2 | 238 | 0.13 | 1 | – | – | – | 252 | 0.49 | 3 |
| 161 | Soochow University | China | 0.35 | 5 | 157 | 0.29 | 2 | 201 | 0.15 | 2 | 172 | 0.79 | 9 |
| 162 | Australian Astronomical Observatory | Australia | 0.35 | 1 | 189 | 0.22 | 1 | – | – | – | 222 | 0.57 | 2 |
| 163 | University of Miyazaki | Japan | 0.35 | 2 | – | – | – | 63 | 0.96 | 2 | 122 | 1.31 | 4 |
| 164 | University of New England | Australia | 0.33 | 2 | – | – | – | – | – | – | 300 | 0.33 | 2 |
| 165 | Center for International Forestry Research (CIFOR) | Indonesia | 0.33 | 1 | – | – | – | – | – | – | 301 | 0.33 | 1 |
| 165 | Indian Institute of Science Education and Research (IISER) | India | 0.33 | 1 | 288 | 0.08 | 1 | 268 | 0.08 | 1 | 249 | 0.50 | 3 |
| 165 | International Outer Planet Watch (IOPW) | Japan | 0.33 | 1 | – | – | – | – | – | – | 301 | 0.33 | 1 |
| 165 | National Institute of Animal Health | Japan | 0.33 | 1 | – | – | – | – | – | – | 301 | 0.33 | 1 |
| 165 | Shenyang Normal University | China | 0.33 | 1 | – | – | – | 88 | 0.63 | 1 | 155 | 0.96 | 2 |
| 170 | CHA University | Korea | 0.33 | 3 | 352 | 0.04 | 1 | – | – | – | 293 | 0.36 | 4 |
| 171 | Korea Institute of Science and Technology (KIST) | Korea | 0.32 | 3 | 86 | 0.74 | 4 | 47 | 1.15 | 2 | 77 | 2.21 | 9 |
| 172 | National Institute of Water and Atmospheric Research (NIWA) | New Zealand | 0.32 | 1 | 194 | 0.20 | 1 | – | – | – | 240 | 0.52 | 2 |
| 172 | Sun Moon University | Korea | 0.32 | 1 | – | – | – | 191 | 0.17 | 1 | 254 | 0.48 | 2 |
| 174 | Fisheries Research Agency | Japan | 0.32 | 1 | – | – | – | – | – | – | 314 | 0.32 | 1 |
| 175 | National Tsing Hua University | Taiwan | 0.31 | 2 | 203 | 0.19 | 2 | – | – | – | 248 | 0.50 | 4 |
| 176 | Electronics and Telecommunications Research Institute (ETRI) | Korea | 0.30 | 1 | – | – | – | – | – | – | 315 | 0.30 | 1 |
| 176 | Hankuk University of Foreign Studies (HUFS) | Korea | 0.30 | 1 | – | – | – | – | – | – | 315 | 0.30 | 1 |
| 176 | Japan Biological Informatics Consortium (JBIC) | Japan | 0.30 | 1 | – | – | – | 245 | 0.10 | 1 | 280 | 0.40 | 2 |
| 176 | Korea Ocean Research & Development Institute (KORDI) | Korea | 0.30 | 1 | 144 | 0.35 | 1 | 138 | 0.33 | 1 | 153 | 0.98 | 3 |
| 176 | Tokyo Gakugei University | Japan | 0.30 | 1 | – | – | – | – | – | – | 315 | 0.30 | 1 |
| 181 | Mitsubishi Chemical Corporation | Japan | 0.29 | 2 | – | – | – | 108 | 0.50 | 1 | 170 | 0.79 | 3 |
| 181 | National Institute of Health Sciences (NIHS) | Japan | 0.29 | 2 | – | – | – | – | – | – | 320 | 0.29 | 2 |
| 181 | National Yang-Ming University (NYMU) | Taiwan | 0.29 | 3 | 101 | 0.56 | 2 | 245 | 0.10 | 1 | 156 | 0.95 | 6 |
| 184 | Fukushima Medical University | Japan | 0.29 | 2 | 324 | 0.05 | 1 | 263 | 0.09 | 1 | 269 | 0.43 | 4 |
| 185 | Chiba Institute of Technology | Japan | 0.29 | 2 | – | – | – | 300 | 0.06 | 1 | 296 | 0.35 | 3 |
| 186 | Beijing Normal University | China | 0.29 | 4 | 145 | 0.35 | 2 | 356 | 0.03 | 1 | 192 | 0.67 | 7 |
| 187 | Shantou University | China | 0.29 | 2 | 337 | 0.04 | 2 | – | – | – | 309 | 0.33 | 4 |
| 188 | Aoyama Gakuin University | Japan | 0.29 | 1 | – | – | – | 169 | 0.22 | 2 | 244 | 0.50 | 3 |
| 188 | Canon ANELVA Corporation | Japan | 0.29 | 1 | – | – | – | – | – | – | 324 | 0.29 | 1 |
| 188 | Dr. Shroff's Charity Eye Hospital | India | 0.29 | 1 | – | – | – | – | – | – | 324 | 0.29 | 1 |
| 188 | Korea Research Institute of Chemical Technology (KRICT) | Korea | 0.29 | 1 | 89 | 0.71 | 2 | – | – | – | 151 | 0.99 | 3 |
| 188 | National Agriculture Research Center for Hokkaido Region | Japan | 0.29 | 1 | – | – | – | – | – | – | 324 | 0.29 | 1 |
| 193 | Korea Research Institute of Standards and Science (KRISS) | Korea | 0.28 | 2 | – | – | – | – | – | – | 331 | 0.28 | 2 |
| 194 | Kyung Hee University | Korea | 0.28 | 4 | – | – | – | 77 | 0.74 | 3 | 142 | 1.02 | 7 |
| 195 | Rigaku Corporation | Japan | 0.28 | 2 | – | – | – | – | – | – | 333 | 0.28 | 2 |
| 196 | Chang Gung University | Taiwan | 0.27 | 4 | 154 | 0.31 | 2 | 295 | 0.07 | 2 | 200 | 0.65 | 8 |
| 197 | Kitasato University | Japan | 0.27 | 3 | – | – | – | 169 | 0.22 | 2 | 253 | 0.49 | 5 |
| 198 | Tokyo University of Agriculture | Japan | 0.27 | 1 | 185 | 0.22 | 1 | – | – | – | 250 | 0.49 | 2 |
| 199 | Hamamatsu University | Japan | 0.27 | 3 | – | – | – | 108 | 0.50 | 1 | 175 | 0.77 | 4 |
| 200 | National Institute of Agrobiological Sciences (NIAS) | Japan | 0.27 | 1 | 75 | 0.85 | 3 | – | – | – | 133 | 1.12 | 4 |

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