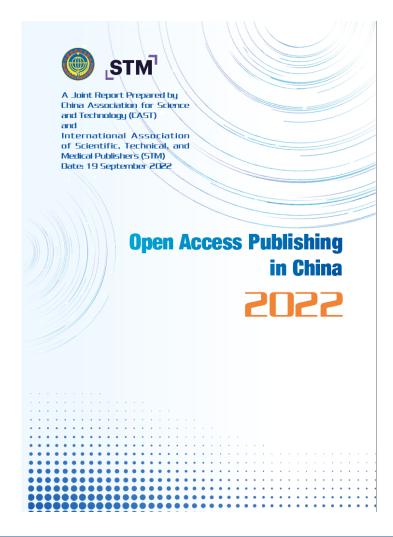


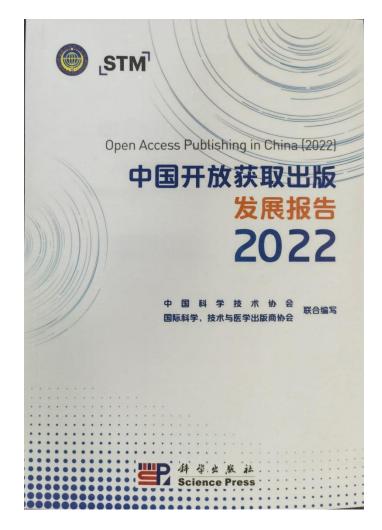
中国的开放获取: 现状与未来











## 中国开放获取出版发展报告 (2022)

English Version: https://doi.org/10.6084/m9.figshare.21708113

中文版下载地址: https://www.cast.org.cn/art/2022/12/15/art\_457\_204834.html

## **Contents**

**Policies and Guidelines** 

Current Open Access in China

Future OA Development in China





# Policies and Guidelines

## Governmental levels



### 2002,2004

Two national documents require that scientific knowledge generated by public funding and scientific infrastructure built with financial funds be open and shared

### 2014

Chinese Premier Li Keqiang clearly expresses support for establishing an open access mechanism for scientific knowledge funded by public finance









### 2012

The State Council issues a policy document strengthening the openness and sharing of science and technology resources

### 2018

The State Council issues the "Measures for the Management of Scientific Data": scientific data formed with government funding to be open and shared

China currently does not yet have clear open science policies and guidelines at the national level.

## Governmental levels



#### 2019

"Suggestions on Deepening Reform and Cultivating World-class STM Journals" emphasizes the need to expand and deepen international cooperation

### 2022

The "Initiative on International Cooperation in Scientific Research Behavior" directs Chinese researchers to adopt global open science and technology cooperation approaches

#### 2024

XI Jinping: To build an open environment for scientific and technological innovation with global competitiveness, expand international exchanges and cooperation, strive to build a win-win partnership, and deeply participate in global academic governance.









### 2021

"Norms for the Construction of Digital Campuses in Higher Education Institutions (Trial)" mandates that institutional repositories be managed, discoverable, disseminated, and preserved. In 2021, "open science" officially appears in "Science and Technology Progress Law of the People's Republic of China"

### 2023

XI Jinping: China will continue to promote international scientific and technological cooperation with more open thinking and measures, build an open and innovative ecosystem with global partners, and work together to create an open, fair, just, and non-discriminatory environment for scientific and technological development

China currently does not yet have clear open science policies and guidelines at the national level.

## Institutional level



### 2004

NSFC and CAS sign the Berlin Declaration on Open Access to Knowledge in the Science and Humanities

### 2015

NSFC issues the Implementation Rules of Open Access Policy for Basic Research Repository

### 2020

19 organizations in China had sign the Open Access 2020 Initiative

### In 2022

the Open Science Promotion Consortium was established

China's open sharing policy is ushered in by the statements of CAS and NSFC on Open Access to Papers Published by Publicly Funded Research Projects

2014

Chinese Academy of Agricultural Sciences: "Statement of Implementing an Open Access Policy for Papers Published in Public Funded Research Projects" "Measures for Agricultural Science Data Management and Open Sharing"

2019

Tsinghua University launches the "Open Science Support Program" with the aim of accelerating the widespread dissemination of scientific knowledge created by universities and research institutes

2021

Guidelines for authors of the Chinese Academy of Agricultural Sciences to publish OA papers for free

2024

More institutes should be involved in open science and open access in China. They play the key role.



# Current Open : Access in China

# Current Open Access in China



OA Papers

**OA Journals** 

**Transformative Agreements** 

**Platforms** 

**APCs** 

Researchers' Knowledge on OA

## International OA Papers by Researchers from China



## **Number of papers from China:**

**159640** (2011)

**742727** (2023)

(Average annual growth rate 13.7%)

## **Number of OA papers:**

**25235**(2011)

**334080**(2023)

(Average annual growth rate 24.0%)

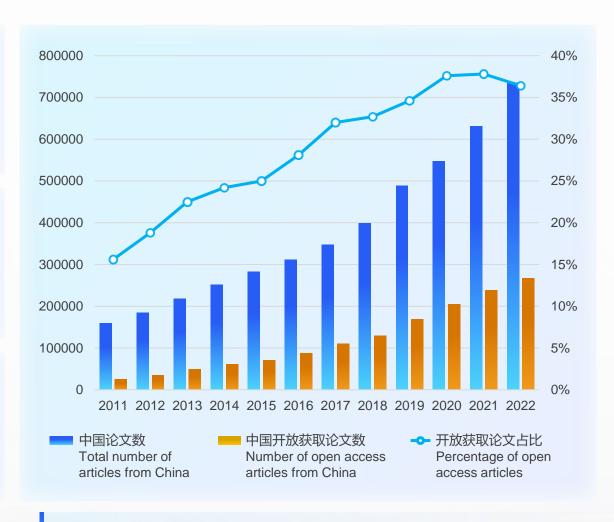
## Gold OA papers:

**14454**(2011, 57.3%)

**254420**(2023, 85.9%)

(Average annual growth rate 26.0%)

Database: Clarivate's Science Citation Index; Literature types: Article and Review; Registered address of the paper includes China



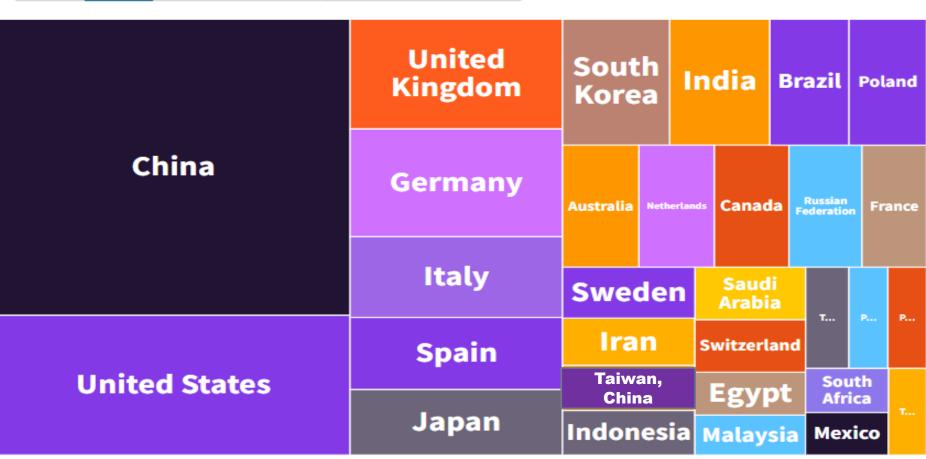
Articles published in international journals and open access articles of China, 2011-2021. Source: *Open Access Publishing in China 2022* 

## Top 30 countries/regions in 2022; Output by access type

Select a view







STM:

Open Access Dashboard launch

https://www.stm -assoc.org/oadashboard/

Source: Scopus, 2023 • Countries/regions selected and ranked by number of

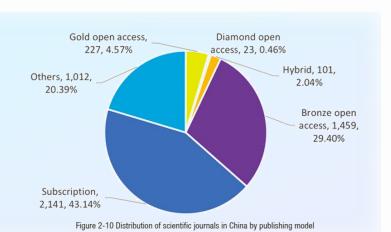


Advancing trusted research

# Journal Publishing Models in China



In 2022, we analyzed 4963 scientific journals in China: 36.47% of them were involved in open access (29.40% of which were Bronze)



Among 428 English language journals, 271 are fully open access (63.3%), 122 hybrid (28.5%), 35 subscription (8.2%).

A study\* showed that among all 90 high-potential journals from 2019 to 2021 of the Excellence Action Plan, 81 of them had websites, and all provided open access publishing, with 92.6% being fully open access.



In May 2024, a research program funded by the Chinese Association for Science and Technology(CAST) showed that there are 1800+ STM journals can be read, downloaded, and used openly, accounting for more than one-third of the total 5164 STM journals in China. Among 1800+journals, 358 journals are fully open access, while the remaining journals are mainly with unclear or non-standard CC licenses.



The Open Science Promotion Consortium(OSPC) is studying the transformation path of open access for Chinese STM journals, and giving guidance to journals to be open access.



The OA Journal List will be established to set examples and lead the OA transformation for STM journals in China.

<sup>\*</sup>Ding Z.Q., Li CH. W., 2022. Development of High-start Journals in China: Current Situation, Trends, and Cultivation. Science-Technology & Publication. 334, 21-27. 10.16510/j.cnki.kjycb.20221012.019

# China's Transformative Agreements



By January 2024, there are 20 TAs signed by 12 Chinese institutions, involving 8 international publishing institutions, covering various transformative models. So far there is no large scale TA signed.

Start date	Chinese institutions	International publishing organizations	Models
2020 2021	National Science Library, CAS (NSLC)	Oxford University Press Association for Computing Machinery The Royal Society of Chemistry	Read and Publish ACM Open
2021	Chinese Academy of Medical Sciences	Karger Press	APC Credit
2021	Shanghai Jiao Tong University	Cambridge University Press	Read & Publish
2021 2022 2022	Tsinghua University	Association for Computing Machinery Cambridge University Press International Water Association (IWA)	ACM Open Read and Publish Subscribe to Open (Ended)
2022	Institute of Microbiology, CAS	Microbiology Society	Publish and Read
2022	Xi'an Jiaotong-Liverpool University	Cambridge University Press	Read & Publish
2022 2023	Wuhan university	IWA Microbiology Society	Read & Publish Publish & Read
2023	Chinese Academy of Agricultural Sciences	Microbiology Society The Royal Society of Chemistry	Publish and Read
2023	Chang'an University	IWA	Read & Publish
2023	Shenzhen Pengcheng Laboratory	Association for Computing Machinery	ACM Open
2023	Westlake University	Association for Computing Machinery The Royal Society of Chemistry	ACM Open
2023 2024	Fudan University	Cambridge University Press Microbiology Society	Read & Publish Publish and Read

# China's Open Platforms



There are different open platforms in China in line with international category classifications



机构知识库 institutional repositories





开放出版平台 OA publishing platforms



platforms

National Public Academic Platform

National Advanced Platform for S&T Information and Communication <a href="https://napstic.istic.ac.cn/">https://napstic.istic.ac.cn/</a>



## APCs paid by Researchers in China



According to the data of **Global OA Journals and APC Monitoring Report** from 2019 to 2022 by the National Science Library of the Chinese Academy of Sciences, the APCs paid by Chinese authors for international publishing show a rapid upward trend, of which about 10% are published in unreasonable APC journals. The APC model brings a huge economic burden to countries and institutions with a large volume of OA papers output.



### **Unreasonable APC Journals:**

Refers to those APC high premium journals, which are calculated based on their publication volume, influence (h5 index, IF, etc.) and other indicators, and their APC fees are significantly higher than those of journals at the same level as their peers.

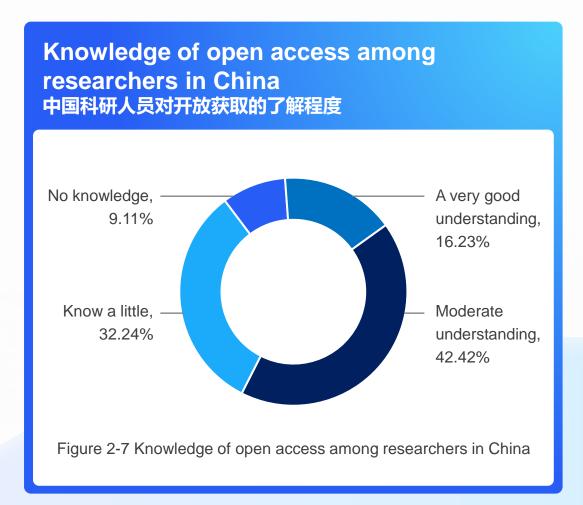
Rui X., Zhao Zh. Y., Wang F., Chen X.F., Huang J.X, 2021. Research on APC Monitoring and Abnormal Warning Model of Global OA Sci-Tech Journals. Library and Information Service, 65(8),42-50.

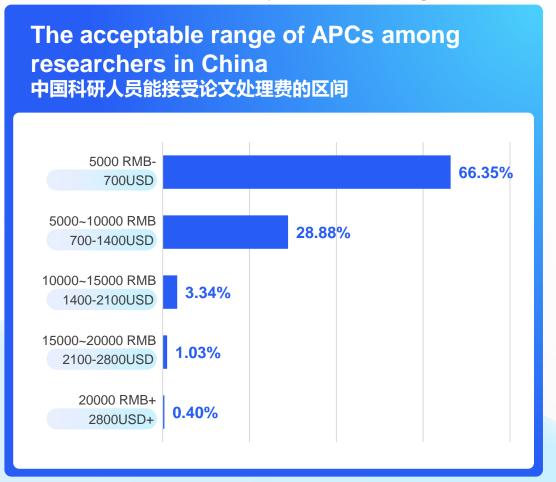
10.13266/j.issn.0252-3116.2021.08.005

## Attitudes Towards Open Access by Researchers in China



From: Open Access Publishing in China 2022





For future open access publishing, please consider China's research output and the budgetary limits of Chinese researchers



# Future OA Development in China

## Current Problems



- There is currently no clear policy and guidance at the national level, and stakeholders such as government departments, academic institutions, funds, researchers, etc. do not have enough understanding and acknowledgement on open access.
- The lack of systematic supervision over OA papers in highly commercial and predatory OA journals has led to numerous quality and integrity issues, resulting in the flow of a large number of APCs and first publication rights to international publishers. At the same time, we also provided somebody with leverage to criticize us.
- Insufficient infrastructure construction of open access, inadequate support of standards, regulations and market system, and lack of education and incentive mechanisms.

### **COUNTRIES WITH HIGHEST RETRACTION RATES**

Saudi Arabia, Pakistan, Russia and China have the highest retraction rates among countries with >100,000 papers\* published over the past two decades.

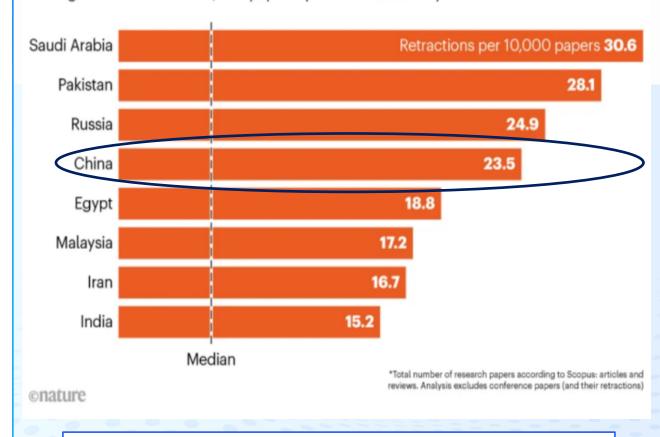


Figure from 《Nature》 (December 2023)

# Future OA Development in China



Governmental and Institutional Policy System

**Quality Control System** 

Standard, Guidance and Education system

Infrastructure System (platforms, fundings, etc)

The early warning list
The Recommended OA
Journal List for
Researchers and
Institutions

**Market System** 

# Future OA Development in China



- There will be a qualitative leap both in the scale and standardization of open access once China issues its open science policy.
- With the shift in China's academic evaluation policy to replace quantity with quality, the trend of rapid growth in research articles may change in the future, and it can be foreseen that the amount growth rate of OA articles published in international journals by Chinese authors will also slow down.
- Completely following Western OA pricing model is not sustainable for China. Reasonable pricing of APCs for Chinese authors and journals is critically important.
- Open access publishing in China still has huge opportunities and development space for international cooperation. Besides the open access articles and journals, future efforts can also focus on cooperation with Chinese publishing platforms.
- China will continue to closely cooperate with international publishing society to jointly address research integrity in open access and actively participate in international academic governance.

