





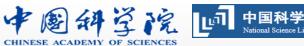
From Open Repository to Open Scholarly Communication: Experiences Learned in China (CAS)

Zhang Zhixiong

National Science Library, Chinese Academy of Sciences

May.17th, 2018





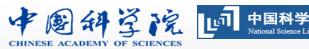




Outline

- OA Repository in CAS
- Opportunity for OA Repository
- From OA Repository to Open **Scholarly Communication**
- Conclusion









Outline

- OA Repository in CAS
- Opportunity for OA Repository
- From OA Repository to Open **Scholarly Communication**
- Conclusion







The Chinese Academy of Sciences

- A national team and a locomotive driving national technological innovation
 - 124 institutes, including 5 universities & supporting organization
 - 56,000 professional researchers
 - > 60,000 students, most of which are doctoral candidates
- CAS tops Nature Index for 6 years













Open Repositories in CAS

- From 2006, more than 110 IRs been setup and run by the research institutes
- with the software, guidance and services provided by the Library













Open Repositories in CAS

Verbatim search . Additional word forms . Multilingual synonyms				
Boost open access documents				
566 documents				
AFM characterization of self-ordered porous alumina films as substrate	8	(43,456) Inst. of Engineering Therr (27,801) Peking Univ.: Institutional (27,800) Research Center for Eco- (23,443) Changchun Inst. of Apple	mophysics: ETP OpenIR I Repository (PKU IR) -Environmental Sciences: ed Chemistry: CIAC OpenII	
Zhou HY [claim] ; Qu SC [claim] ; Wang ZG [claim] ; Liang LY [claim] ; Cheng BC [claim] ; Liu JP [claim] ; Peng WQ [claim]		(15,416) Inst. of Semiconductors: (14,835) Shenyang Inst. Of Autom	SEMI OpenIR lation: SIA OpenIR	
Self-ordered porous alumina films on a semi-insulated GaAs substrate were prepared in oxalic acid aqueous solutions by three-step anodization. The I-t curve of anodization process was recorded to observe time effects of anodization. Atomic force m (13,004) Inst. of Oceanology: IOCAS-IR (12,483) Nanjing Inst. of Geology and Palaeontology: (12,483) Institute of Automation: CASIA OpenIR (12,237) Shanghai Inst. of Organic Chemistry: SIOC OpenIR (12,237) Inst. of Hydrobiology: IHB OpenIR (10,728) Inst. of Hydrobiology: IHB OpenIR (10,72				
ELSEVIER SCI LTD		(10,520) Inst. of Psychology: PSY6	CH OpenIR:	
2006				
Zhou, HY (Zhou, H. Y.); Qu, SC (Qu, S. C.); Wang, ZG (Wang, Z. G.);		Content Provider		
Liang, LY (Liang, L. Y.); Cheng, BC (Cheng, B. C.); Liu, JP (Liu, J. P.); Peng, WQ (Peng, W. Q.) . Preparation and AFM characterization of self- ordered porous alumina films on semi		Language		
Institute of Semiconductors: SEMI OpenIR (Chinese Academy of Science / 中国科学院半导体研究所机构知识库 6	es)	Access	D	
dd to Favorites Check in Google Scholar Export Record				
	AFM characterization of self-ordered porous alumina films substrate Zhou HY [claim]; Qu SC [claim]; Wang ZG [claim]; Liang LY [claim]; Cheng BC [claim]; Liu JP [claim]; Peng WQ [claim] Self-ordered porous alumina films on a semi-insulated GaAs substrate were prepared in oxalic acid aqueous solutions by three-step anodization. The I-t curve of anodization process was recorded to observe time effe of anodization. Atomic force m ELSEVIER SCI LTD 2006 Zhou, HY (Zhou, H. Y.); Qu, SC (Qu, S. C.); Wang, ZG (Wang, Z. G.); Liang, LY (Liang, L. Y.); Cheng, BC (Cheng, B. C.); Liu, JP (Liu, J. P.); Peng, WQ (Peng, W. Q.). Preparation and AFM characterization of self-ordered porous alumina films on semi Institute of Semiconductors: SEMI OpenIR (Chinese Academy of Science / 中国科学院半导体研究所机构知识库 ①	AFM characterization of self-ordered porous alumina films substrate Zhou HY [claim]; Qu SC [claim]; Wang ZG [claim]; Liang LY [claim]; Cheng BC [claim]; Liu JP [claim]; Peng WQ [claim] Self-ordered porous alumina films on a semi-insulated GaAs substrate were prepared in oxalic acid aqueous solutions by three-step anodization. The I-t curve of anodization process was recorded to observe time effects of anodization. Atomic force m ELSEVIER SCI LTD 2006 Zhou, HY (Zhou, H. Y.); Qu, SC (Qu, S. C.); Wang, ZG (Wang, Z. G.); Liang, LY (Liang, L. Y.); Cheng, BC (Cheng, B. C.); Liu, JP (Liu, J. P.); Peng, WQ (Peng, W. Q.). Preparation and AFM characterization of self-ordered porous alumina films on semi Institute of Semiconductors: SEMI OpenIR (Chinese Academy of Sciences) / 中国科学院半导体研究所机构知识库 ①	AFM characterization of self-ordered porous alumina films as substrate Zhou HY [claim]; Qu SC [claim]; Wang ZG [claim]; Liang LY [claim]; Cheng BC [claim]; Liu JP [claim]; Peng WQ [claim] Self-ordered porous alumina films on a semi-insulated GaAs substrate were prepared in oxalic acid aqueous solutions by three-step anodization. The I-t curve of anodization process was recorded to observe time effects of anodization. Atomic force m ELSEVIER SCI LTD 2006 Zhou, HY (Zhou, H. Y.); Qu, SC (Qu, S. C.); Wang, ZG (Wang, Z. G.); Liang, LY (Llang, L. Y.); Cheng, BC (Cheng, B. C.); Liu, JP (Llu, J. P.); Peng, WQ (Peng, W. Q.) Preparation and AFM characterization of self-ordered porous alumina films on semi Institute of Semiconductors: SEMI OpenIR (Chinese Academy of Sciences) / 中国科学院半导体研究所机构知识库 ①	

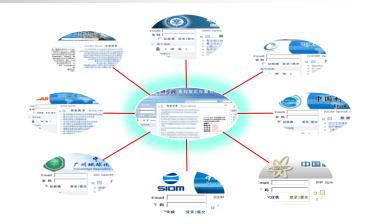






Open Repositories in CAS

- Aggregator: CAS IR Grid
 - > 110 IRs from CAS
 - **802,567** items
 - 600,686 full text papers
 - 486,875 English papers
 - 18,155,990 total downloads
 - 17,076,748 downloads outside CAS
- The largest Institute Repository Services in China



http://www.irgrid.ac.cn







Chinese Open Research Cloud, CORC

- CORC
- 169 IRs registered
 - 57 IRs outsides CAS
 - Including Univ. in and outside China Mainland
- **1,145,396** items



http://www.chinair.org.cn/







CSpace

- **A** Enhanced Chinese version of DSpace
- V 6.0 released 2017

中国科学院兰州文献情报中心,机构知识管理平台CSpace 6.0, 2017.9





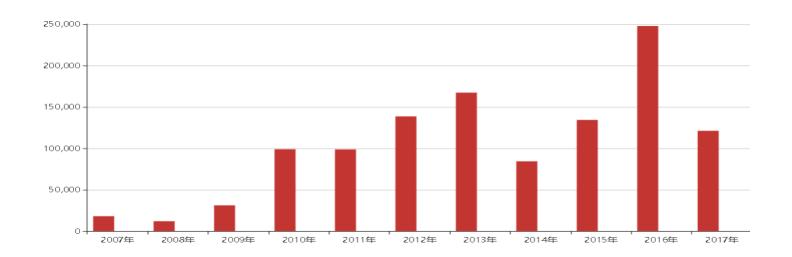






The Challenge of OA Repository

Submission Rate of CORC





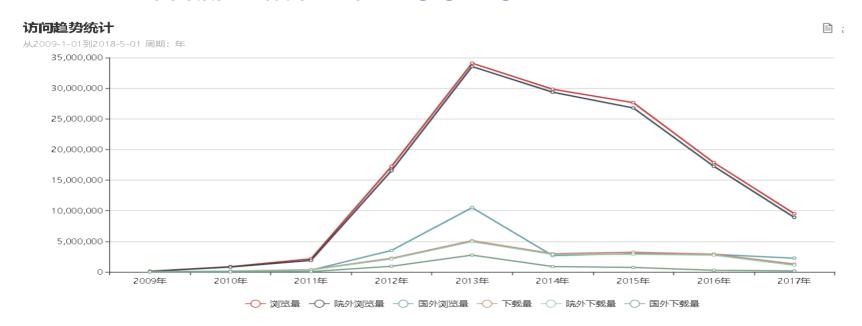






The Challenge of OA Repository

Access Rate from CORC







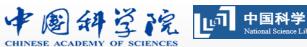




Opportunity

Do we still have opportunity in developing OA Repository in Google World?









Outline

- OA Repository in CAS
- Opportunity for OA Repository
- From OA Repository to Open **Scholarly Communication**
- Conclusion







Opportunity for OA Repository

- In fact, from the very begin of OA movement
- Opportunity for OA Repository are always with us
- It lies in Scholarly Communication, especially lies in Changes in Scholarly Communication
- Scholarly Communication are changing from journal-centric model to alternatives







Changes in Scholarly Communication

 In early this century, many scholars recognized and predicted the revolutionary changes in Scholarly Communication

 2000, Julie M. Hurd, The Transformation of Scientific Communication: A Model for 2020

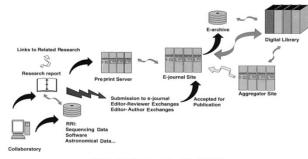


FIG. 2. Scientific Communication: A Model for 2020







Changes in Scholarly Communication

Igniting Change in Scholarly Communication:
 SPARC, Its Past, Present, and Future

Igniting Change in Scholarly Communication: SPARC, Its Past, Present, and Future

(As published in Advances in Librarianship, Vol. 26)

Mary M. Case
Director, Office of Scholarly Communication
Association of Research Libraries
21 Dupont Circle, NW
Suite 800
Washington, DC 20036
202-296-2296 x112

Copyright © 2002 by Mary M. Case



www.arl.org/

SPARC:

Igniting Change in Scholarly Communication

Rick Johnson, Senior Advisor (rick@arl.org) Scholarly Publishing & Academic Resources Coalition

Crimea 2008 International Conference Sudak, Autonomous Republic of Crimea, Ukraine









- 2003, Suzanne E. Thorin,
 Indiana University Bloomington
- Global Changes in Scholarly Communication

GLOBAL CHANGES IN SCHOLARLY COMMUNICATION

Suzanne E. Thorin

1. Chapter Overview

For more than a decade, the cost of print and electronic journals, particularly in the sciences, has increased rapidly at the same time as the amount of research being reported via published articles has grown exponentially. The publicity surrounding the cost of finished publications has come about because librarians, in a growing number of cases, simply can no longer afford to purchase some journals. At first blush, the traditional scholarly communication system, apart from the pricing structure, still seems to work. However, under what is still on the surface a relatively stable environment for teaching, learning and scholarship, potentially seismic changes are occurring that are affecting each stage of the scholarly communication process. These challenges include lack of communication between disciplines and a lack of understanding of the social and cultural practices of various disciplines.

When looking closely at the term scholarly communication, it has a somewhat broader meaning than publication, as it also includes the processes by which scholars communicate with one another as they create new knowledge and by which they measure its worth with colleagues prior to making a formal article available to the broader community, which is then purchased and preserved or licensed by academic libraries world-wide.

This chapter divides the scholarly communication process into three distinct aspects: (1) the process of conducting research, developing ideas and communicating informally with other scholars and scientists; (2) the process of preparing, shaping and communicating to a group of colleagues what will become formal research results; and (3) the ultimate formal product that is distributed to libraries and others in print or electronically. The chapter describes some of the strategic issues within the traditional system of scholarly







Opportunity for OA Repository

Untill recently, Changes in Scholarly
 Communication are becoming more and more a reality

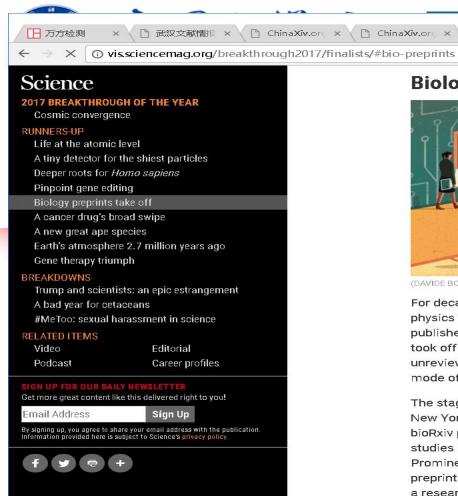






2017 BREAKTHROUGH of the YEAR





Biology preprints take off

P ChinaXiv.or ×



I breakthrou∈ ×

Breakthroug ×

公

(DAVIDE BONAZZI/SALZMAN ART)

Pi ChinaXiv.orc ×

For decades, biologists sat on the sidelines as their colleagues in physics routinely shared draft manuscripts online before they were published in a peer-reviewed journal. But preprint sharing in biology took off this year, as thousands of life scientists posted their unreviewed papers online and funders threw their weight behind this mode of scientific communication.

The stage was set 4 years ago when Cold Spring Harbor Laboratory in New York launched the free biology preprint server, bioRxiv. A trickle of bioRxiv papers in computational biology grew to include experimental studies in fields from microbiology to cell biology and neuroscience. Prominent life scientists fanned out to persuade their colleagues that preprints speed the pace of science and help young investigators build a research record.



bioRxiv

- launched by Cold Spring Harbor Laboratory in New York, 2013
- The movement still has a long way to go
 - The 1500 or so biology preprints posted each month on bioRxiv
- "It's amazing how rapidly things have changed"
- "It's a major cultural change in communication."

——Ronald Vale (cell biologist, University of California)



















SSRN was acquired by Elsevier and expanded to important areas such as biology and chemistry

ELSEVIER



Elsevier > Elsevier Connect > SSRN—the lead

Tools & Technology

SSRN—the leading repository and onla

Elsevier's acquisition of the strengthen it alongside Mer advancement for each comp

By Gregg Gordon Posted on 17 May 2016











SSRN was acquired by Elsevier and expanded to important areas such as biology and chemistry

Biology	BioRN	Chemistry	ChemRN	Education	EduRN
Engineering	EngRN	Women's & Gender Studies	WGSRN		
esearch Net	works	Health Econo	omics HEN	Marketing	MKT
Anthropology & Archaeology	AARN	Hebrew	HRN	Music & Composition	MRCN
Classics	CRN	Information Systems ISN & eBusiness		Negotiation	NEG
Cognitive Science	CSN	Innovation	IRPN	Philosophy	PRN
Corporate Governance	CGN	Law	LSN	Political Science	PSN
Economics	ERN	Leadership	LRN	Rhetoric & Communication	RCRN









Citing interim research products in applications, proposals and reports

Interim research products can be cited anywhere other research products are cited. These sections include the following:

- R&R Other Project Information Form, Bibliography & References Cited
- R&R Senior/Key Person Profile (Expanded) Form, Biographical Sketch
- PHS 398 Research Plan, Progress Report Publication List
- PHS 398 Career Development Award Supplemental Form, Progress Report Publication List
- PHS Fellowship Supplemental Form, Progress Report Publication List
- RPPR, section C Products

To cite the product, applicants and awardees must include the Digital Object Identifier and the Object type (e.g. preprint, protocol) in the citation. Also list any information about the document version (e.g. most recent date modified), and if relevant, the date the product was cited.







Fund agencies accept preprints in a project application and reports



CANCER RESEARCH

Let's beat cancer sooner

Donate

HOME

ABOUT CANCER -

SUPPORT US -OUR RESEARCH +

FUNDING FOR RESEARCHERS .

SHOP + ABOUT US +

Home , Funding for researchers , Research features , We accept preprints in grant applications: new guidance for researchers

We accept preprints in grant applications: new guidance for researchers

Category: Research Feature

30 May 2017

Cancer Research UK



We allow - and encourage - our researchers to deposit preprints of their publications, and to cite preprints and other non-traditional research outputs in their funding applications. We're updating our application guidelines to









Revolutionary Changes in Scholarly Communication

- In addition to preprint, many vivid models Scholarly Communication, not just journal-centric model
 - Data Archive, Data Repositories, Data Cite, Data Portal,
 - Social Network (Research Gate)
 - Social Storage (SlideShare)
 - Self media (blog, Wechat)
 - Citations -> Altmetrics
 - • • •







Revolutionary Changes Communication

- LIBER Europe Strategy 2018-2022
- Association of European Research Libraries









European Commission Open Research Publishing Platform

- 2017, EU proposes to fund a European Commission Open Research Publishing Platform
- The main aim of the platform is to offer a free and fast publication possibility for peer reviewed articles as well as pre-prints resulting from Horizon 2020 funding.











Outline

- OA Repository in CAS
- Opportunity for OA Repository
- From OA Repository to Open **Scholarly Communication**
- Conclusion









From OA Repository to Open Scholarly Communication

- National Science Library, CAS try to build an Open Scholarly Communication environment for the researcher and students
- Try to enhance the Institute Repositories into a Open Scholarly Communication environment

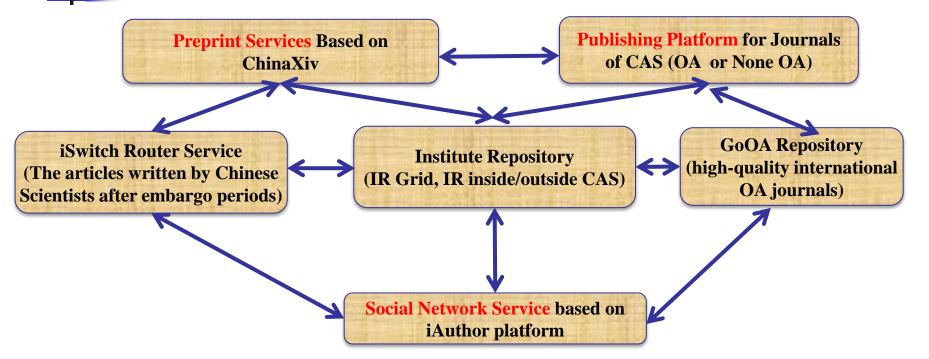








Open Scholarly Communication Environment





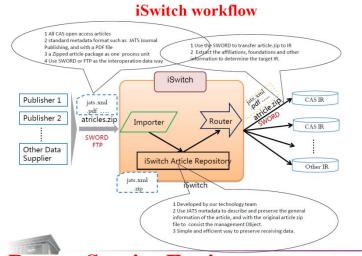






iSwitch Router Service

- Router Service Engine iSwitch for Open Access Articles
- Collect the articles written by Chinese Scientists published in international journal after embargo periods
- Disseminate the articles to IR



Na Liang, XiaolinZhang, Li Qian, Hongbo Shi, Router Service Engine iSwitchfor Open Access Articles, 2014

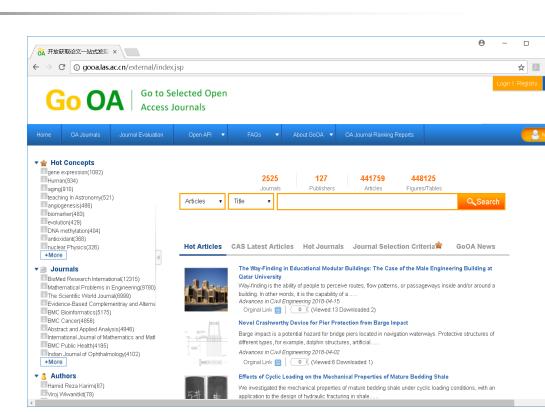






GoOA Repository

- GoOA Repository
- Selected Open Access Journals
- Collect the article in those high-quality OA journals
- http://gooa.las.ac.cn/



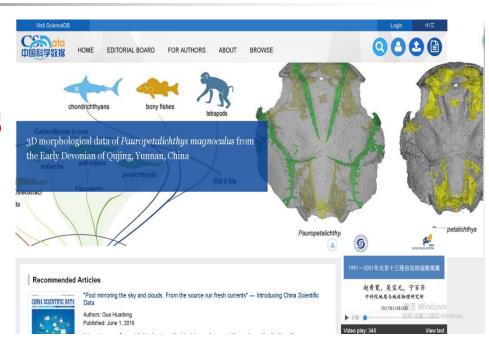






Publishing Platform

- With the help from Computer Network Information Center, CAS
- Developing and running the Unified Publishing Platform for more than 300 kinds of Journals of CAS
 - OA or None OA









Social Network Service based on iAuthor









ChinaXiv: a Preprint Service from China

- Launched in 2016
- To build the national preprint service infrastructure in China
- Accept scholarly preprints in English or Chinese
- In all the field of natural science



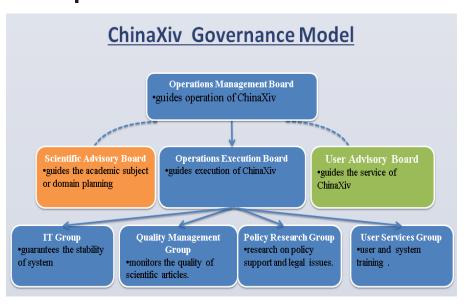


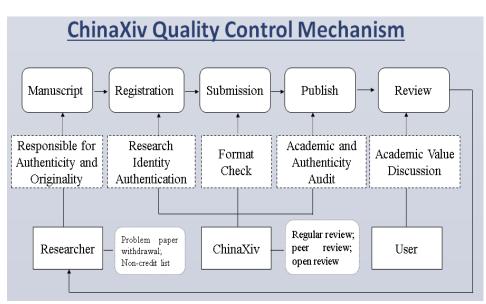






ChinaXiv: a Preprint Service from China





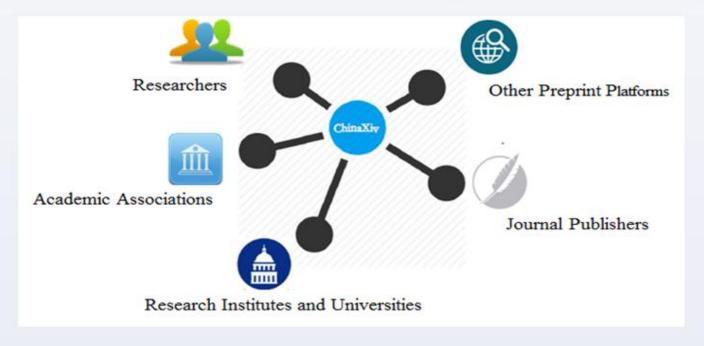








ChinaXiv Promotion and Cooperation Strategy

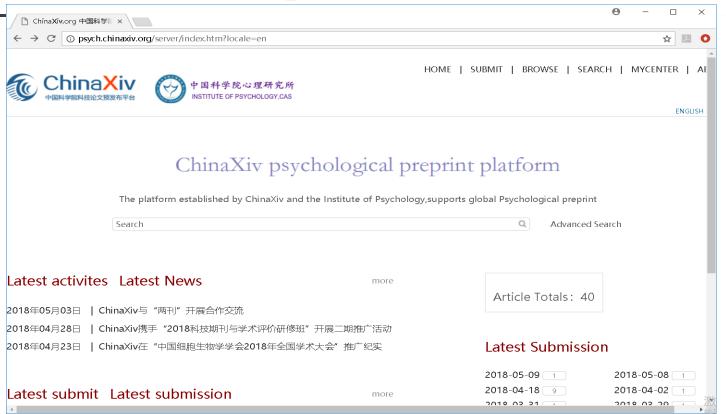








ChinaXiv: a Preprint Service from China





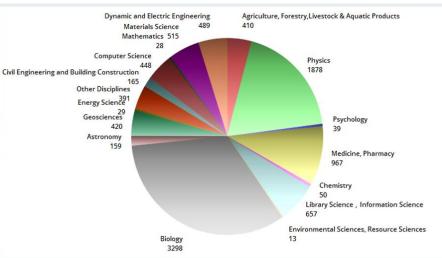




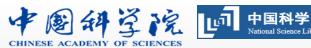


ChinaXiv: a Preprint Service from China













Outline

- OA Repository in CAS
- Opportunity for OA Repository
- From OA Repository to Open **Scholarly Communication**
- Conclusion









- Changes in Scholarly Communication is a opportunity for OA repository
- The OA repository should not be a warehouse for data, but a stage for scientist (students)
 - to disseminate the findings, share the research results, exchange the ideas, make friends, communicate and cooperate
- OA repository still has a long way to go









THANKS!

Thank you for your attention! 谢谢关注!



http://chinaxiv.org

ChinaXiv DOI prefix: 10.12074