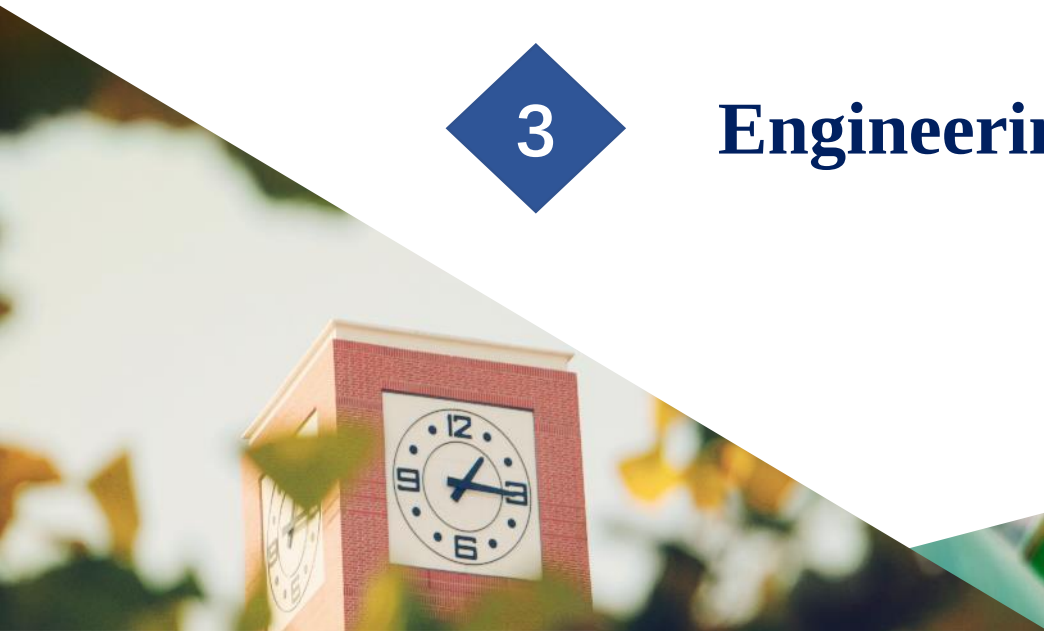
中国科学院大学
University of Chinese Academy of Sciences

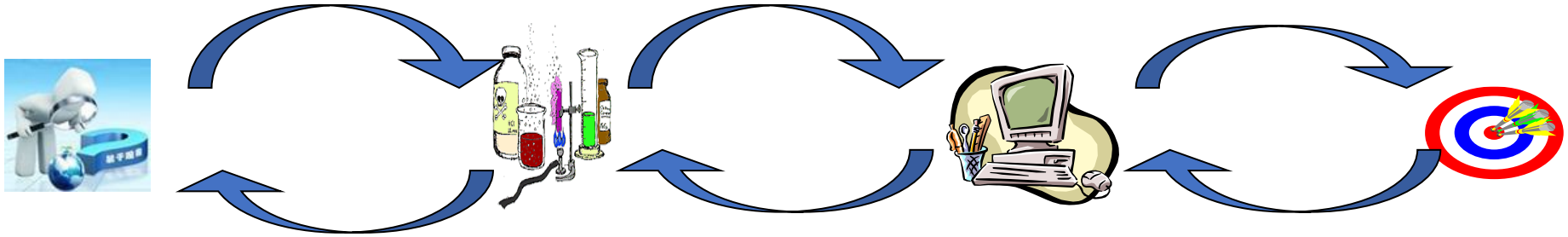
外文文献检索工具介绍与应用

吴鸣

Contents



Overview



发现问题	试验探索	数据分析	发表成果
• 检索获取文献	• 利用跟踪文献	• 数据处理	• 撰写研究论文
• 分析现有的研究结果	• 制订试验方案	• 数据验证	• 发表研究论文
• 寻找新的研究点	• 进行试验	• 对照文献	• 参考相关文献

➢ 科学研究是一种具有连续性、继承性、创造性劳动

➢ 科技文献贯穿科学研究生命周期全过程

➢ 科技文献类型：按加工深度来分

科技信息资源

零次信息资源

未经发表

—及时、直接、新颖、随机
—非存贮，不能检索
—实验记录、组会讨论

一次信息资源

科研成果原始文献
公开发表形式多样

ScienceDirect

Science　nature

AIP Publishing (美国物理联合会)

APS physics （美国物理学会）

二次信息资源

经过加工、组织
目录、文摘

Clarivate Web of Science™

Engineering Village ELSEVIER

三次信息资源

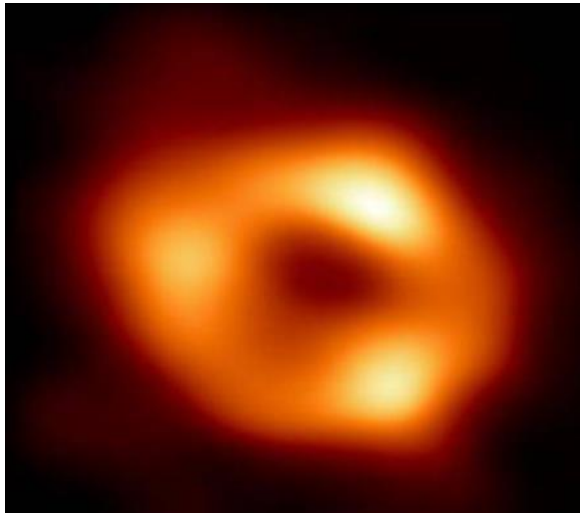
分析、研究
工具、专著、丛书

—百科全书
—年鉴
—专业图书

➢ 建立背景知识，分析研究问题：天文望远镜为例

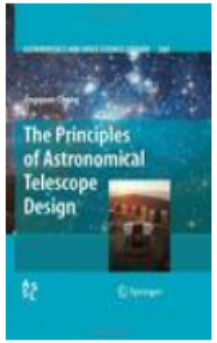
5月13日《天体物理学杂志通讯》发布首张银河系中心超大黑洞图片

- 观测证实了被称为人马座A*（Sgr A*）的黑洞的存在
- 全球8个射电望远镜合作完成，虚拟望远镜被命名为：事件视界（Event Horizon）



➢ 建立背景知识，分析研究问题：天文望远镜为例

检索结果: 1



The Principles of Astronomical Telescope Design

出版社：Springer New York

EISBN：9780387887913

出版时间：2009

作者：Jingquan Cheng

Table of contents (11 chapters)

Search within book

随着天文观测的极限不断向外延伸，现代天文望远镜的灵敏度和精度不断的提高，现代天文望远镜成为了名副其实的代表技术发展最高水平的重大科研基础设施，现代天文学被公认为“大学科”。

主动光学技术、自适应光学技术、人造激光星技术、斑点干涉技术、振幅干涉技术、全息面形检测技术、红外调制技术、光学桁架技术、光谱平面天线技术、隐形技术等。

射电天文望远镜　Radio Telescope，Radio Astronomical Telescope

Contents

Web of Science——获取全球权威、高质量科技文献信息的平台
（https://www.webofscience.com/wos/alldb/basic-search）

◆SCI是科学引文索引（Science Citation Index ）

收录了自然科学、工程技术、生物医学领域，170多个学科9200多种核心期刊论文，是权威的科学技术文献检索工具

◆CPCI-S是会议论文引文索引（ Conference Proceedings Citation Index —Science ）

收录自然科学、工程技术、生物医学领域著名国际会议和学术会议的论文

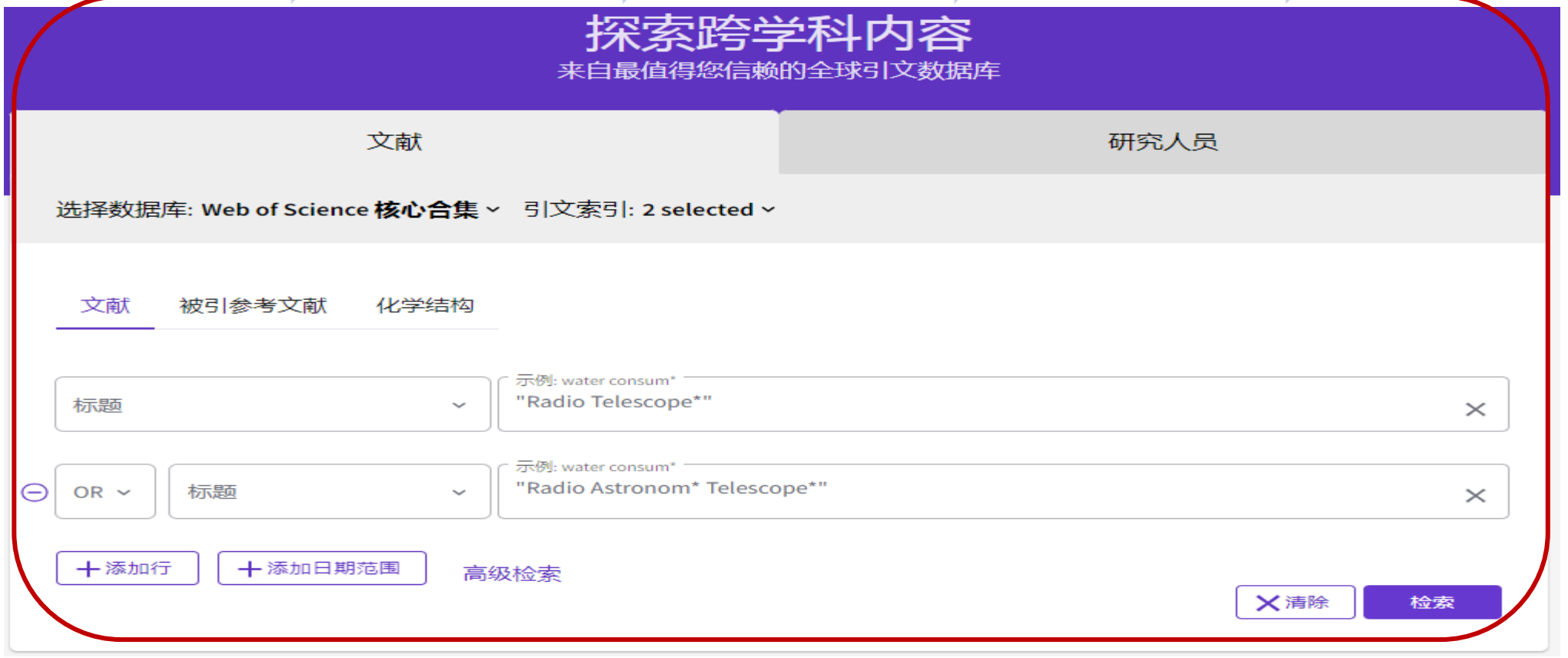
Clarivate™ 科睿唯安™

Web of Science™核心合集-SCI、CPCI

射电天文望远镜

"Radio Telescope*" or "Radio Astronom* Telescope*"

1 构建策略 → 2 检索文献 → 3 分析文献 → 4 跟踪文献



1,397 条来自 Web of Science 核心合集的结果:

"Radio Telescope*" (标题) or "Radio Astronom* Telescope*" (标题)

分析检索结果 引文报告 创建跟踪服务

复制检索式链接

出版物 您可能也想要...

精炼检索结果

在结果中检索...

快速过滤

- 综述论文 19
- 在线发表 2
- 开放获取 378

出版年

文献类型

Web of Science 类别

作者

所属机构

出版物标题

出版商

基金资助机构

0/1,397 添加到标记结果列表 导出 排序方式: 相关性 1 / 28

1 RADIO ASTRONOMY Telescope Project Splits Array to Avoid Division

Glanz, J

Jun 1 2012 | SCIENCE 336 (6085) , pp.1085-1085

0 参考文献

2 Signal Processing for Phased Array Feeds in Radio Astronomical Telescopes

Jeffs, BD; Warnick, KF; (...); Norrod, RD

Oct 2008 | IEEE JOURNAL OF SELECTED TOPICS IN SIGNAL PROCESSING 2 (5) , pp.635-646

Relative to traditional waveguide feeds, phased array feeds (PAFs) for radio telescopes can increase the instrument field of view and sky survey speed. Unique challenges associated with PAF observations, including extremely low signal levels, long-term system gain stability requirements, spatially correlated noise due to mutual coupling, and tight beamshape tolerances, require the development o ... 显示更多

知识库中的免费已提交文章 出版商处的全文

62 被引频次

39 参考文献

相关记录

3 RFI profiles of prime candidate sites for the first radio astronomical telescope in Malaysia

Abidin, ZZ; Adnan, SBRS and Ibrahim, ZA

Mar 2010 | NEW ASTRONOMY 15 (3) , pp.307-312

Radio astronomy is a very young research field in South East Asia. There has not been a research-grade radio telescope built in this part of the world yet. A plan has been proposed by the University of Malaya's Radio Cosmology Research Laboratory to build a medium-sized radio telescope in order to eventually join the global projects of the Very Long Baseline Interferometry (VLBI) Network and Sq ... 显示更多

出版商处的全文

9 被引频次

3 参考文献

相关记录

1、我该先读哪些文章？

最新发表的论文——论文发表时间排序

高影响力论文—— 被引频次降序排列

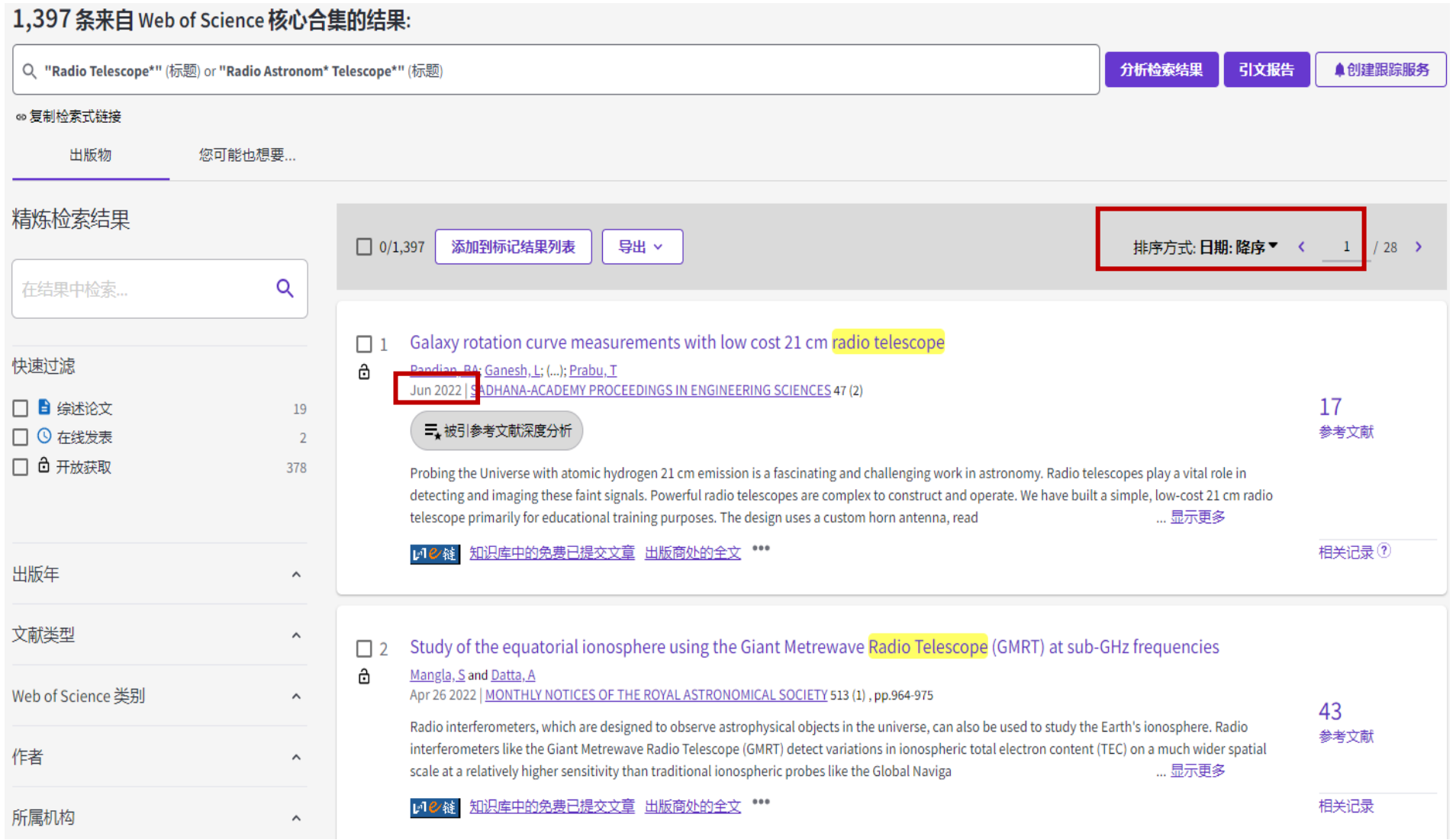
最受关注的论文——文献级别用量指标（使用次数）

锁定相关领域的论文—— 精炼检索结果(Web of Science类别)

综述文章—— 精炼检索结果（文献类型Review）

……

最新发表的论文——论文发表时间排序



高影响力论文—— 被引频次

1,397 条来自 Web of Science 核心合集的结果:

"Radio Telescope*" (标题) or "Radio Astronom* Telescope*" (标题)

分析检索结果 | 引文报告 | 创建跟踪服务

复制检索式链接

出版物 | 您可能也想要...

精炼检索结果

在结果中检索...

快速过滤

- 综述论文 19
- 在线发表 2
- 开放获取 378

出版年

文献类型

Web of Science 类别

作者

0/1,397 | 添加到标记结果列表 | 导出

排序方式: 被引频次: 最高优先 | 1 / 28

1 THE FIVE-HUNDRED-METER APERTURE SPHERICAL RADIO TELESCOPE (FAST) PROJECT

Nan, RD; Li, D; (...); Qian, L

Jun 2011 | INTERNATIONAL JOURNAL OF MODERN PHYSICS D 20 (6) , pp.989-1024

Five-hundred-meter Aperture Spherical radio Telescope (FAST) is a Chinese mega-science project to build the largest single dish radio telescope in the world. Its innovative engineering concept and design pave a new road to realize a huge single dish in the most effective way. FAST also represents Chinese contribution in the international efforts to build the square kilometer array (SKA). Being ... 显示更多

知识库中的免费已提交文章 | 出版商处的全文 | View PDF with EndNote Click

383 被引频次

28 参考文献

相关记录

2 THE GIANT METER-WAVE RADIO TELESCOPE

SWARUP, G; ANANTHAKRISHNAN, S; (...); KULKARNI, VK

Jan 25 1991 | CURRENT SCIENCE 60 (2) , pp.95-105

The Giant Metre-wave Radio Telescope, an aperture-synthesis array consisting of 30 fully steerable parabolic dishes of 45-m diameter each, is being set up about 80 km north of Pune as a national facility for frontline research in radio astronomy in the frequency range 38 MHz to 1420 MHz. The new and novel design of a low-solidity dish for metre-wave operation, in which a thin wire mesh (varyin ... 显示更多

344 被引频次

64 参考文献

相关记录

最受关注的论文——文献使用次数

0/1,397 添加到标记结果列表 导出 ∨ 排序方式: 使用次数 (所有时间): 最多优先 ▾ 1 / 28

1 THE FIVE-HUNDRED-METER APERTURE SPHERICAL RADIO TELESCOPE (FAST) PROJECT

Nan, RD; Li, D; (...); Qian, L

Jun 2011 | INTERNATIONAL JOURNAL OF MODERN PHYSICS D 20 (6) , pp.989-1024

Five-hundred-meter Aperture Spherical radio Telescope (FAST) is a Chinese mega-science project to build the largest single dish radio telescope in the world. Its innovative engineering concept and design pave a new road to realize a huge single dish in the most effective way. FAST also represents Chinese contribution in the international efforts to build the square kilometer array (SKA). Being ... 显示更多

383 被引频次

28 参考文献

知识链 知识库中的免费已提交文章 出版商处的全文 ***

相关记录

2 Five hundred meter aperture spherical radio telescope (FAST)

Nan, RD

Apr 2006 | SCIENCE IN CHINA SERIES G-PHYSICS MECHANICS & ASTRONOMY 49 (2) , pp.129-148

Five hundred meter aperture spherical radio telescope (FAST) will be the largest radio telescope in the world. The innovative engineering concept and design pave a new road to realizing a huge single dish in the most effective way. Three outstanding features of the telescope are the unique karst depressions as the sites, the active main reflector which corrects spherical aberration on the groun ... 显示更多

172 被引频次

10 参考文献

知识链 出版商处的全文 ***

相关记录

0/1,397 添加到标记结果列表 导出 ∨ 排序方式: 使用次数 (最近 180 天): 最多优先 ▾ 1 / 28

1 THE FIVE-HUNDRED-METER APERTURE SPHERICAL RADIO TELESCOPE (FAST) PROJECT

Nan, RD; Li, D; (...); Qian, L

Jun 2011 | INTERNATIONAL JOURNAL OF MODERN PHYSICS D 20 (6) , pp.989-1024

Five-hundred-meter Aperture Spherical radio Telescope (FAST) is a Chinese mega-science project to build the largest single dish radio telescope in the world. Its innovative engineering concept and design pave a new road to realize a huge single dish in the most effective way. FAST also represents Chinese contribution in the international efforts to build the square kilometer array (SKA). Being ... 显示更多

383 被引频次

28 参考文献

知识链 知识库中的免费已提交文章 出版商处的全文 ***

相关记录

2 The latest progress of Five-hundred-meter Aperture Spherical radio Telescope

Jiang, P and Yao, R

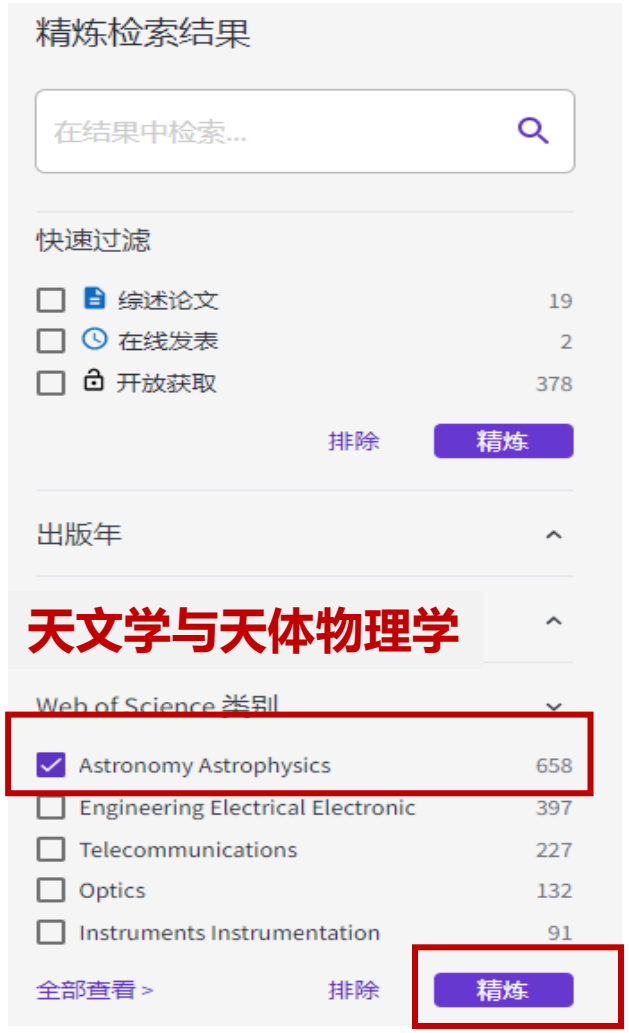
Dec 2021 (在线发表) | SCIENCE CHINA-TECHNOLOGICAL SCIENCES

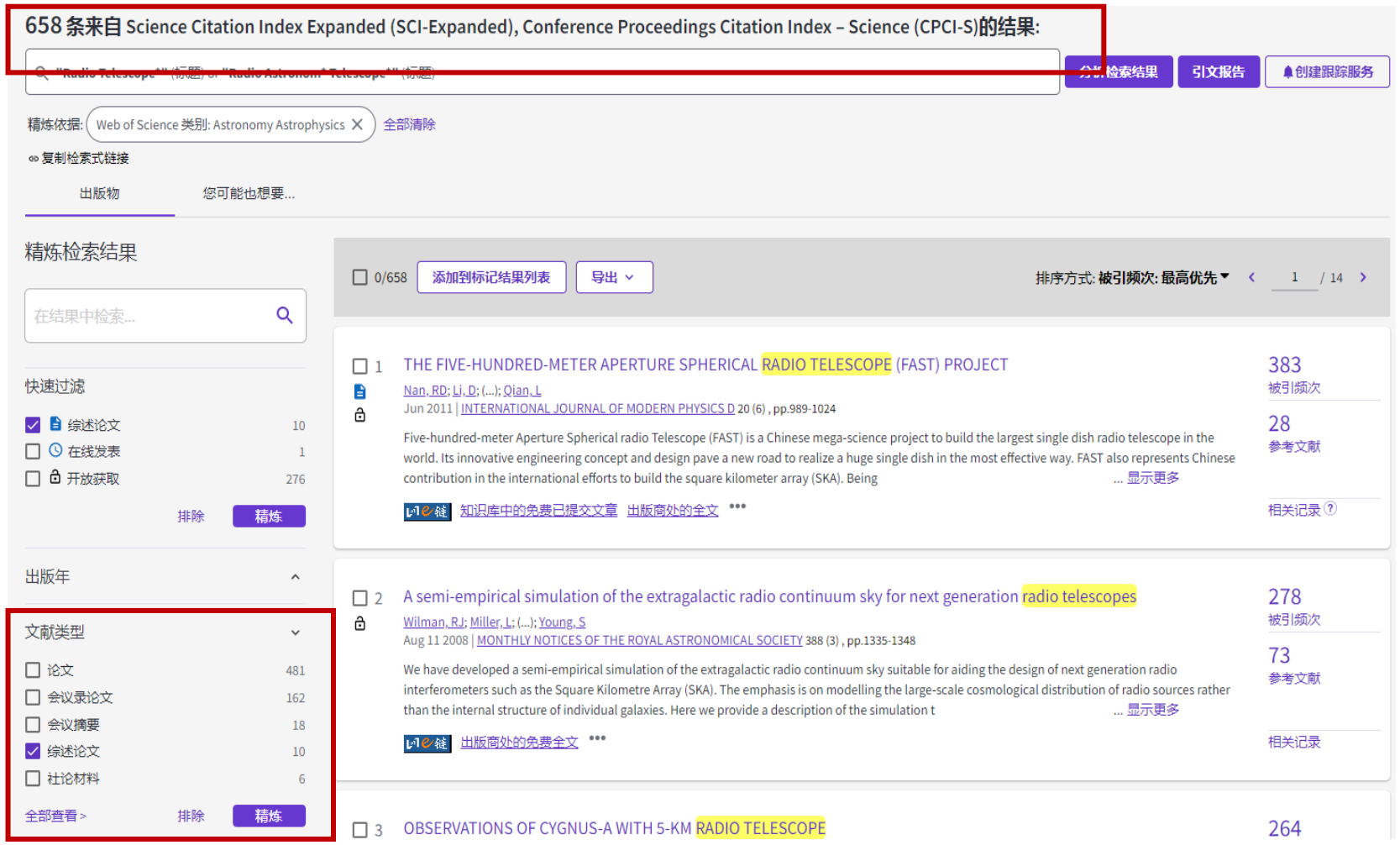
10 参考文献

知识链 出版商处的免费全文 *** View PDF with EndNote Click

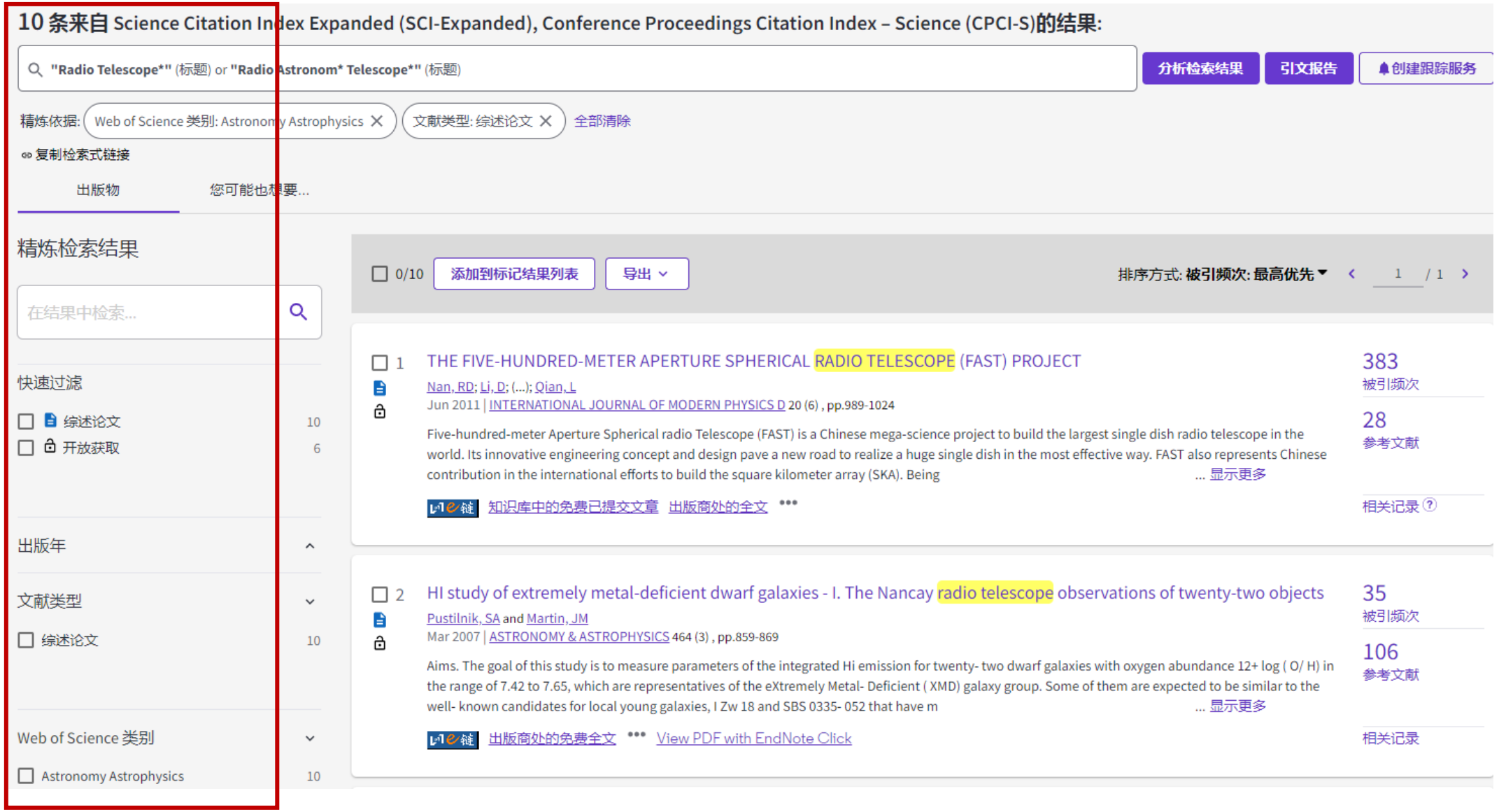
相关记录

锁定相关领域的论文—— 精炼检索结果（Web of Science类别）

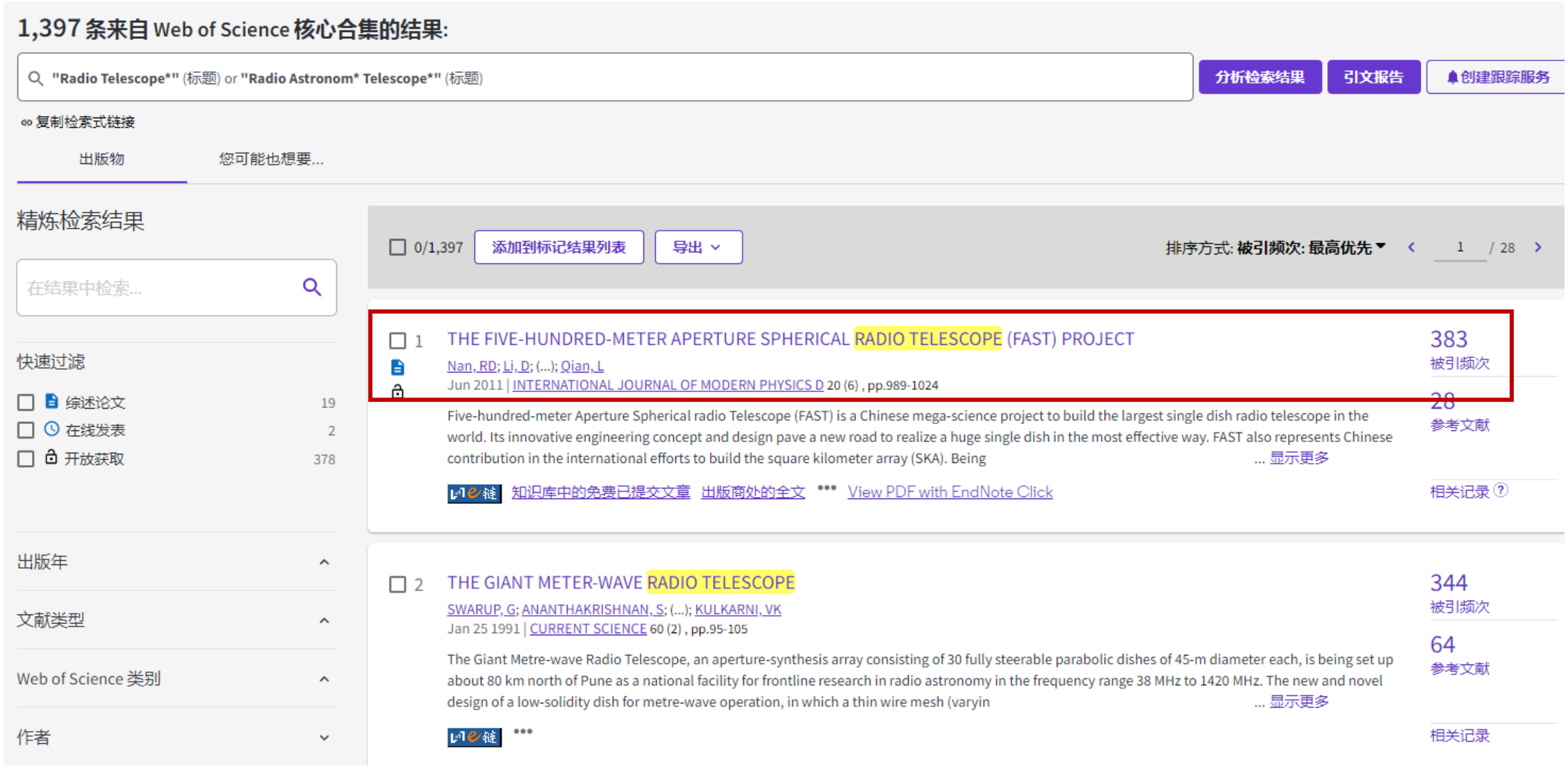




综述文章—— 精炼文献类型Review



2、如何从高质量论文了解领域发展



1,397 条来自 Web of Science 核心合集的结果:

"Radio Telescope*" (标题) or "Radio Astronom* Telescope*" (标题)

分析检索结果 | 引文报告 | 创建跟踪服务

复制检索式链接

出版物 | 您可能也想要...

精炼检索结果

在结果中检索...

快速过滤

- 综述论文 19
- 在线发表 2
- 开放获取 378

出版年

文献类型

Web of Science 类别

作者

0/1,397 | 添加到标记结果列表 | 导出

排序方式: 被引频次: 最高优先 1 / 28

1 THE FIVE-HUNDRED-METER APERTURE SPHERICAL RADIO TELESCOPE (FAST) PROJECT

Nan, RD; Li, D; (...); Qian, L

Jun 2011 | INTERNATIONAL JOURNAL OF MODERN PHYSICS D 20 (6) , pp.989-1024

Five-hundred-meter Aperture Spherical radio Telescope (FAST) is a Chinese mega-science project to build the largest single dish radio telescope in the world. Its innovative engineering concept and design pave a new road to realize a huge single dish in the most effective way. FAST also represents Chinese contribution in the international efforts to build the square kilometer array (SKA). Being ... 显示更多

知识库中的免费已提交文章 | 出版商处的全文 | View PDF with EndNote Click

383 被引频次

28 参考文献

相关记录

2 THE GIANT METER-WAVE RADIO TELESCOPE

SWARUP, G; ANANTHAKRISHNAN, S; (...); KULKARNI, VK

Jan 25 1991 | CURRENT SCIENCE 60 (2) , pp.95-105

The Giant Metre-wave Radio Telescope, an aperture-synthesis array consisting of 30 fully steerable parabolic dishes of 45-m diameter each, is being set up about 80 km north of Pune as a national facility for frontline research in radio astronomy in the frequency range 38 MHz to 1420 MHz. The new and novel design of a low-solidity dish for metre-wave operation, in which a thin wire mesh (varyin ... 显示更多

344 被引频次

64 参考文献

相关记录

“人民科学家”南仁东——500米口径球面射电望远镜（FAST）

出版商处的全文 | 全文链接 | 导出 | 添加到标记结果列表 | 1 / 10

THE FIVE-HUNDRED-METER APERTURE SPHERICAL RADIO TELESCOPE (FAST) PROJECT

作者: Nan, RD (Nan, Rendong) [1], [2]; Li, D (Li, Di) [1], [3]; Jin, CJ (Jin, Chengjin) [1]; Wang, QM (Wang, Qiming) [1]; Zhu, LC (Zhu, Lichun) [1]; Zhu, WB (Zhu, Wenbai) [1]; Zhang, HY (Zhang, Haiyan) [1], [2]; Yue, YL (Yue, Youling) [1]; Qian, L (Qian, Lei) [1]

查看 Web of Science ResearcherID 和 ORCID (由 Clarivate 提供)

INTERNATIONAL JOURNAL OF MODERN PHYSICS D

卷: 20 **期:** 6 **页:** 989-1024

DOI: 10.1142/S0218271811019335

出版时间: JUN 2011

已索引: 2011-06-18

文献类型: Review

摘要

Five-hundred-meter Aperture Spherical radio Telescope (FAST) is a Chinese mega-science project to build the largest single dish radio telescope in th... engineering concept and design pave a new road to realize a huge single dish in the most effective way. FAST also represents Chinese contribution in the international efforts to build the square kilometer array (SKA). Being the most sensitive single dish radio telescope, FAST will enable astronomers to jump-start many science goals, such as surveying the neutral hydrogen in the Milky Way and other galaxies, detecting faint pulsars, looking for the first shining stars, hearing the possible signals from other civilizations, etc.

The idea of sitting a large spherical dish in a karst depression is rooted in Arecibo telescope. FAST is an Arecibo-type antenna with three outstanding aspects: the karst depression used as the site, which is large to host the 500-meter telescope and deep to allow a zenith angle of 40 degrees; the active main reflector correcting for spherical aberration on the ground to achieve a full polarization and a wide band without involving complex feed systems; and the light-weight feed cabin driven by cables and servomechanism plus a parallel robot as a secondary adjustable system to move with high precision. The feasibility studies for FAST have been carried out for 14 years, supported by Chinese and world astronomical communities. Funding for FAST has been approved by the National Development and Reform Commission in July of 2007 with a capital budget similar to 700 million RMB. The project time is 5.5 years from the commencement of work in March of 2011 and the first light is expected to be in 2016.

This review intends to introduce the project of FAST with emphasis on the recent progress since 2006. In this paper, the subsystems of FAST are described in modest details followed by discussions of the fundamental science goals and examples of early science projects.

关键词

作者关键词: Radio telescope; active main reflector; HI 21cm line; pulsar

Keywords Plus: GALACTIC PLANE SURVEY; ALPHA SURVEY; REFLECTOR; GALAXIES; EMISSION; DESIGN; CLOUDS

作者信息

通讯作者地址: Nan, Rendong (通讯作者)

Chinese Acad Sci, Natl Astron Observ, A20 Datun Rd, Beijing 100012, Peoples R China

地址:

1 Chinese Acad Sci, Natl Astron Observ, Beijing 100012, Peoples R China

2 Chinese Acad Sci, Key Lab Radio Astron, Nanjing 210008, Peoples R China

3 CALTECH, Jet Prop Lab, Pasadena, CA 91109 USA

WOS被引频次

引用参考文献

相关文献

引文网络

来自 Web of Science 核心合集

383

被引频次

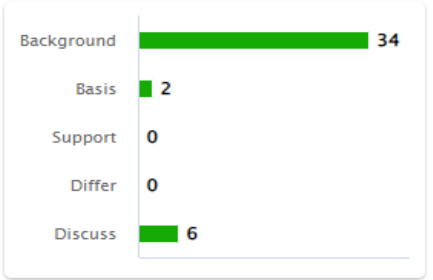
创建引文跟踪

28

查看更多的被引频次 | 查看相关记录

按分类引用项目 New

根据可用的引文上下文数据和 39 条引用项目中的摘录，对此文献的提及方式进行细分。



您可能也想要...

Massaro, F; Allegretti, M; Ferrari, A;
Data mining in modern radio astronomy
PROCEEDINGS OF THE 2017 IEEE-APS TOPICAL CONFERENCE ON ANTENNAS AND PROPAGATION IN WIRELESS COMMUNICATIONS (APWC)

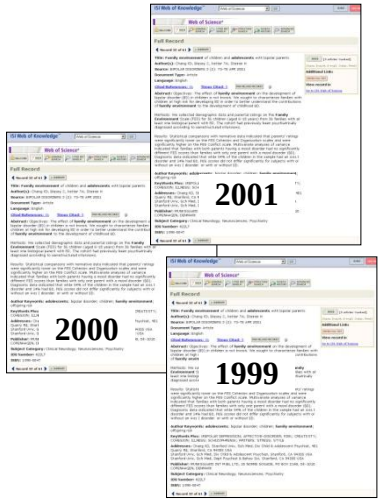
了解和把握领域发展的来龙去脉

从一篇高质量的文献出发
沿着科学研究的发展道路…

Cited References

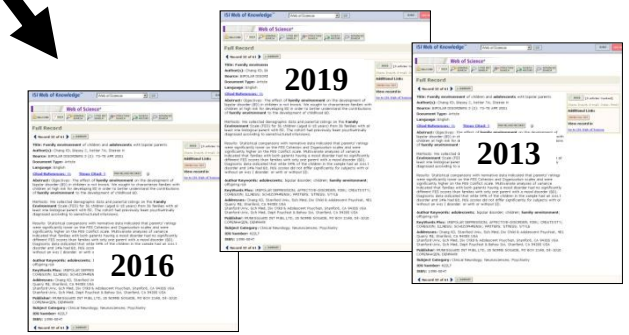
Times Cited

Related Records

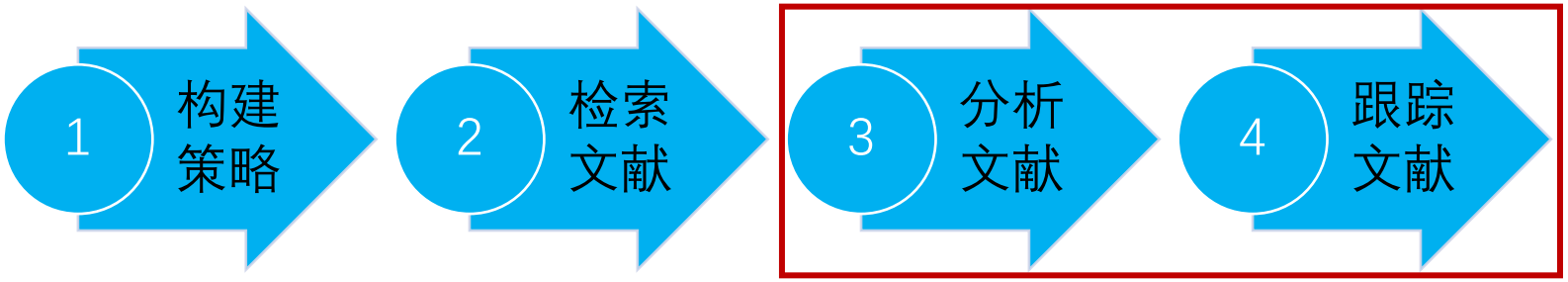


越查越深
课题起源、演变

越查越新
课题的最新进展



越查越广
课题相关研究



强大的分析功能：

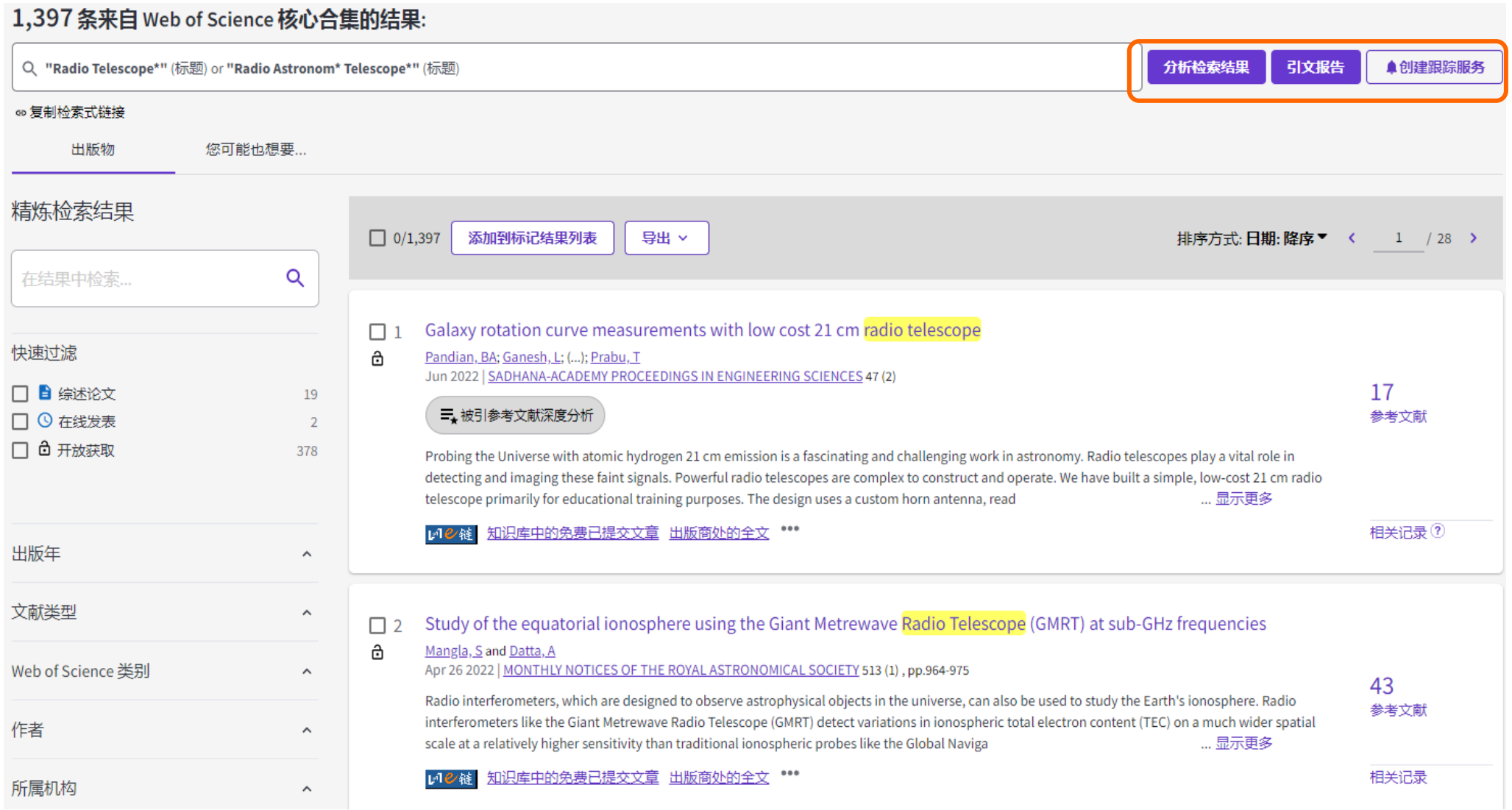
▪作者 ▪出版年 ▪来源期刊 ▪文献类型

▪会议名称 ▪国家/地区 ▪基金资助机构

▪授权号 ▪团体作者 ▪所属机构 ▪语种

▪ WOS学科类别 ▪编者 ▪丛书名称 ▪研究方向

分析检索结果、引证报告、创建跟踪服务



引证报告

出版物
1,397
合计
来自 1900 至 2022

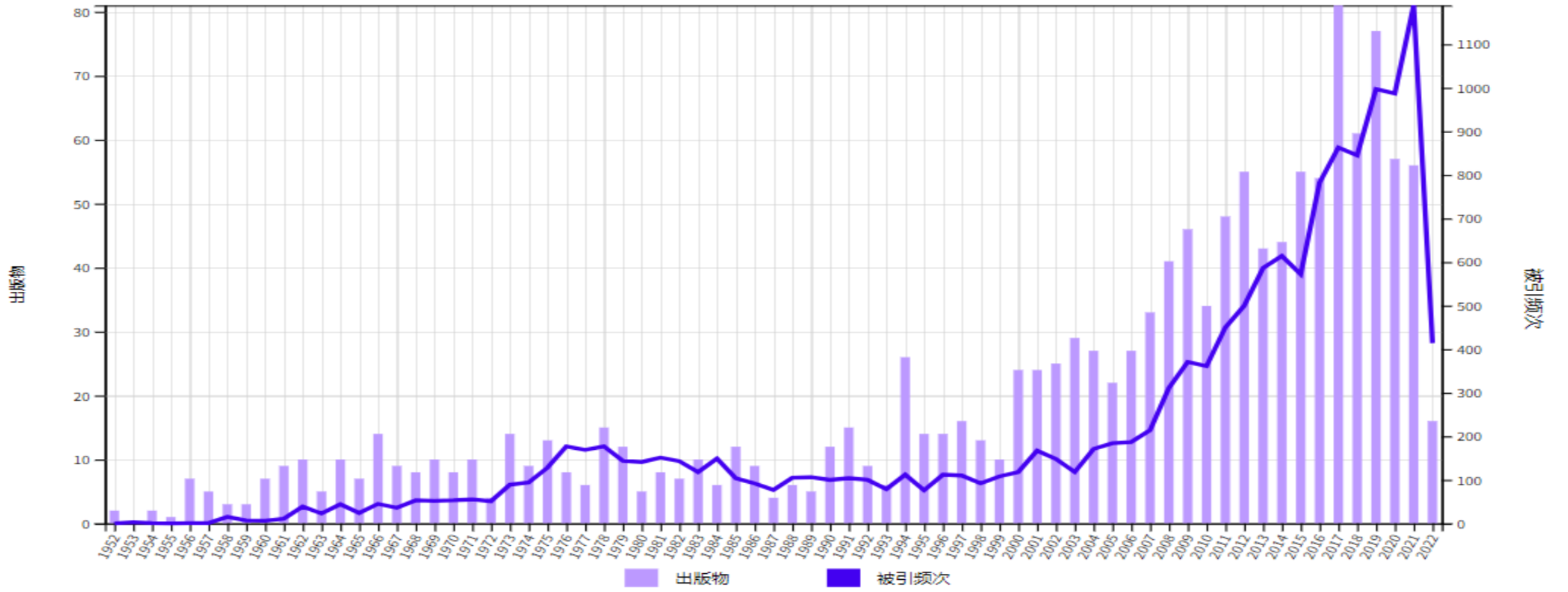
施引文献
10,645 分析
合计
10,073 分析
去除自引

被引频次
14,826
合计
13,622
去除自引
10.61
篇均被引频次

57
h-index

按年份的被引频次和出版物分布

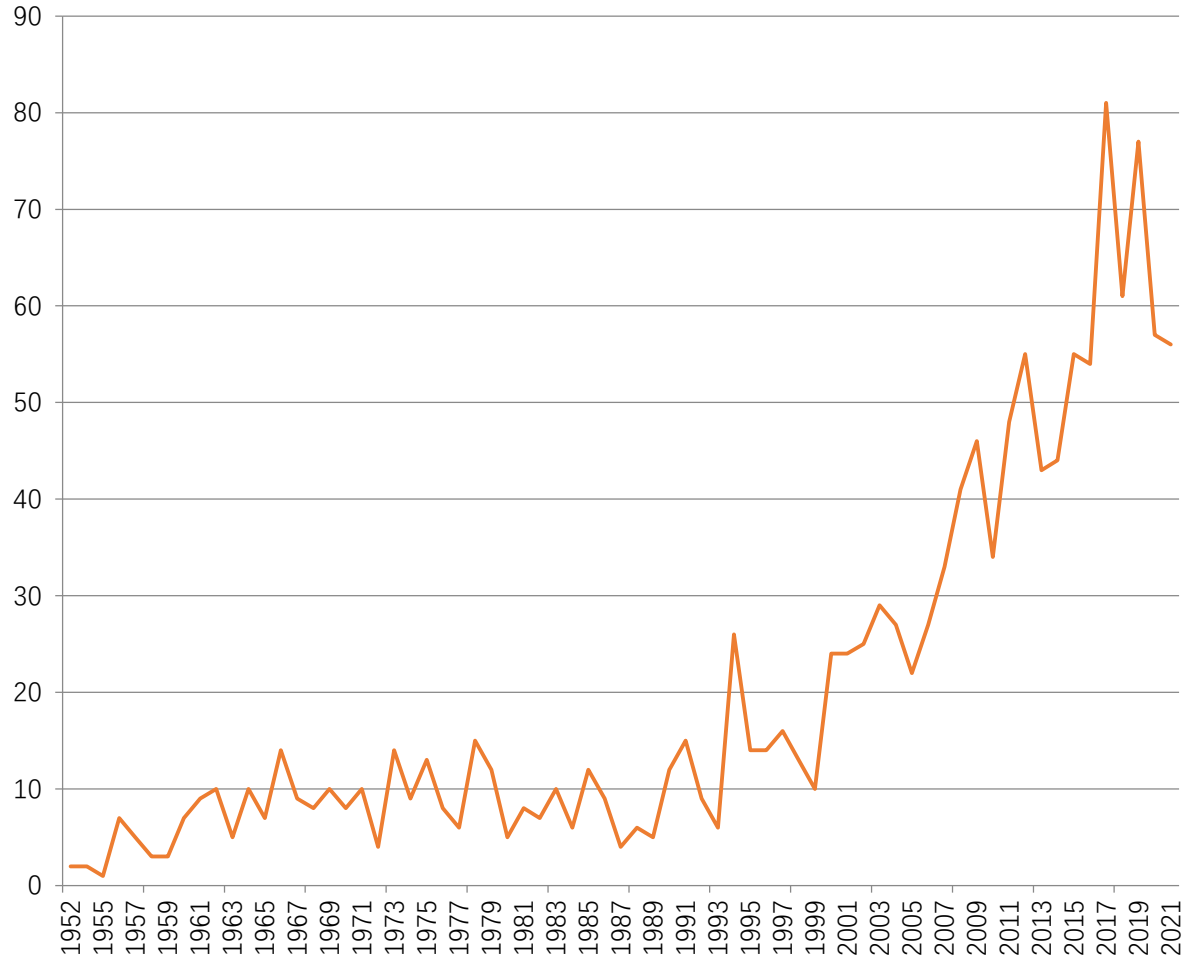
下载



分析检索结果

出版年份分析

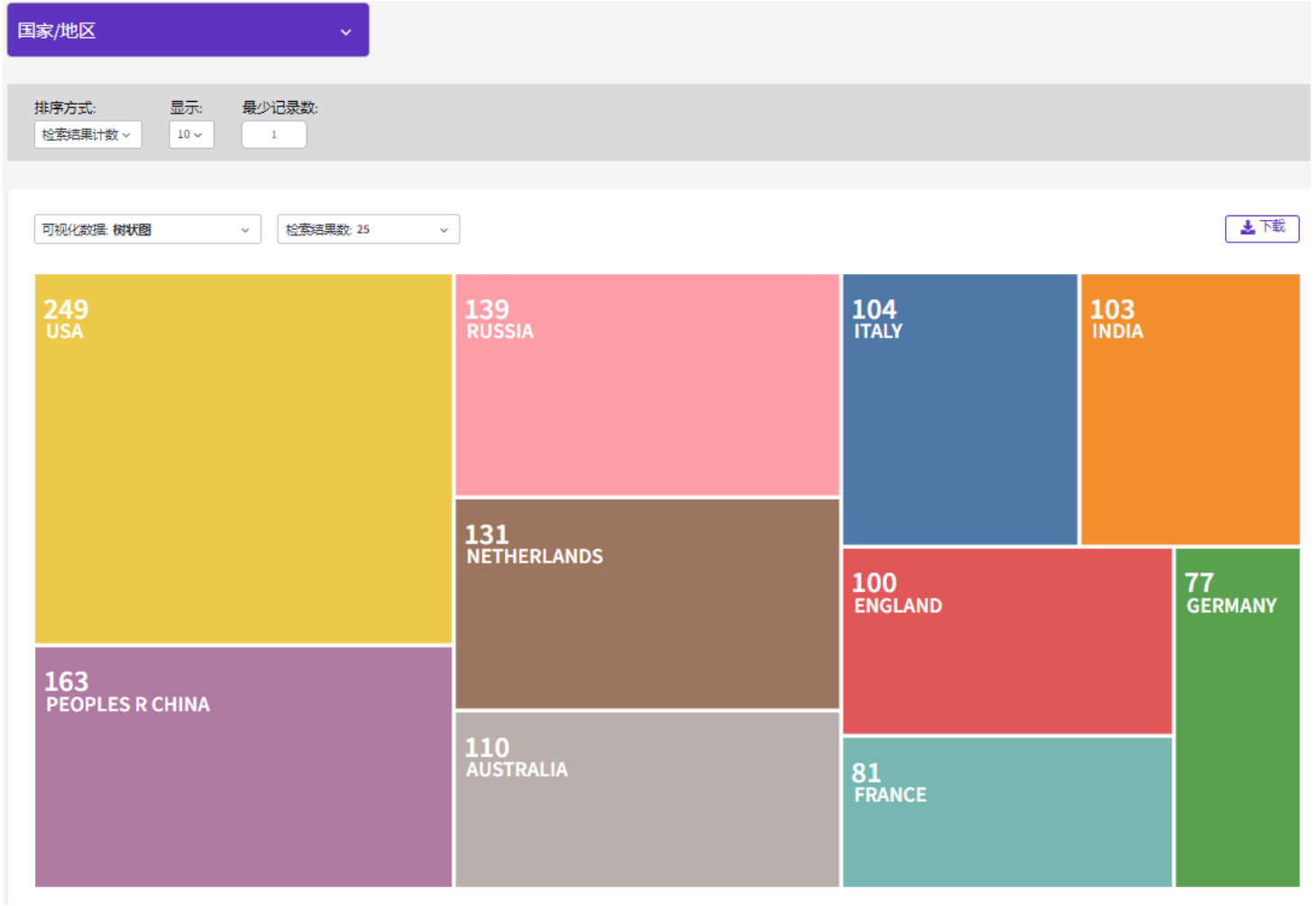
了解课题的发展趋势以及判断课题的发展阶段。



分析检索结果

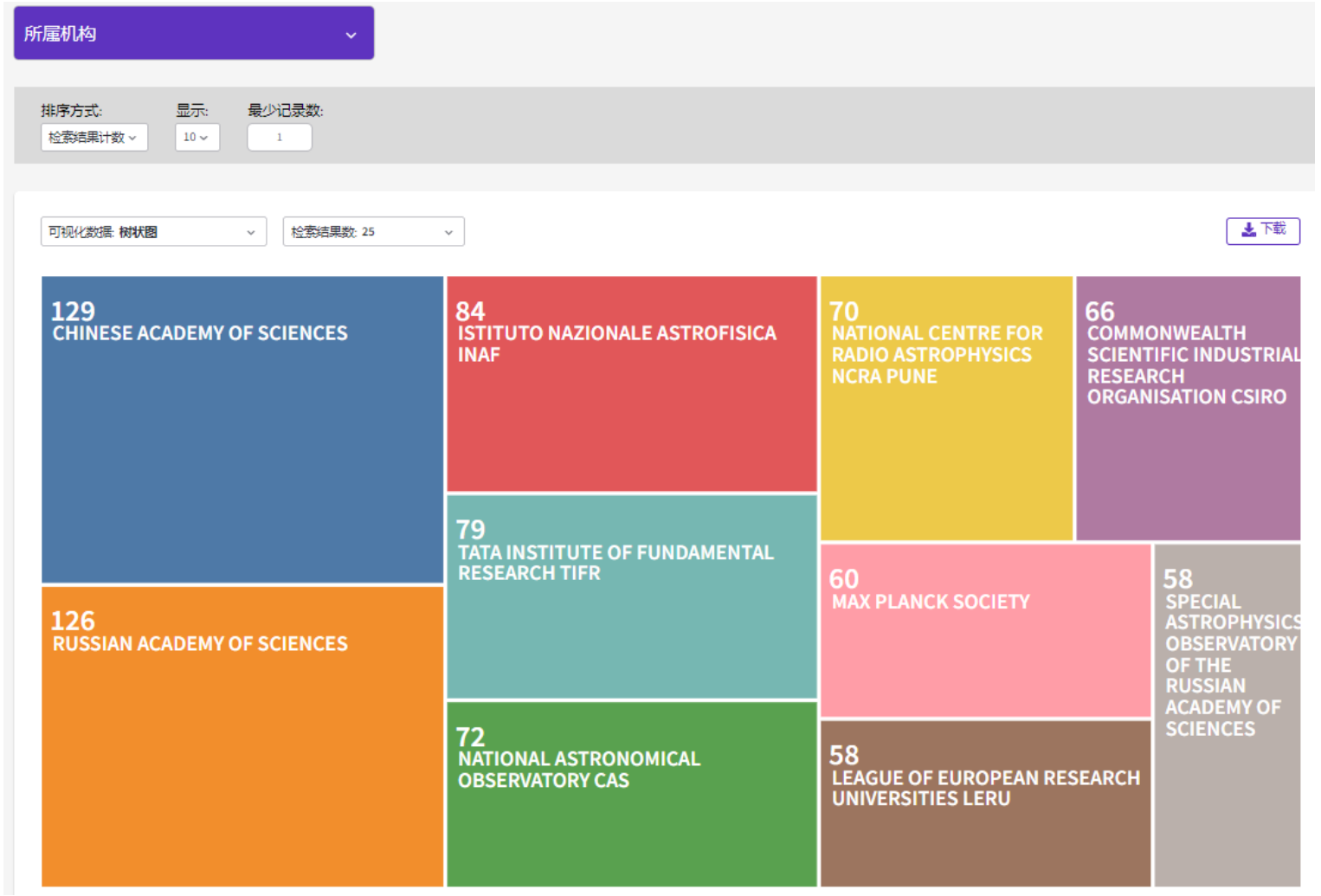
国家/地区分析

- 发现该领域高产出的国家/地区。
- 进行国家与地区间的研究对比。



机构分析

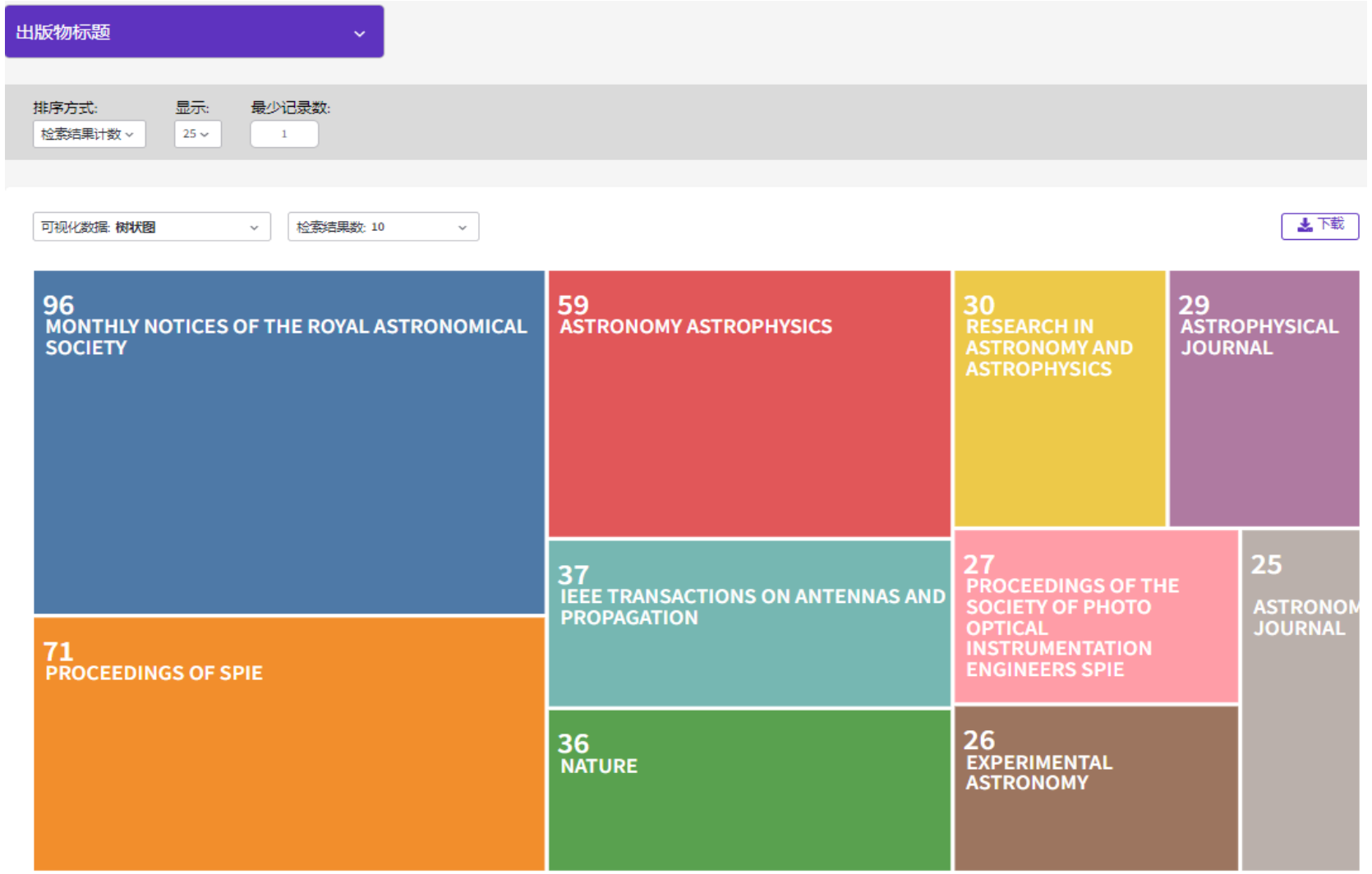
- 发现该领域高产出的大学及研究机构
- 有利于机构间的合作
- 发现深造的研究机构



出版物分析

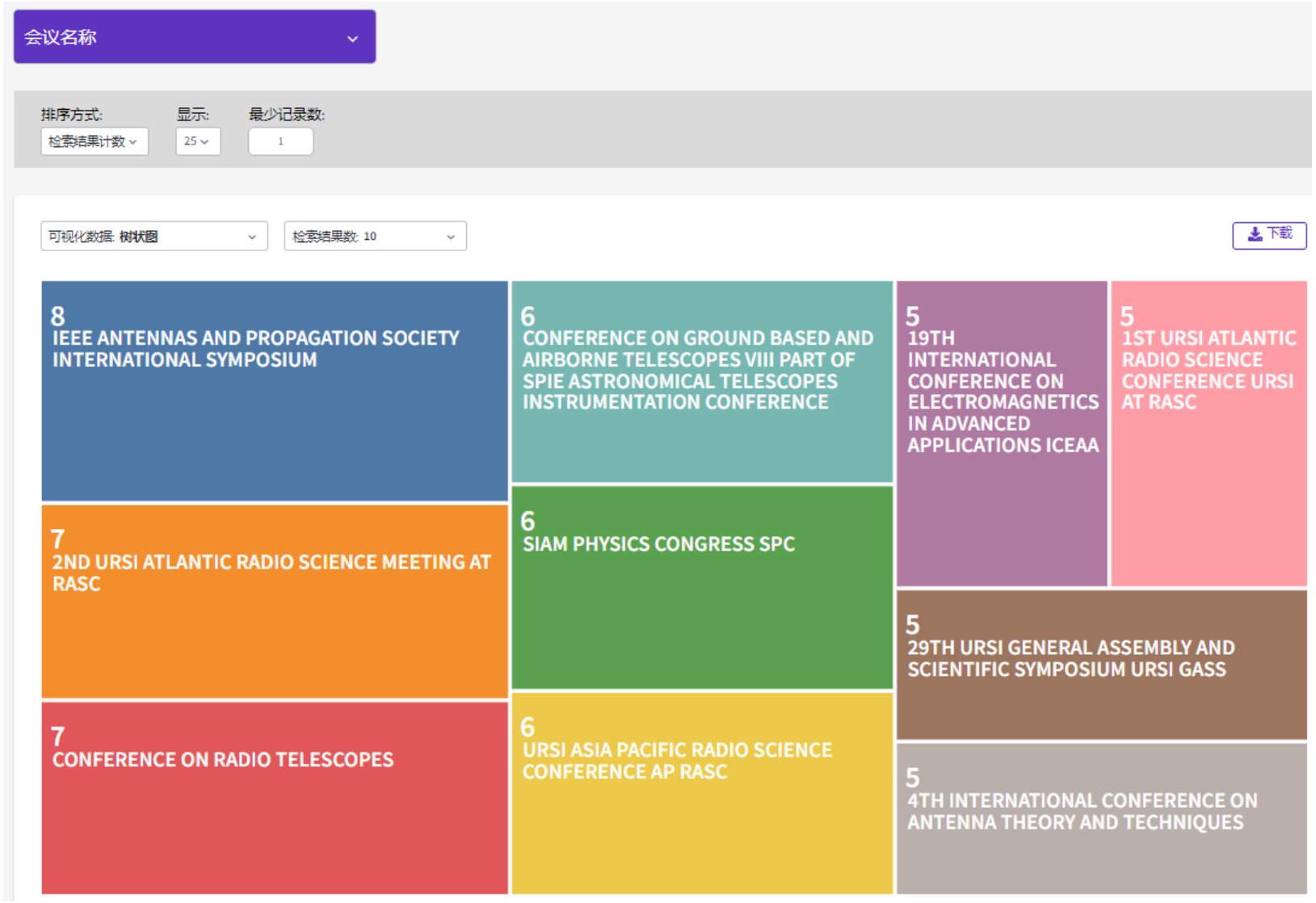
--发现该领域的高产出期刊

-筛选论文投稿候选期刊

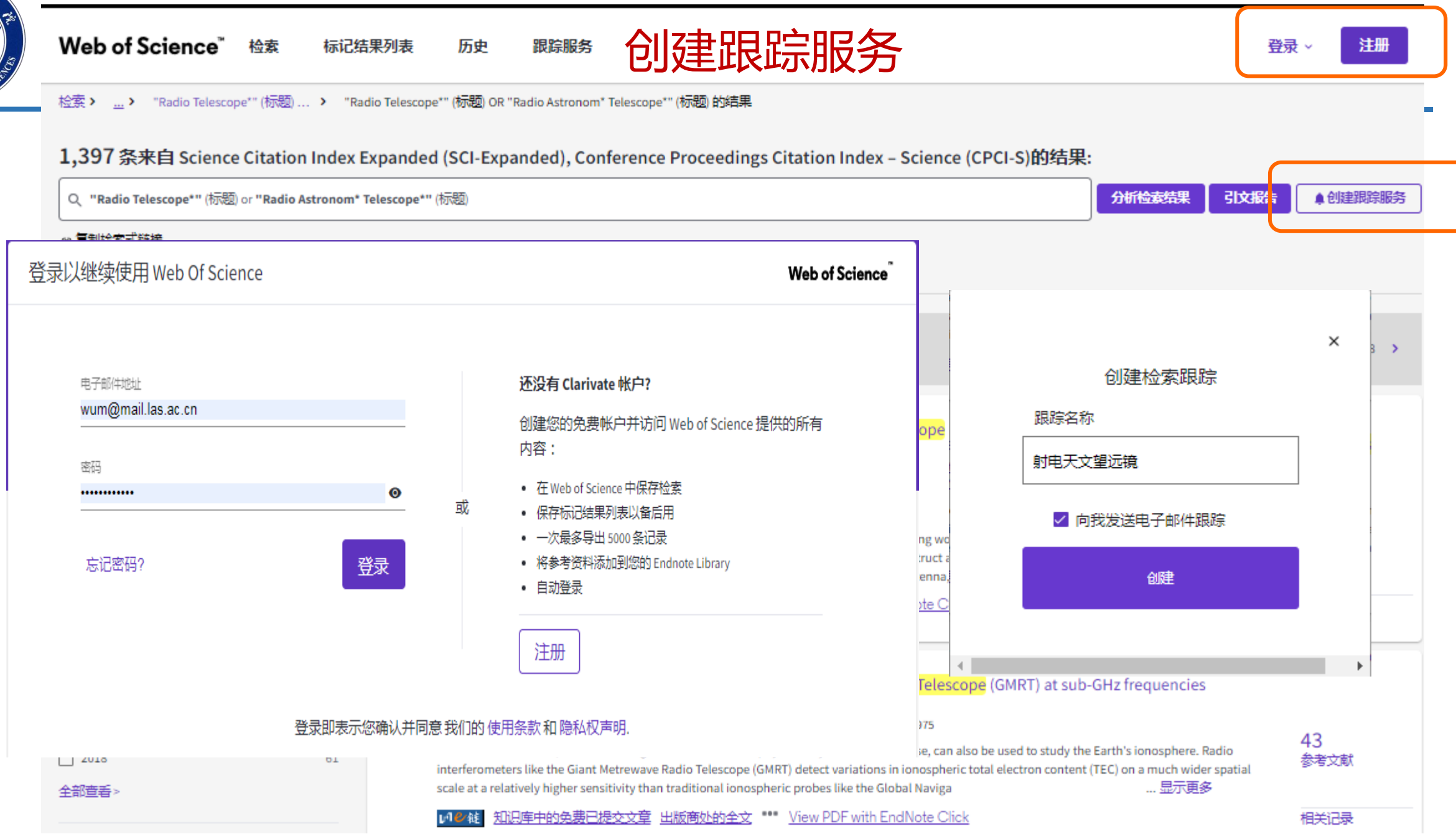


会议信息

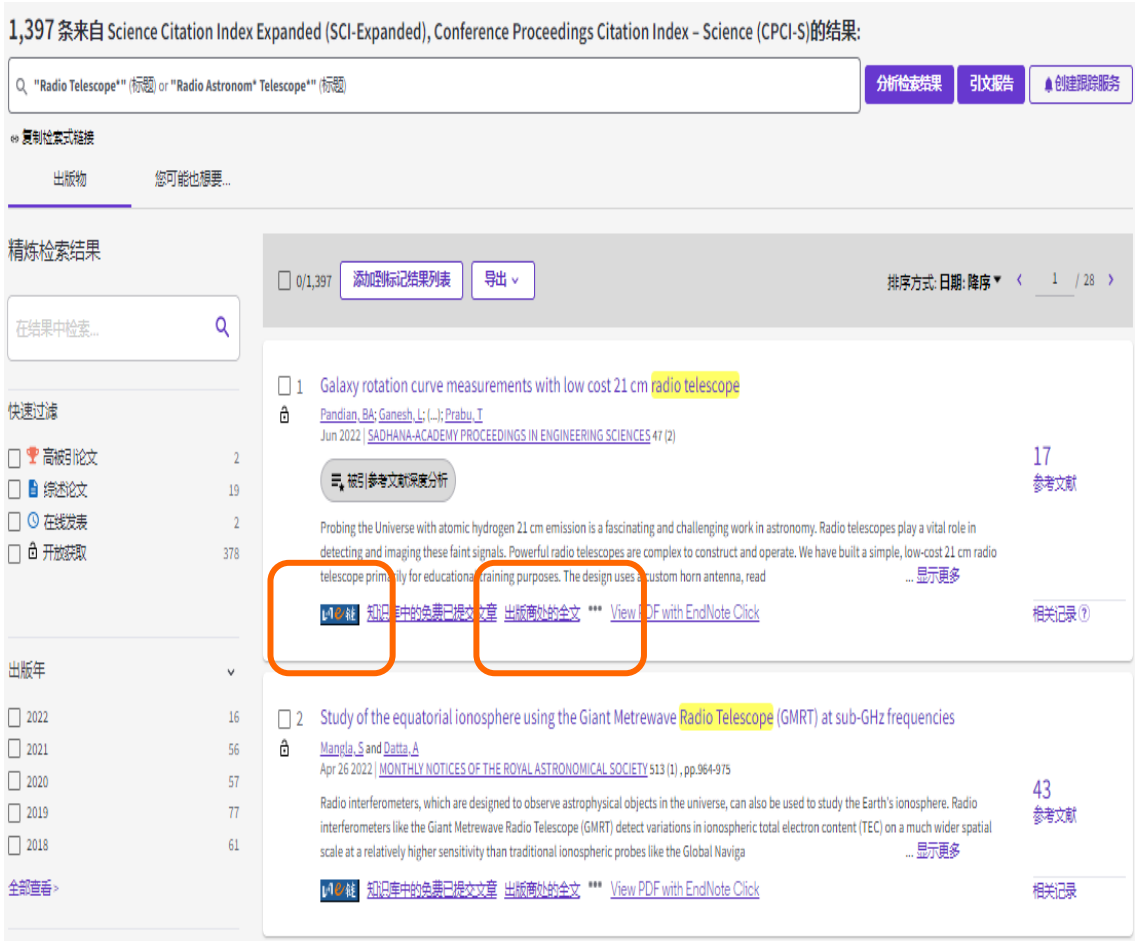
-了解领域会议

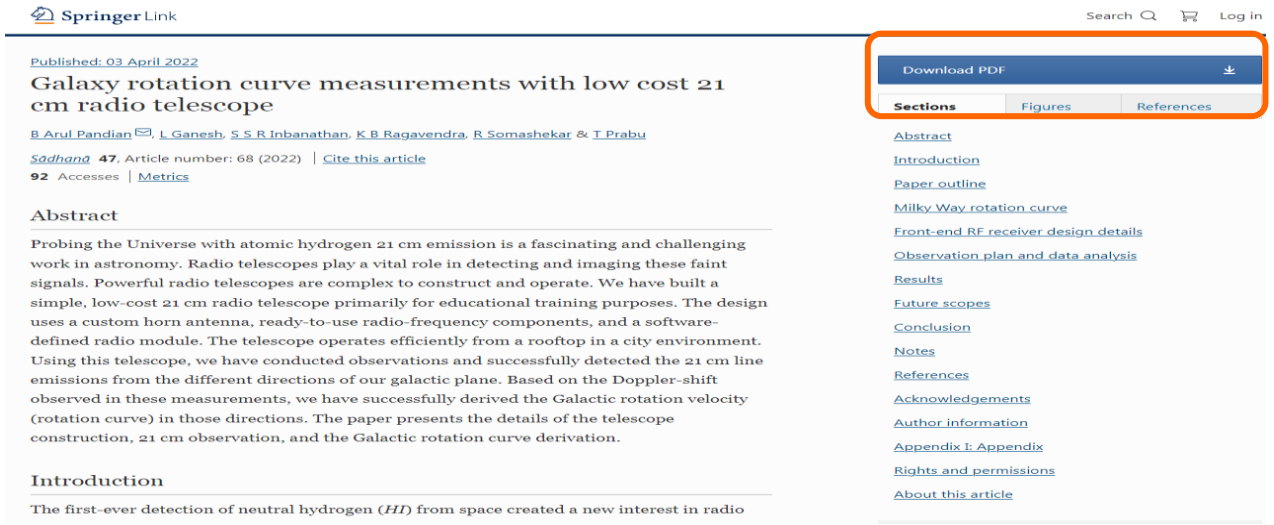

会议名称
排序方式:
检索结果计数
显示:
25
最少记录数:
1
可视化数据: 树状图
检索结果数: 10
下载
8
IEEE ANTENNAS AND PROPAGATION SOCIETY INTERNATIONAL SYMPOSIUM
6
CONFERENCE ON GROUND BASED AND AIRBORNE TELESCOPES VIII PART OF SPIE ASTRONOMICAL TELESCOPES INSTRUMENTATION CONFERENCE
5
19TH INTERNATIONAL CONFERENCE ON ELECTROMAGNETICS IN ADVANCED APPLICATIONS ICEAA
5
1ST URSI ATLANTIC RADIO SCIENCE CONFERENCE URSI AT RASC
7
2ND URSI ATLANTIC RADIO SCIENCE MEETING AT RASC
6
SIAM PHYSICS CONGRESS SPC
5
29TH URSI GENERAL ASSEMBLY AND SCIENTIFIC SYMPOSIUM URSI GASS
7
CONFERENCE ON RADIO TELESCOPES
6
URSI ASIA PACIFIC RADIO SCIENCE CONFERENCE AP RASC
5
4TH INTERNATIONAL CONFERENCE ON ANTENNA THEORY AND TECHNIQUES

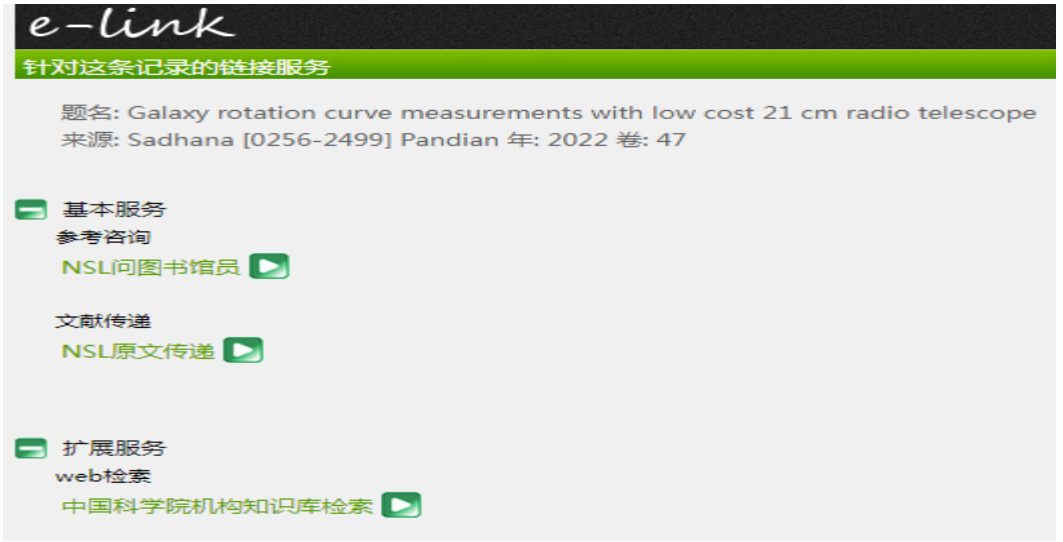
创建跟踪服务


Web of Science
检索
标记结果列表
历史
跟踪服务
登录
注册
检索 > ... > "Radio Telescope*" (标题) ... > "Radio Telescope*" (标题) OR "Radio Astronom* Telescope*" (标题) 的结果
1,397 条来自 Science Citation Index Expanded (SCI-Expanded), Conference Proceedings Citation Index – Science (CPCI-S)的结果:
"Radio Telescope*" (标题) or "Radio Astronom* Telescope*" (标题)
分析检索结果
引文报告
创建跟踪服务
登录以继续使用 Web Of Science
Web of Science
电子邮件地址
wum@mail.las.ac.cn
密码
忘记密码?
登录
或
还没有 Clarivate 帐户?
创建您的免费帐户并访问 Web of Science 提供的所有内容:
在 Web of Science 中保存检索
保存标记结果列表以备后用
一次最多导出 5000 条记录
将参考资料添加到您的 Endnote Library
自动登录
注册
登录即表示您确认并同意我们的使用条款和隐私权声明.
创建检索跟踪
跟踪名称
射电天文望远镜
向我发送电子邮件跟踪
创建
Telescope (GMRT) at sub-GHz frequencies
interferometers like the Giant Metrewave Radio Telescope (GMRT) detect variations in ionospheric total electron content (TEC) on a much wider spatial scale at a relatively higher sensitivity than traditional ionospheric probes like the Global Naviga
... 显示更多
43
参考文献
知识库中的免费已提交文章
出版商处的全文
View PDF with EndNote Click
相关记录
全部查看 >

4、获取全文


1,397 条来自 Science Citation Index Expanded (SCI-Expanded), Conference Proceedings Citation Index - Science (CPCI-S)的结果:
"Radio Telescope*" (标题) or "Radio Astronom* Telescope*" (标题)
分析检索结果
引文报告
创建跟踪服务
复制检索式链接
出版物
您可能也想要...
精炼检索结果
在结果中检索...
快速过滤
高被引论文 2
综述论文 19
在线发表 2
开放获取 378
出版年
2022 16
2021 56
2020 57
2019 77
2018 61
全部查看>
0/1,397
添加到标记结果列表
导出
排序方式: 日期: 降序
1 / 28
1 Galaxy rotation curve measurements with low cost 21 cm radio telescope
Pandian, BA; Ganesh, L; (...); Prabu, T
Jun 2022 | SADHANA-ACADEMY PROCEEDINGS IN ENGINEERING SCIENCES 47 (2)
被引参考文献深度分析
17
参考文献
Probing the Universe with atomic hydrogen 21 cm emission is a fascinating and challenging work in astronomy. Radio telescopes play a vital role in detecting and imaging these faint signals. Powerful radio telescopes are complex to construct and operate. We have built a simple, low-cost 21 cm radio telescope primarily for educational training purposes. The design uses a custom horn antenna, read
... 显示更多
知识库中的免费已提交文章
出版商处的全文
View PDF with EndNote Click
相关记录
2 Study of the equatorial ionosphere using the Giant Metrewave Radio Telescope (GMRT) at sub-GHz frequencies
Mangla, S and Datta, A
Apr 26 2022 | MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY 513 (1) , pp.964-975
43
参考文献
Radio interferometers, which are designed to observe astrophysical objects in the universe, can also be used to study the Earth's ionosphere. Radio interferometers like the Giant Metrewave Radio Telescope (GMRT) detect variations in ionospheric total electron content (TEC) on a much wider spatial scale at a relatively higher sensitivity than traditional ionospheric probes like the Global Naviga
... 显示更多
知识库中的免费已提交文章
出版商处的全文
View PDF with EndNote Click
相关记录


SpringerLink
Search
Log in
Published: 03 April 2022
Galaxy rotation curve measurements with low cost 21 cm radio telescope
B Arul Pandian, L Ganesh, S S R Inbanathan, K B Ragavendra, R Somashekar & T Prabu
Sadhana 47, Article number: 68 (2022) | Cite this article
92 Accesses | Metrics
Abstract
Probing the Universe with atomic hydrogen 21 cm emission is a fascinating and challenging work in astronomy. Radio telescopes play a vital role in detecting and imaging these faint signals. Powerful radio telescopes are complex to construct and operate. We have built a simple, low-cost 21 cm radio telescope primarily for educational training purposes. The design uses a custom horn antenna, ready-to-use radio-frequency components, and a software-defined radio module. The telescope operates efficiently from a rooftop in a city environment. Using this telescope, we have conducted observations and successfully detected the 21 cm line emissions from the different directions of our galactic plane. Based on the Doppler-shift observed in these measurements, we have successfully derived the Galactic rotation velocity (rotation curve) in those directions. The paper presents the details of the telescope construction, 21 cm observation, and the Galactic rotation curve derivation.
Introduction
The first-ever detection of neutral hydrogen (HI) from space created a new interest in radio
Download PDF
Sections
Figures
References
Abstract
Introduction
Paper outline
Milky Way rotation curve
Front-end RF receiver design details
Observation plan and data analysis
Results
Future scopes
Conclusion
Notes
References
Acknowledgements
Author information
Appendix I: Appendix
Rights and permissions
About this article


e-link
针对这条记录的链接服务
题名: Galaxy rotation curve measurements with low cost 21 cm radio telescope
来源: Sadhana [0256-2499] Pandian 年: 2022 卷: 47
基本服务
参考咨询
NSL问图书馆员
文献传递
NSL原文传递
扩展服务
web检索
中国科学院机构知识库检索

Contents

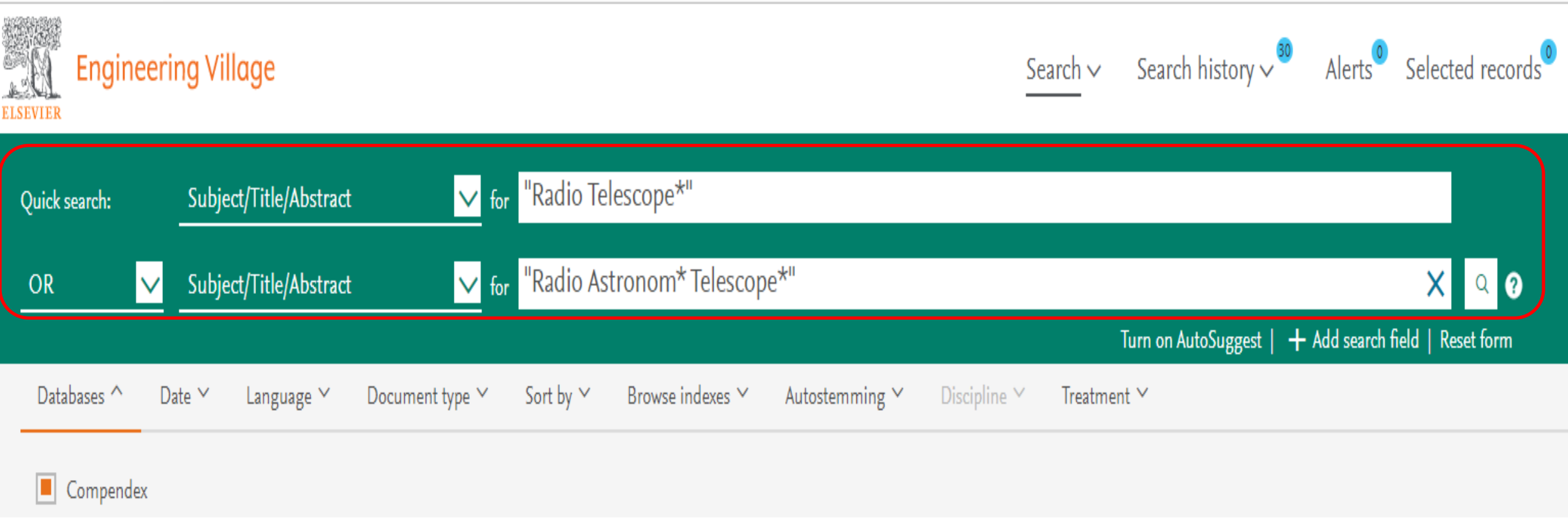
Ei Compendex (EI)是美国工程索引，收录权威的可用工程技术资源，包括期刊、会议、书籍和报告等。

帮助解决与时俱进的问题，涵盖从理论到应用、从基础到复杂的方方面面，是工程技术领域权威的检索工具。

- **应用科学和工程类别**
  - 生物工程、土木、地质、环境、矿业、石油、冶金、机械、燃料工程、核能、汽车、航天航空工程、电气工程、电子通讯、控制工程、化工、食品、农业、工业管理、数学、物理、仪表、计算机和信息技术等。

射电天文望远镜

"Radio Telescope*" or "Radio Astronom* Telescope*"



精炼：

1、物理性质

2、分类筛选

分析

4,114 records found in Compendex for 1884-2022: ((("Radio Telescope*") WN KY) OR (("Radio Astronom* Telescope*") WN KY))

1 of 165 pages >

Create alert | Save search | Share search | RSS feed

Sort by: Relevance

Refine

By physical property

Filter results by physical properties such as size, temperature, pressure and many more.

By category Download all

Limit to | Exclude

Add a term

Open Access

Document type

Author

Author affiliation

Controlled vocabulary

Classification code

Country/Region

Language

Year

Source title

Publisher

Funding sponsor

Preprint articles are included in these search results. To exclude them, please filter by document type. Learn more

Display: 25 results per page

1. **Surface segmentation design using a weighting level set topology optimization method for large radio telescope antennas**

Zhang, Shuxin (Key Laboratory of Electronic Equipment Structure Design (Ministry of Education), Xidian University, Xi'an; Shaanxi; 710071, China); Song, Jun **Source:** *Structural and Multidisciplinary Optimization*, v 64, n 2, p 905-918, August 2021

Database: Compendex

Document type: Journal article (JA)

Detailed | Show preview | Full text

2. **Design and application of digital twin system architecture for large radio telescope**

Zhang, Qinghai (School of Mechanical and Automotive Engineering, Qingdao University of Technology, Qingdao; 266520, China); Wu, Pengwei; Zhao, Zhengxu **Source:** *Jisuanji Jicheng Zhizao Xitong/Computer Integrated Manufacturing Systems, CIMS*, v 27, n 2, p 364-373, February 2021 **Language:** Chinese

Database: Compendex

Document type: Journal article (JA)

Detailed | Show preview | Full text

3. **Correlation between the Jupiter-Io Observations and the Solar Radio Bursts using the Sharjah Decametric Radio Telescope (SDRT)**

Yousef, Areej (Radio Astronomy Laboratory, Sharjah Academy for Astronomy, Space Sciences, and Technology (SAASST), University of Sharjah (UoS), University City, Sharjah; 27272, United Arab Emirates); Rihan, Mohammad; Shuhail, Salem; Hindawi, Noor Al; Madara, Sahith Reddy; Fernini, Ilias; Al-Naimiy, Hamid M.K. **Source:** *Proceedings of the International Astronautical Congress, IAC*, v A7, 2021, *IAF Symposium on Ongoing and Near Future Space Astronomy and Solar-System Science Missions 2021 - Held at the 72nd International Astronautical Congress, IAC 2021*

Database: Compendex

Document type: Conference article (CA)

Detailed | Show preview

4. **Influence of pedestal deformation caused by solar radiation on the pointing accuracy of radio telescope**

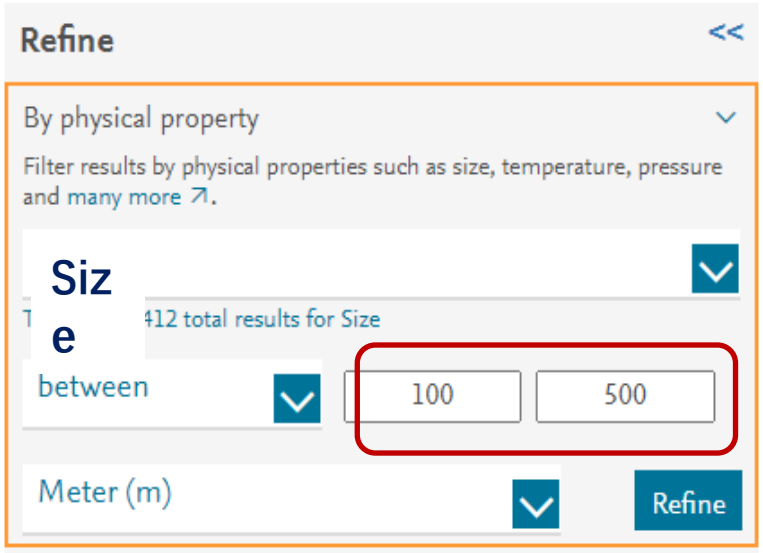
Kong, Deqing (Key Laboratory of Lunar and Deep Space Exploration, National Astronomical Observatories, Chinese Academy of Sciences, Beijing; 100012, China); Jiang, Zhengyang; Zhang, Hongbo; Wang, Zan; Chen, Zhiping **Source:** *Lecture Notes in Electrical Engineering*, v 589, p 573-586, 2020, *Proceedings of the 7th Asia International Symposium on Mechatronics - Volume II, 2019*

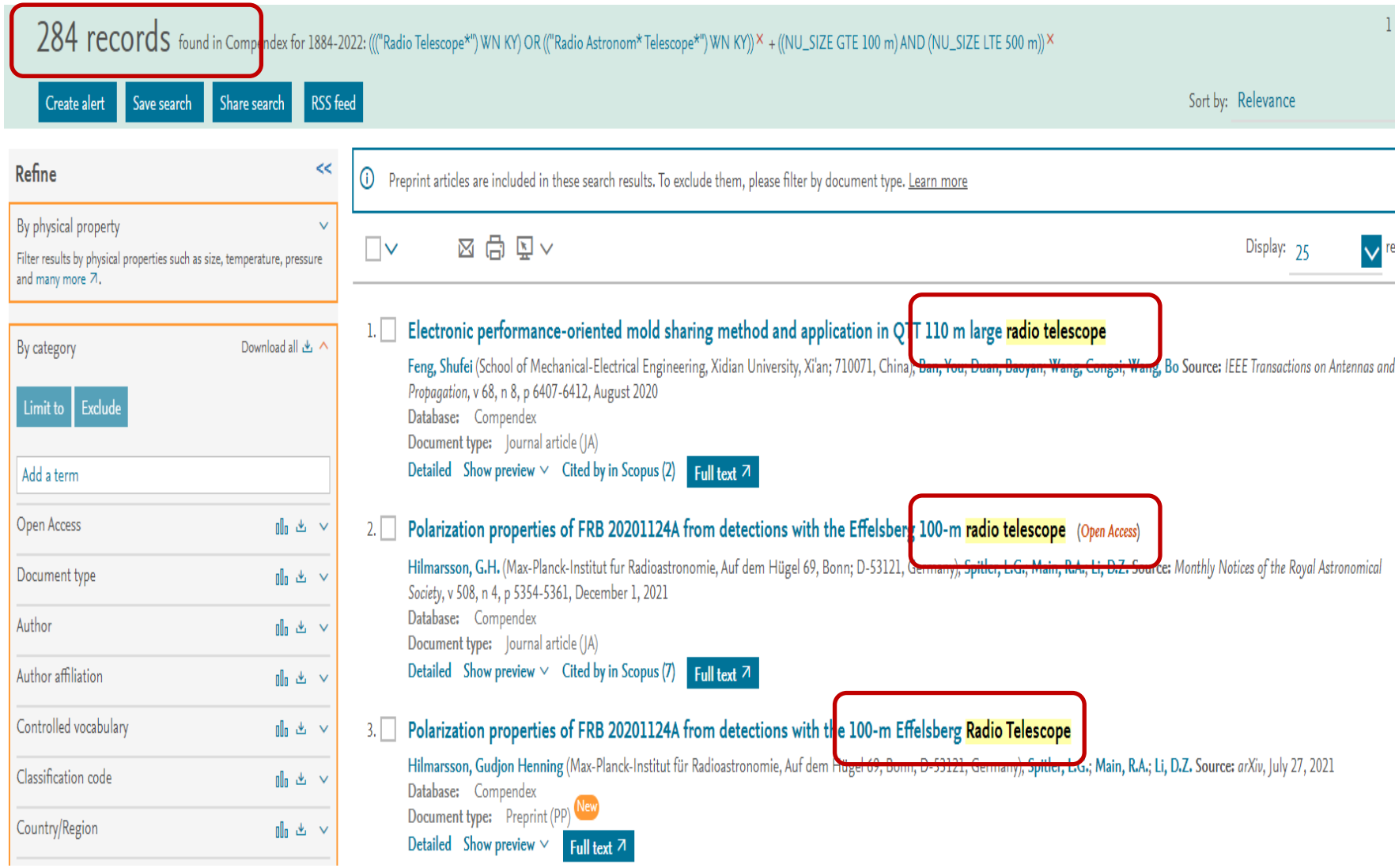
Database: Compendex

Document type: Conference article (CA)

Detailed | Show preview | Full text

1、物理性质


Refine
By physical property
Filter results by physical properties such as size, temperature, pressure and many more.
Size
412 total results for Size
between
100
500
Meter (m)
Refine


284 records found in Compendex for 1884-2022: ((("Radio Telescope*") WN KY) OR (("Radio Astronom* Telescope*") WN KY)) + ((NU_SIZE GTE 100 m) AND (NU_SIZE LTE 500 m))
Create alert
Save search
Share search
RSS feed
Sort by: Relevance
Refine
By physical property
Filter results by physical properties such as size, temperature, pressure and many more.
By category
Download all
Limit to
Exclude
Add a term
Open Access
Document type
Author
Author affiliation
Controlled vocabulary
Classification code
Country/Region
Preprint articles are included in these search results. To exclude them, please filter by document type. Learn more
Display: 25
1. Electronic performance-oriented mold sharing method and application in QTT 110 m large radio telescope
Feng, Shufei (School of Mechanical-Electrical Engineering, Xidian University, Xi'an; 710071, China); Ban, You; Duan, Baoyan; Wang, Congsi; Wang, Bo Source: IEEE Transactions on Antennas and Propagation, v 68, n 8, p 6407-6412, August 2020
Database: Compendex
Document type: Journal article (JA)
Detailed Show preview Cited by in Scopus (2) Full text
2. Polarization properties of FRB 20201124A from detections with the Effelsberg 100-m radio telescope (Open Access)
Hilmarsson, G.H. (Max-Planck-Institut fur Radioastronomie, Auf dem Hügel 69, Bonn; D-53121, Germany); Spitler, L.G.; Main, R.A.; Li, D.Z. Source: Monthly Notices of the Royal Astronomical Society, v 508, n 4, p 5354-5361, December 1, 2021
Database: Compendex
Document type: Journal article (JA)
Detailed Show preview Cited by in Scopus (7) Full text
3. Polarization properties of FRB 20201124A from detections with the 100-m Effelsberg Radio Telescope
Hilmarsson, Gudjon Henning (Max-Planck-Institut für Radioastronomie, Auf dem Hügel 69, Bonn, D-53121, Germany); Spitler, L.G.; Main, R.A.; Li, D.Z. Source: arXiv, July 27, 2021
Database: Compendex
Document type: Preprint (PP) New
Detailed Show preview Full text

2、分类——筛选

561 records found in Compendex for 1884-2022: ((("Radio Telescope*") WN KY) OR (("Radio Astronom* Telescope*") WN KY)) × + FAST ×

1 of 23

Create alert | Save search | Share search | RSS feed

Sort by: Relevance

Refine

By physical property

Filter results by physical properties such as size, temperature, pressure and many more ↗.

By category — Download all

Limit to | Exclude

FAST

Open Access

Document type

Author

Author affiliation

Controlled vocabulary

Classification code

Country/Region

Preprint articles are included in these search results. To exclude them, please filter by document type. Learn more

Display: 25 results

1. **Optimization of reflecting surface adjustment of FAST radio telescope based on improved Harris Hawk Optimizer**

Guiao, Yang (School of Information Engineering, Wuhan University of Technology, Wuhan, China); Zhelin, Ruan; Ziyu, Zhang **Source:** *2022 IEEE International Conference on Electrical Engineering, Big Data and Algorithms, EEBDA 2022*, p 516-519, 2022, *2022 IEEE International Conference on Electrical Engineering, Big Data and Algorithms, EEBDA 2022*

Database: Compendex

Document type: Conference article (CA)

Detailed | Show preview | Full text ↗

2. **The dawn of a new era of pulsar discoveries by Chinese radio telescope FAST** *(Open Access)*

Jing, YiPeng (School of Physics and Astronomy, Shanghai Jiao Tong University, Shanghai; 200240, China) **Source:** *Science China: Physics, Mechanics and Astronomy*, v 64, n 12, December 2021

Database: Compendex

Document type: Journal article (JA)

Detailed | Show preview | Full text ↗

3. **A single pulse study of PSR J1022+1001 using the FAST radio telescope**

Feng, Yi (CAS Key Laboratory of FAST, National Astronomical Observatories, Chinese Academy of Sciences, Beijing; 100101, China); Hobbs, George; Li, Di; Dai, Shi; Zhu, Weiwei; Yue, Youling; Wang, Pei; Zhang, Songbo; Qian, Lei; Zhang, Lei; Wang, Shuangqiang; Miao, Chenchen; Yuan, Mao; Zhang, Yongkun **Source:** *arXiv*, December 11, 2020

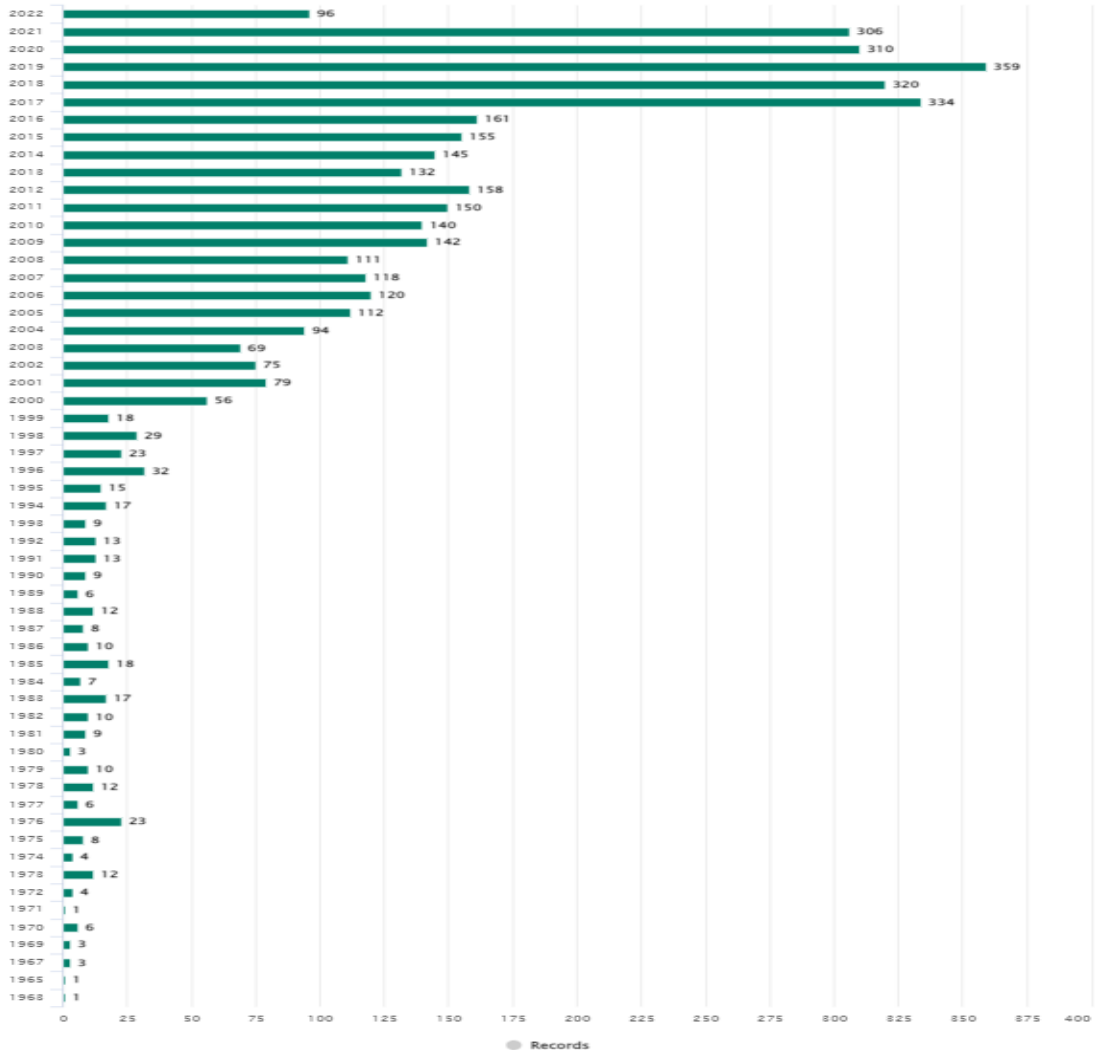
Database: Compendex

Document type: Preprint (PP) New

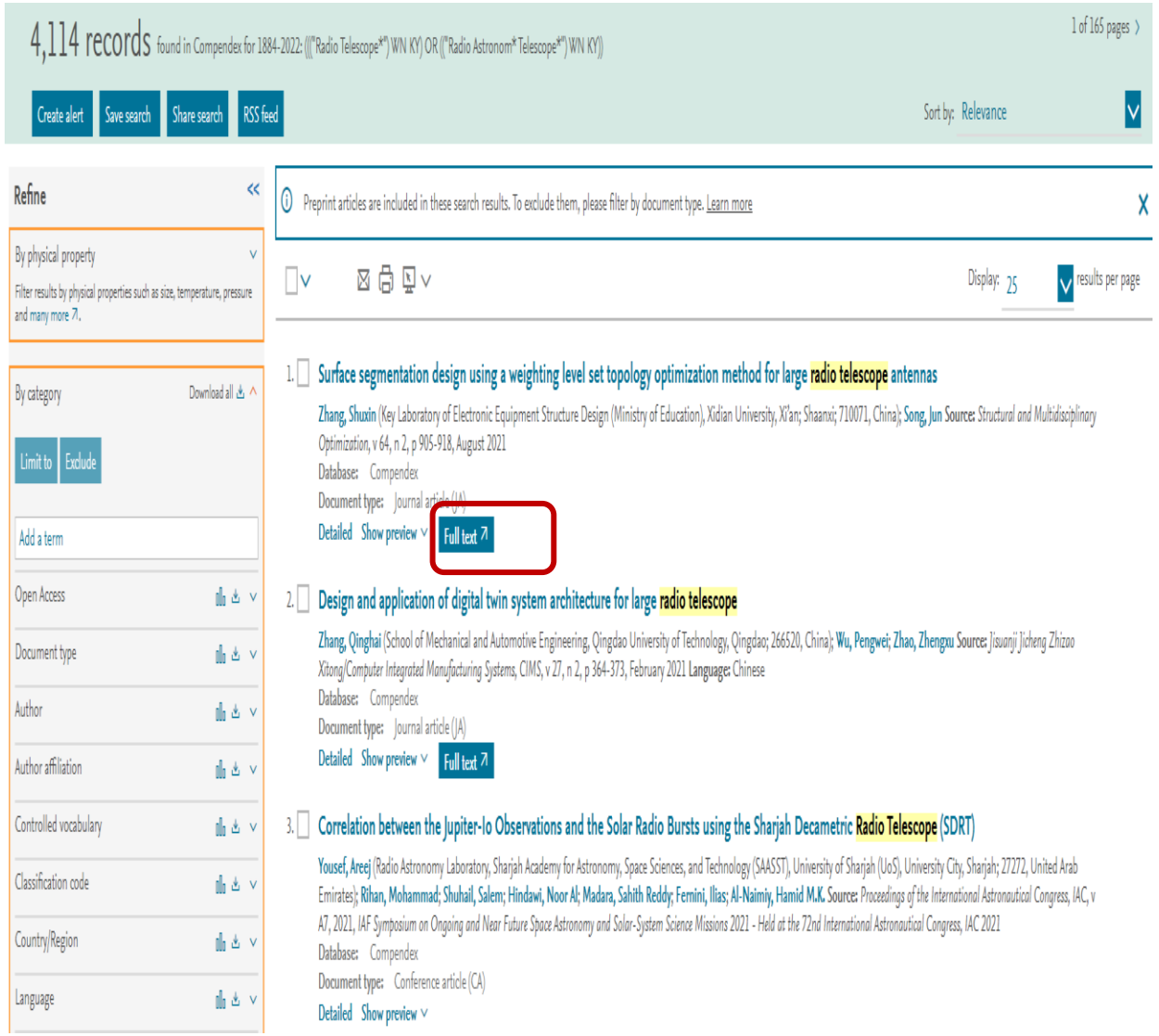
Detailed | Show preview | Full text ↗

2、分类——分析

- Open Access
- Document type
- Author
- Author affiliation
- Controlled vocabulary
- Classification code
- Country/Region
- Language
- Year
- Source title
- Publisher
- Funding sponsor



3、获取全文


4,114 records found in Compendex for 1884-2022: ((("Radio Telescope*") WN KY) OR (("Radio Astronom* Telescope*") WN KY))
1 of 165 pages
Create alert
Save search
Share search
RSS feed
Sort by: Relevance
Refine
By physical property
Filter results by physical properties such as size, temperature, pressure and many more.
By category
Download all
Limit to
Exclude
Add a term
Open Access
Document type
Author
Author affiliation
Controlled vocabulary
Classification code
Country/Region
Language
Preprint articles are included in these search results. To exclude them, please filter by document type. Learn more
Display: 25 results per page
1. Surface segmentation design using a weighting level set topology optimization method for large radio telescope antennas
Zhang, Shuxin (Key Laboratory of Electronic Equipment Structure Design (Ministry of Education), Xidian University, Xi'an; Shaanxi; 710071, China); Song, Jun Source: Structural and Multidisciplinary Optimization, v 64, n 2, p 905-918, August 2021
Database: Compendex
Document type: Journal article (JA)
Detailed Show preview
Full text
2. Design and application of digital twin system architecture for large radio telescope
Zhang, Qinghai (School of Mechanical and Automotive Engineering, Qingdao University of Technology, Qingdao; 266520, China); Wu, Pengwei; Zhao, Zhengxu Source: Jisuanji Jicheng Zhizao Xitong/Computer Integrated Manufacturing Systems, CIMS, v 27, n 2, p 364-373, February 2021 Language: Chinese
Database: Compendex
Document type: Journal article (JA)
Detailed Show preview
Full text
3. Correlation between the Jupiter-Io Observations and the Solar Radio Bursts using the Sharjah Decametric Radio Telescope (SDRT)
Yousef, Areej (Radio Astronomy Laboratory, Sharjah Academy for Astronomy, Space Sciences, and Technology (SAASST), University of Sharjah (UoS), University City, Sharjah; 27272, United Arab Emirates); Rihan, Mohammad; Shuhail, Salem; Hindawi, Noor Al; Madara, Sahith Reddy; Femini, Ilias; Al-Naimiy, Hamid M.K. Source: Proceedings of the International Astronautical Congress, IAC, v A7, 2021, IAF Symposium on Ongoing and Near Future Space Astronomy and Solar-System Science Missions 2021 - Held at the 72nd International Astronautical Congress, IAC 2021
Database: Compendex
Document type: Conference article (CA)
Detailed Show preview


SpringerLink
Search
Log in
Research Paper | Published: 25 March 2021
Surface segmentation design using a weighting level set topology optimization method for large radio telescope antennas
Shuxin Zhang & Jun Song
Structural and Multidisciplinary Optimization 64, 905–918 (2021) | Cite this article
330 Accesses | Metrics
Abstract
Surface segmentation design is a conceptual problem in the structural design of large radio telescope antennas. Before performing surface segmentation optimization, a weighting level set topology optimization method is proposed for the antenna backup supporting structure from the viewpoint of continuum topology optimization. With the help of weighting level set topology optimization, a clear and compact backup supporting structure is acquired. Taking the optimized topology backup supporting structure as the design basis, a surface segmentation optimization scheme is presented and extended to the full aperture. By employing this method in the conceptual surface segmentation design of two large radio telescope antenna applications, the effectiveness of this method is easily illustrated.
Introduction
Due to the advantages of high gain, high working frequency, and low cost, large radio telescope antennas are widely utilized in radio astronomy applications (Chahat et al. 2020;
Download PDF
Sections
Figures
References
Abstract
Introduction
Weighting level set topology optimization
The surface segmentation scheme
Surface segmentation applications
Conclusions
References
Acknowledgements
Funding
Author information
Ethics declarations
Additional information
Rights and permissions
About this article
Advertisement

结 语

工欲善其事，必先利其器

科技文献，助力科研

国科大图书馆微信公众号

Thanks for your attention !

– 吴鸣

– Email：wum@mail.las.ac.cn