Elsevier Research Intelligence

SciVal帮你打开科研新视野

www.scopus.com www.scival.com

于婷婷 博士
爱思唯尔 客户顾问
t.yu@elsevier.com

Empowering Knowledge

主要内容

- Scopus & SciVal简介

- 科研检索的新路径

- 演示与练习

SciVal 全球领先的科研表现分析工具

- 方便快捷地访问全球12,100家机构的科研表现

- Top of Prominence -- 对全球约9.6万个研究主题进行趋势分析

- 多元化指标数据（文献、基金、专利、社会媒体评价等多维度）

- 超过600位客户，遍布全球80个国家

- 基于Scopus数据库

SciVal

Overview 特定机构和研究人员的研究表现细节

Benchmarking 比较多个机构和研究人员的研究表现

Collaboration 了解机构和机构之间的合作和研究的情况

Trends 掌握研究领域的趋势

SciVal的基本功能板块

SciVal

Overview   Benchmarking   Collaboration   Trends   Reporting   My SciVal   Scopus ↗   ?

Welcome to SciVal

Overview

Get a high-level overview of the research performance of your Institution, other Institutions, Countries and Groups of Researchers.

Go to Overview >

Benchmarking

Compare and benchmark your Institution to other Institutions, Researchers and Groups of Researchers using a variety of metrics.

Go to Benchmarking >

Collaboration

Explore the collaboration network of both your Institution and other Institutions.

Go to Collaboration >

Trends

Get the current scientific trends to determine a new research strategy, find collaboration opportunities and rising stars.

Go to Trends >

Reporting

Create rich Reports specifically tailored to support your institution's distinct research strategy.

Go to Reporting >

SciVal的基本结构

四个主要的分析模块

SciVal

分析对象面板

Overview   Benchmarking   Collaboration   Trends | Reporting   My SciVal   Scopus ↗

Institutions and Groups

- ◉ 🏛 Tsinghua University
- ○ 🏛 Beijing Normal University
- ○ 🏛 Guangdong
- ○ 🏛 Hong Kong
- ○ 🏛 Macau
- ○ 🏛 North China Electric Power University
- ○ 🏛 Peking University
- ○ 🏛 Renmin University of China
- ○ 🏛 Shandong Normal University
- ○ 🏛 Shandong University
- ○ 🏛 Tongji University

+ Add Institutions and Groups
✕ Remove all entities from this section
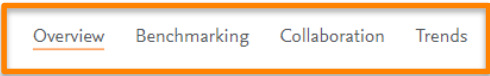
Tsinghua University

清华大学

📖 17th (QS ↗) · 22nd (THE ↗) · 45th (ARWU ↗) · 1st (RUANKE ↗) | 🇨🇳 China | More details on this Institution

2013 to 2018   ▽   no subject area filter selected   ▽   ASJC

Summary   Topics & Topic Clusters   Collaboration   Published   Viewed   Cited   Authors   Economic Impact   Societal Imp

+ Add Summary to Re

Overall research performance

Scholarly Output ⚙   Authors   Field-Weighted Citation Impact ⚙
82,897 ▲   43,554 ▲   1.44
📋 View list of publications

Citation Count ⚙   Citations per Publication ⚙   h5-index ⓘ
780,312   9.4   157

Other (8.6%)   Computer Science (12.6%)
Medicine (2.1%)
Biochemistry, Genetics and Molecular Biology (3.7%)   Mathematics (5.7%)
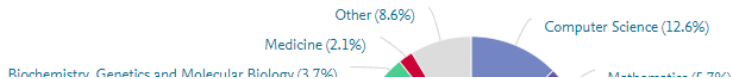
Scopus® 全球最大的摘要，引文数据库

Scopus 收录了全球105个国家，5000多家出版商的科技出版内容，覆盖40多种语言；实现全领域，全文献类型的覆盖；每日更新

	Number of active Journals by subject area	期刊 **Journal**	会议论文 **Conference**	书籍 **Book**
自然科学	Physical Sciences 8,102	**23,578** Peer-reviewed journals	**111K** Conference events	**752** Book series
医疗健康	Health Sciences 7,468	**308** Trade journals **4,065** Active Gold Open Access journals	**8.8M** Conference papers Mainly Engineering and Computer Sciences	**40K** Volumes **1.6M** Items
社会科学	Social Sciences 9,692	**>8,000** Articles in Press		**183,034** Stand-alone books
生命科学	Life Sciences 4,883	Full metadata, abstracts. Cited references back to 1970.		**1.5M** Items Mainly Social Sci. and Arts & Humanities

Source: Scopus.com, October 2018

Scopus

收录了全球**105**个国家，**5000**多家出版商的科技出版内容

11% ELSEVIER
7% SPRINGER NATURE
5% Taylor & Francis Taylor & Francis Group
4% WILEY-BLACKWELL
2% SAGE
1% Wolters Kluwer Health
1% BRILL
1% IEEE
1% Emerald
1% KARGER Medical and Scientific Publishers
1% OXFORD UNIVERSITY PRESS
1% BENTHAM SCIENCE
1% INDERSCIENCE PUBLISHERS
1% CAMBRIDGE UNIVERSITY PRESS

Other 60%
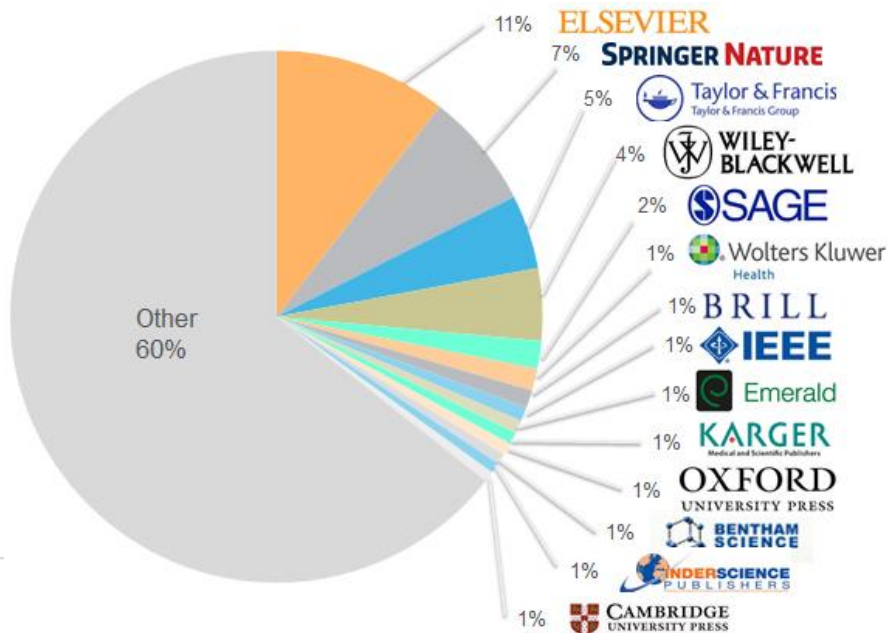
*Counts February 2018

为机构和学科排名提供客观、权威的底层数据和技术实现

拓展视野的检索路径

从**Scopus**到**SciVal**的检索发现路径

Scopus

| 1. 关键词检索 | 2.限制范围精确检索 | 3. 浏览重点论文 | 4.查看论文对应Topic | 5.Topic要点概览 |

SciVal

| 6.Topic总览 | 7.领域重要学者及其研究 | 8. 领域重要期刊 | 9. 相关领域发现 |

1. 从Scopus的常规检索开始

以"remote sensing"为例

ELSEVIER

海量检索结果

Scopus   检索   来源出版物   通知   列表   帮助 ⌄   SciVal ⌐   Tingting Yu

215,789 文献搜索结果   查看次要文献   查看 26278 专利搜索结果   Search your library   View 240

TITLE-ABS-KEY ("remote sensing")

✎ 编辑   🖫 保存   🔔 设置通知   📶 设置馈送流

在搜索结果内搜索... 🔍   📊 **分析搜索结果**   显示所有摘要   排序对象: 施引文献（最多数量）

精简搜寻结果   □ 全部 ⌄   CSV 导出 ⌄   下载   查看引文概览   查看施引文献   保存到列表   ⋯   🖨 ✉ 🗐

限制范围   排除   文献标题   作者   年份   来源出版物

访问类型 ⓘ   ⌃   □ 1   Evaluation of water body extraction from satellite images using open-source tools   Rithin Paul Reddy, K., Srija, S.S., Karthi, R., Geetha, P.   2020   Advances in Intelligent Systems and Computing 910, pp. 129-140
□ Open Access   (24,206) ›
□ Other   (191,583) ›   查看摘要 ⌄   [Full Text]   View at Publisher   相关文献

年份   ⌃   □ 2   Research on road extraction of remote sensing image based on convolutional neural network   Jiang, Y.   2019   Eurasip Journal on Image and Video Processing 2019(1),31
□ 2020   (1) ›   公开访问
□ 2019   (2,418) ›
□ 2018   (13,495) ›   查看摘要 ⌄   [Full Text]   View at Publisher   相关文献

ELSEVIER

03.2019

2 精简范围--明确自己需要什么

举例
- 该领域发展非常迅速，近几年的成果参考意义更大
  - 时间设置为2015-2019
- 关注会议论文和研究论文
- 关注环境领域
- 直接能看原文—Open Access

Scopus共收录了880万篇高水准的会议论文，对于工程，计算机领域的研究非常有帮助

检索结果-充分利用精确检索功能

3. 挑选/浏览重点论文

浏览代表性论文

CSV 导出 ⌄   ⬇下载   🖨打印   ✉通过电子邮件发送   保存到 PDF   ☆ 保存到列表   更多... ›

Full Text **Library Catalogue** **Order Document**

Hydrology and Earth System Sciences   公开访问
Volume 19, Issue 1, 21 January 2015, Pages 389-407

ERA-Interim/Land: A global land surface reanalysis data set (Article) (公开访问)

Balsamo, G.[a] ✉, Albergel, C.[a], Beljaars, A.[a], Boussetta, S.[a], Brun, E.[b], Cloke, H.[c], Dee, D.[a], Dutra, E.[a], Munõz-Sabater, J.[a], Pappenberger, F.[a], De Rosnay, P.[a], Stockdale, T.[a], Vitart, F.[a] 👤

[a]European Centre for Medium-Range Weather Forecasts (ECMWF), Reading, United Kingdom
[b]Météo-France, Toulouse, France
[c]University of Reading, Reading, United Kingdom

摘要   ⌄ 查看参考文献 (72)

ERA-Interim/Land is a global land surface reanalysis data set covering the period 1979-2010. It describes the evolution of soil moisture, soil temperature and snowpack. ERA-Interim/Land is the result of a single 32-year simulation with the latest ECMWF (European Centre for Medium-Range Weather Forecasts) land surface model driven by meteorological forcing from the ERA-Interim atmospheric reanalysis and precipitation adjustments based on monthly GPCP v2.1 (Global Precipitation Climatology Project). The horizontal resolution is about 80 km and the time frequency is 3-hourly. ERA-Interim/Land includes a number of parameterization improvements in the land surface scheme with respect to the original ERA-Interim data set, which makes it more suitable for climate studies involving land water resources. The quality of ERA-Interim/Land is assessed by comparing with ground-based and remote sensing observations. In particular, estimates of soil moisture, snow depth, surface albedo, turbulent latent and sensible fluxes, and river discharges are verified against a large number of site measurements. ERA-Interim/Land provides a global integrated and coherent estimate of soil moisture and snow water equivalent, which can also be used for the initialization of numerical weather prediction and climate models. © 2015 Author(s).

SciVal 热门主题 ⓘ

主题: land surface | Surface measurement | land-atmosphere coupling

突出百分比: 97.260 ▬▬▬▬ ⓘ

度量标准 ⓘ   查看所有度量标准›

186 ❞   Scopus 中的引用
           第 99 个百分比

23.53 ↗   领域加权的引用影响

🔵 PlumX 度量标准   ⌄
        在 Scopus 之外的使用情况、
        抓取、提及、社交媒体和引
        用。

被 186 篇文献引用

Contributions of climate change to the terrestrial carbon stock of the arid region of China: A multi-dataset analysis
Fang, X. , Guo, X. , Zhang, C.
(2019) Science of the Total Environment

Analysis of the temporal–spatial changes in surface radiation budget over the Antarctic sea ice region
Zhang, T. , Zhou, C. , Zheng, L.
(2019) Science of the Total Environment

Mesoclimate regulation induced by landscape restoration and water harvesting in agroecosystems of the horn of Africa
Castelli, G. , Castelli, F. , Bresci, E.

4. 浏览代表性论文，查看论文的topic

ERA-Interim/Land: A global land surface reanalysis data set (Article) (公开访问)

Balsamo, G.[a] ✉, Albergel, C.[a], Beljaars, A.[a], Boussetta, S.[a], Brun, E.[b], Cloke, H.[c], Dee, D.[a], Dutra, E.[a], Munōz-Sabater, J.[a], Pappenberger, F.[a], De Rosnay, P.[a], Stockdale, T.[a], Vitart, F.[a]

[a]European Centre for Medium-Range Weather Forecasts (ECMWF), Reading, United Kingdom
[b]Météo-France, Toulouse, France
[c]University of Reading, Reading, United Kingdom

摘要 ⌄查看参考文献 (72)

ERA-Interim/Land is a global land surface reanalysis data set covering the period 1979-2010. It describes the evolution of soil moisture, soil temperature and snowpack. ERA-Interim/Land is the result of a single 32-year simulation with the latest ECMWF (European Centre for Medium-Range Weather Forecasts) land surface model driven by meteorological forcing from the ERA-Interim atmospheric reanalysis and precipitation adjustments based on monthly GPCP v2.1 (Global Precipitation Climatology Project). The horizontal resolution is about 80 km and the time frequency is 3-hourly. ERA-Interim/Land includes a number of parameterization improvements in the land surface scheme with respect to the original ERA-Interim data set, which makes it more suitable for climate studies involving land water resources. The quality of ERA-Interim/Land is assessed by comparing with ground-based and remote sensing observations. In particular, estimates of soil moisture, snow depth, surface albedo, turbulent latent and sensible fluxes, and river discharges are verified against a large number of site measurements. ERA-Interim/Land provides a global integrated and coherent estimate of soil moisture and snow water equivalent, which can also be used for the initialization of numerical weather prediction and climate models. © 2015 Author(s).

SciVal 热门主题 ⓘ

主题: land surface | Surface measurement | land-atmosphere coupling
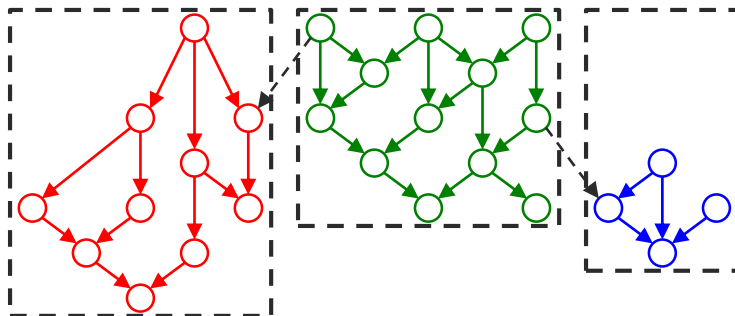
突出百分比: 97.260 ⓘ
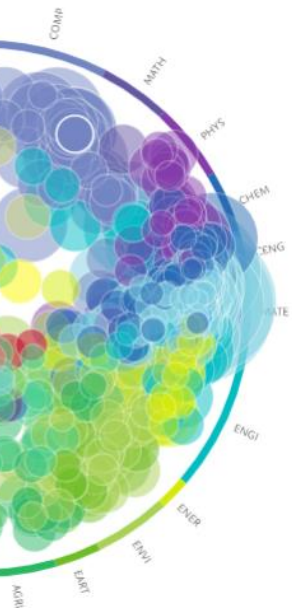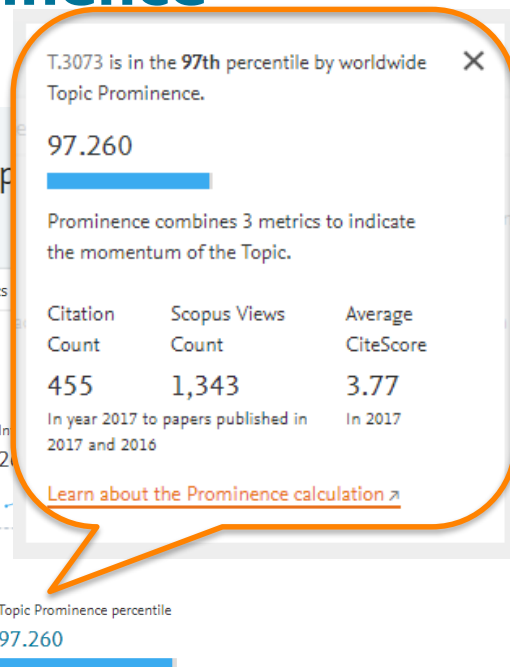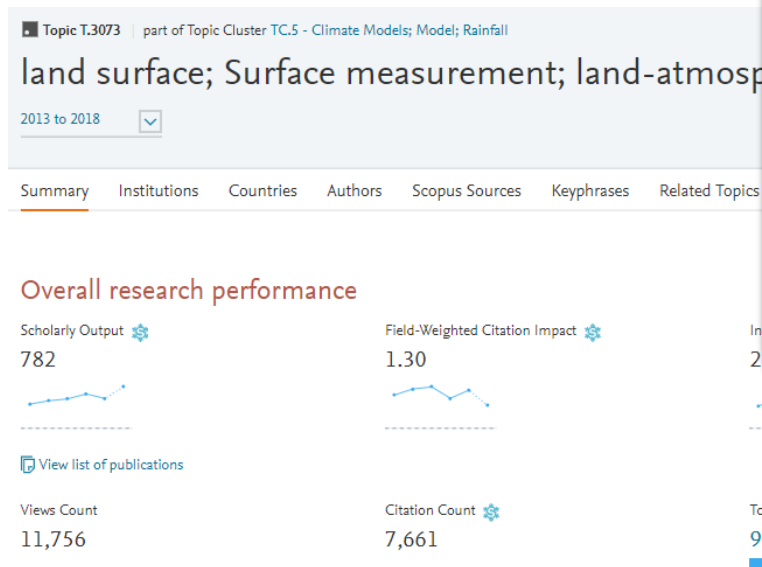
该论文属于全球前3%
热门研究主题（Topic）

点击主题名称

关于研究主题 Topic

微观层面的特定研究问题

- 基于scopus数据库约7500万文献数据和约10亿条直接引用链接聚类成文献簇，生成全领域约9.6万个研究主题 (Topic)

- **真实反映了学科交叉与融合的趋势**

关于主题显示度 Topic prominence

- 由近两年引用数，浏览数和期刊citescore三种指标组成
- Prominence排序后按照百分位定义研究领域热门程度

5. 热门研究主题概览

land surface │ Surface measurement │ land-atmosphere coupling (T.

地表|表面测量|陆地 - 大气耦合

land surface | Surface measurement | land-atmosphere coupling (T.3073)

年份范围:2013 - 2017

代表性文档

Impact of soil moisture-climate feedbacks on CMIP5 projections: First results from the GLACE-CMIP5 experiment
Seneviratne, S.I.,Wilhelm, M.,Stanelle, T....
(2013) *Geophysical Research Letters*
Cited 123 times

Improving the representation of hydrologic processes in Earth System Models
Clark, M.P.,Fan, Y.,Lawrence, D.M....
(2015) *Water Resources Research*
Cited 104 times

Reconciling spatial and temporal soil moisture effects on afternoon rainfall
Guillod, B.P.,Orlowsky, B.,Miralles, D.G....
(2015) *Nature Communications*
Cited 104 times

The plumb   s: Benchmarking model performance
Best, M.J.,   H.
(2015) *Jour*
Cited 77 ti

最重要的论文

顶尖作者   学术性产出

Ek, Michael B.   25
Seneviratne, Sonia I.   24
Dirmeyer, Paul A.   21
Quiring, Steven M.   21
Ford, Trent W.   19

最具影响力的学者

关键词分析   📈图表 田表

atmospheric forcing parameterization monsoon Atmospheric temperature temperature
climate prediction atmosphere hydrological modeling surface temperature
Stream flow water budget boundary layer Climate models streamflow atmospheric modeling
climate variation Snow Moisture Evapotranspiration vegetation
Watersheds extreme event climate modeling river basin
data set climates sensible heat flux weather
Runoff Hydrology soil temperature routing surface energy leaf area index
Arid regions simulation model soil texture Soil surveys
prediction summer latent heat flux Soils data layer
Catchments regional climate soil data assimilation hydrological cycle
biosphere Drought moisture flux
land cover Surface measu... coupling Protective atmosphere
surface flux precipitation (climatology) weather forecasting Precipitation (chemical)
land surface Soil moisture
dynamics
ssment

关键词云
By fingerprint技术

在 SciVal 中分析 ›

03.2019   切换到SciVal中查看更多细节

6. 在SciVal中查看topic的更多信息

Topic T.3073 | part of Topic Cluster TC.5 - Climate Models; Model; Rainfall

land surface; Surface measurement; land-atmosphere coupling

2013 to 2018 ▼   Data

Summary | Institutions | Countries | Authors | Scopus Sources | Keyphrases | Related Topics

+ Add Summary to Reporting   Export

Overall research performance

+ Add to Reporti

Scholarly Output ⚙
782   论文迅速增长

Field-Weighted Citation Impact ⚙
1.30   论文引用影响力为全球平均水平1.3倍

International Collaboration ⚙
266   约1/3 的论文是国际合作的成果

📄 View list of publications

Views Count
11,756

Citation Count ⚙
7,661

Topic Prominence percentile
97.260

7. 该topic 的顶尖学者
他们在做什么？有哪些突出成果

	Author ↑	Affiliation	Scholarly Output ↓	Views Count	Field-Weight...	Citation Count
1.	Seneviratne, Sonia I.	🇨🇭 Swiss Federal Institute of Technology Zurich	28	692	3.14	732
2.	Ek, Michael B.	🇺🇸 National Center for Atmospheric Research	27	428	2.74	619
3.	Dirmeyer, Paul A.	🇺🇸 George Mason University	25	322	1.89	455
4.	Pitman, A. J.	🏳 Unknown institution	22	397	1.76	297
5.	Quiring, Steven M.	🇺🇸 The Ohio State University	22	202	1.35	288
6.	Ford, Trent W.	🇺🇸 Southern Illinois University	20	189	1.28	260
7.	Xia, Youlong	🇺🇸 NOAA	19	226	2.44	334
8.	Santanello, Joseph A.	🇺🇸 NASA Goddard Space Flight Center	17	264	1.89	301
9.	Yang, Zongliang	🇨🇳 CAS - Institute of Atmospheric Physics	17	285	2.28	278
10.	Peters-Lidard, Christa D.	🏳 Unknown institution	16	297	2.16	283
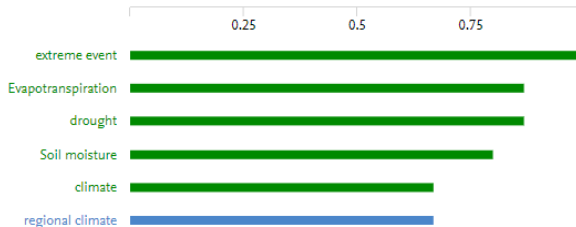
切换回Scopus查看学者详细信息

Scopus　　　　　　　　检索　来源出版物　通知　列表　帮助 ∨　　SciVal ↗　Tingting Yu ∨

作者详情　　　　　　　　　　　　　　　　　　　　　　　关于 Scopus

🖶打印

Seneviratne, Sonia I.

ETH Zürich, Zurich ZH,, Switzerland
作者 ID: 7003499456

ⓘD http://orcid.org/0000-0001-9528-2917

其他姓名格式: (Seneviratne, Sonia) (Seneviratne, Sonia I.) (Seneviratne, S.) (Seneviratne, S. I.)

学科类别: (Earth and Planetary Sciences) (Environmental Science) (Agricultural and Biological Sciences) (Multidisciplinary) (Medicine) (Energy) (Social Sciences)
(Physics and Astronomy) (Materials Science) (Engineering) (Chemistry) (Biochemistry, Genetics and Molecular Biology) (Mathematics)
(Arts and Humanities) (Neuroscience)
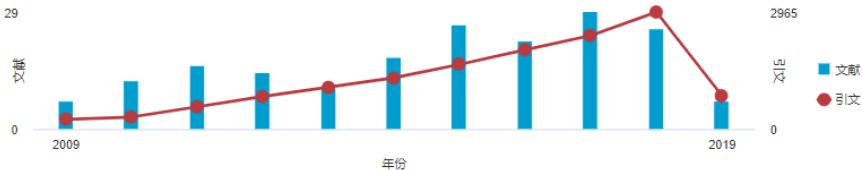
关注该作者

查看可能的匹配作者

h-Index: ⓘ
56

按作者的文献
208　　　分析

总引文数
按 8678 文献分组的 14584

文献和引用趋势:

8. 该领域的主要投稿期刊及其论文表现

Top 100 Scopus Sources in this Topic, by Scholarly Output

⤢ View on Chart

	Scopus Source	Scholarly Output ↓	Views Count ⌄	Field-Weight... ⌄	Citation Count ⌄
1. ☐	Journal of Geophysical Research	95	1,248	1.47	1,004
2. ☐	Journal of Hydrometeorology	89	1,379	1.17	1,235
3. ☐	Hydrology and Earth System Sciences	39	795	1.69	457
4. ☐	Geophysical Research Letters	36	574	2.13	653
5. ☐	Water Resources Research	34	721	2.47	673
6. ☐	Climate Dynamics	29	476	0.97	258
7. ☐	Geoscientific Model Development	29	452	1.96	381
8. ☐	Journal of Climate	29	428	1.21	378
9. ☐	Journal of Advances in Modeling Earth Systems	26	286	0.79	121
10. ☐	Journal of Hydrology	20	548	1.50	201

9. 领域拓展

Topic T.3073 | part of Topic Cluster TC.5 - Climate Models; Model; Rainfall

land surface; Surface measurement; land-atmosphere coupling

2013 to 2018 ▾

Summary | Institutions | Countries | Authors | Scopus Sources | Keyphrases | **Related Topics**

Topics ↑	Relatedness ↓	Scholarly Output	Prominence percentile
land surface; water budget; river basins T.54334	96%		35	23.683
Agriculture; Water resources; flux predictions T.65254	93%		9	0.812
evapotranspiration; evaporation; actual evapotranspiration T.42087	93%		85	70.985
large eddy simulation; land surface; convective boundary T.18847	93%		96	76.126
moisture; atmospheric moisture; hydrological cycle T.38857	93%		135	83.658
water; melting; snow melting T.71951	92%		16	33.504
Monitoring; Sensor networks; river discharge T.71758	92%		23	49.807
Water resources; Watersheds; air temperature T.45556	92%		61	60.318
Watersheds; Climate models; regional climate T.67865	92%		59	62.542
Evapotranspiration; energy balance; evaporative fraction T.2534	92%		1,076	97.910

练习环节

SciVal的使用 -- 学校IP范围内开通、登录/注册后使用

与Scopus共享账号，可直接使用Scopus账号登录

1）理工类

从machine learning开始检索，查看在**工程和数学**领域，**2015年至今**的研究论文和会议论文，浏览重要论文相关的研究主题

Topic T.4338 Neural networks; Convolution; convolutional layers

2）社科类

王老师从事阅读障碍（Dyslexia）相关的研究，想了解目前这个领域在近5年有哪些研究热点，看看有没有合适的合作者和期刊

Topic T.1050 Dyslexia; Reading; dyslexic readers

Thank you

t.yu@elsevier.com