

利用Essential Science Indicators进行科学研究成果评价和研究前沿追踪



THOMSON REUTERS
汤森路透

Essential Science Indicators

- ESI数据库介绍
- 如何利用ESI数据库来进行科学研究成果评价
- 如何利用ESI数据库追踪前沿研究
- 新平台ESI的功能展示

Essential Science Indicators

- ESI数据库介绍
- 如何利用ESI数据库来进行科学研究成果评价
- 如何利用ESI数据库追踪前沿研究
- 新平台ESI的功能展示

科学研究成果的评价和追踪前沿研究关注的问题

- 在化学研究领域，哪个国家的影响力最高？
- 在某个特定研究领域里，哪个机构产出了高被引的研究成果？
- 在免疫学领域中，被引次数最高的论文有哪些？
- 研究领域里现在最热门的话题是什么？
- 我们所在地区的机构在某一研究领域中的排名情况如何？
- 在这个领域里，谁是最具影响力的研究人员？
- 我们所在机构发表文献的影响力排名在全球范围内是上升，还是下降？

Essential Science Indicators—全球学术成果定量评价基准

- Web of Science核心合集的**10**年滚动数据
- 基于**22**个学科

- 总影响力（总引用次数）进入全球前**1%**的**科学家**、**研究机构**（或**大学**）排名；
- 总影响力（总引用次数）进入全球前**50%**的**国家**（或**地区**）及**学术期刊**排名
- 高被引论文、热点论文和研究前沿分析

全球权威学术信息

主流文献计量方法



ESSENTIAL SCIENCE INDICATORS

- 来自于 Web of Science 核心合集SCIE和SSCI的10年多的滚动数据

(最新更新为2016年3月18日，囊括11年的数据，即2005年1月1日~2015年12月31日)

- 发表在11,000多种期刊上的10,000,000个条目
 - 每一种期刊都被按照22个学科进行了分类标引，且只属于一个学科
 - 对跨学科的40多种期刊中的每篇文献进行重新分类
 - 机构名称规范化
 - 文献类型包括：articles, review
- 引文数据来自于 Web of Science 核心合集SCIE、SSCI和A&HCI

22个ESI 学科

- Agricultural Science
- Biology & Biochemistry
- Chemistry
- Clinical Medicine
- Computer Science
- Economics & Business
- Engineering
- Environment/ Ecology
- Geosciences
- Immunology
- Materials Science
- Mathematics
- Microbiology
- Molecular Biology & Genetics
- **Multidisciplinary**
- Neuroscience & Behavior
- Pharmacology
- Physics
- Plant & Animal Science
- Psychiatry/Psychology
- Social Sciences--general
- Space Science

* Approximately 98% of articles published in *Nature*, *Science* and the *Proceedings of the National Academy of Sciences*, are reallocated into one of the other 21 disciplines based on their citation information

ESI的分析对象

- 机构：被引频次同学科前1%
- 作者：被引频次同学科前1%
- 期刊：被引频次同学科前50%
- 国家：被引频次同学科前50%

RESEARCH FIELDS ▲	AUTHOR	INSTITUTION	JOURNAL	COUNTRY
AGRICULTURAL SCIENCES	378	1,673	1,520	852
BIOLOGY & BIOCHEMISTRY	906	5,617	6,178	626
CHEMISTRY	1,457	5,792	5,552	998
CLINICAL MEDICINE	1,803	1,884	3,850	3,420
COMPUTER SCIENCE	288	2,657	1,088	203
ECONOMICS & BUSINESS	351	3,702	1,052	198
ENGINEERING	430	1,730	1,626	669

Essential Science Indicators

- ESI数据库介绍
- 如何利用ESI数据库来进行科学研究成果评价
- 如何利用ESI数据库追踪前沿研究
- 新平台ESI的功能展示

U.S. News 全球大学排名

U.S. News & World Report EDUCATION Education Rankings & Advice

Home Colleges Grad Schools High Schools Online Programs Community Colleges **Global Universities**

Global Rankings Africa

How U.S. Global Universities are Ranked
Find out how we rank the world's best universities of study.
By Robert Morse | Oct 1, 2014

In many cases, an institution that had a strong focus on a certain subject was ranked in that subject but was excluded from the overall Best Global Universities rankings encompassing the top 750 universities worldwide. In total, 45 universities and one country, Georgia, were in the subject rankings but not the overall top 750 rankings.

Ranking Indicators

The bibliometric indicators are based on data from the Web of Science™ for the five-year period from 2009 to 2013. The Web of Science™ is a Web-based research platform that covers more than 12,000 of the most influential and authoritative scholarly journals worldwide in the sciences, social sciences, and arts and humanities. The 22 subject fields used in the analysis came from subject schema in Thomson Reuters' InCites™, which uses the content and citation indicators from the Web of Science™.

The first step in producing the subject rankings was to create the total universe of schools that could be ranked in each field. Depending on the subject, the top 250 or 500 universities that had published the most papers in that subject area in the 2009-2013 time period were included in the ranking universe.

The 22 subject fields used in the analysis came from subject schema in Thomson Reuters InCites™

教育部学位中心学科评估—指标体系

C. 科学研究水平 (含教师和学生)	C1.科研成果	S12.学术论文质量△	①【计算机科学与技术 and 软件工程学科】ESI 高被引论文及在 A 类期刊/会议（清单见附件 2-1）上发表的论文，【其他学科】扩展版 ESI 高被引论文（统计至前 3%）； ②其他 20 篇高水平论文（国内期刊论文不少于 5 篇，每位教师最多填写 5 篇），由专家参考论文引用、期刊档次等情况对论文的实际水平进行评价。	公共数据/ 学校填报
		S13.专利转化	近四年获得授权并已转化或应用的发明专利与国防专利（需提供转让合同或应用证明等）。	学校填报
		S14.出版教材	近四年出版的“十二五”国家级规划教材。	公共数据
	C2.科研获奖	S15.科研获奖	①国家最高科学技术奖、自然科学奖、技术发明奖、科学技术进步奖； ②教育部高校科研成果奖（科学技术），国防科学技术奖； ③省级科研获奖（见附件 2-2）、军队科技进步奖、环境保护科学技术奖、国土资源科学技术奖、安全生产科技成果奖、中国专利奖、何梁何利科技奖。	公共数据
	C3.科研项目	S16.科研项目 (含人均情况)	①国家科技重大专项、国家 973（含军口 973）计划、国家 863（含国防 863）计划、国家科技支撑计划、国家软科学研究计划、国际科技合作专项、科技基础性工作专项、国家磁约束核聚变能发展研究专项、国家重大科学仪器设备开发专项、国家自然科学基金、国家社会科学基金、全国教育科学规划课题、武器装备重点型号项目； ②国防基础科研计划、武器装备探索研究项目、武器装备预研项目、武器装备预研基金项目、省部级及重要横向科研项目（限填 50 项）。	学校填报

Essential Science Indicators

定量分析研究绩效的工具



如上四个方面对学术水平进行评价，已成为当今世界范围内普遍用以评价高校、学术机构、国家及地区国际学术水平及影响力的重要工具。

——《中国大学的国际学术影响力》

*热门论文：过去两年的论文中，同年度同学科领域中被引频次在最近两个月排名位于全球前0.1%的论文。

李志民
教育部科技发展中心主任

Essential Science Indicators的构成

1. 引用排名

- 机构, 科学家, 国家, 期刊

2. 被引频次较高的论文

- 高被引论文 (过去 10 年)
- 热点论文 (过去2 年)

3. 引文分析

- 全球22个学科领域的基准数据
- 研究前沿

ESI: 定量分析研究绩效的工具, 它可以帮助您解决

- 在化学研究领域, 哪个国家的影响力最高?
- 在某个特定研究领域里, 哪个机构产出了高被引的研究成果?
- 在免疫学领域中, 被引次数最高的论文有哪些?
- 研究领域里现在最热门的话题是什么?
- 我们所在地区的机构在某一研究领域中的排名情况如何?
- 在这个领域里, 谁是最具影响力的研究人员?
- 我们所在机构发表文献的影响力排名在全球范围内是上升, 还是下降?



Essential Science Indicators的构成

1. 引用排名

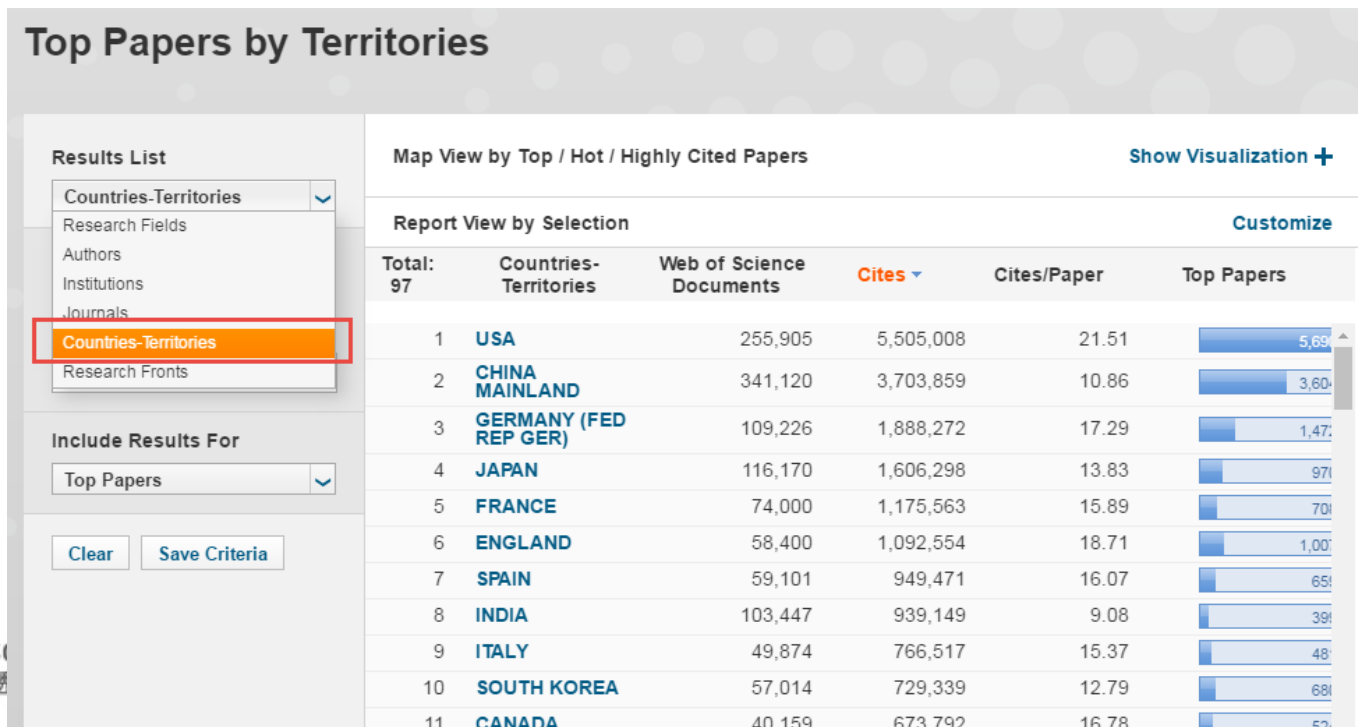
- 机构, 科学家, 国家, 期刊

2. 被引频次较高的论文

- 高被引论文 (过去 10 年)
- 热点论文 (过去 2 年)

3. 引文分析

- 全球22个学科领域的基准数据
- 研究前沿



在化学研究领域，哪个国家的影响力最高？

Top Papers by Territories

Results List

Countries-Territories

Map View by Top / Hot / Highly Cited Papers

Show Visualization +

Report View by Selection

Customize

Filter Results

Changing the filters will remove the current filters.

Add Filter »

× Chemistry

Include Results

Top Papers

Clear

Save

Back

Search Fields

- + Agricultural Sciences
- + Biology & Biochemistry
- Chemistry
- + Clinical Medicine
- + Computer Science
- + Economics & Business
- + Engineering
- + Environment/Ecology
- + Geosciences
- + Immunology
- + Materials Science
- + Mathematics
- + Microbiology
- + Molecular Biology & Genetics

Total: 57

Countries-Territories

Web of Science Documents

Cites

Cites/Paper

Top Papers

5,505,008

21.51

5,691

3,703,859

10.86

3,601

1,888,272

17.29

1,471

939,149

9.08

391

766,517

15.37

481

729,339

12.79

681

673,792

16.78

521

465,207

20.48

431

影响力排在某学科前50%
的国家被收录在ESI中

Results List

Countries-Territories

Filter Results By ?

Changing the filter field removes all current filters.

Add Filter »

× Chemistry

Include Results For

Top Papers

Clear

Save Criteria

Map View by Top / Hot / Highly Cited Papers

Show Visualization +

Report View by Selection

Customize

Total:	Countries-Territories	Web of Science Documents	Cites	Cites/Paper	Top Papers
97					
1	USA	255,905	5,505,008	21.51	5,690
2	CHINA MAINLAND	341,120	3,703,859	10.86	3,600
3	GERMANY (FED REP GER)	109,226	1,888,272	17.29	1,470
4	JAPAN	116,170	1,606,298	13.83	970
5	FRANCE	74,000	1,175,563	15.89	700
6	ENGLAND	58,400	1,092,554	18.71	1,000
7	SPAIN	59,101	949,471	16.07	650
8	INDIA	103,447	939,149	9.08	390
9	ITALY	49,874	766,517	15.37	480
10	SOUTH KOREA	57,014	729,339	12.79	680
11	CANADA	40,159	673,792	16.78	520
12	SWITZERLAND	22,717	465,207	20.48	430

化学领域中，中国的引文次数排名第二，仅次于美国

Results List

Countries-Territories

Filter Results By ?

Changing the filter field removes all current filters.

Add Filter »

× Chemistry

Include Results For

Top Papers

Clear

Save Criteria

Map View by Top / Hot / Highly Cited Papers

Show Visualization +

Report View by Selection

Customize

Total: 97	Countries-Territories	Web of Science Documents	Cites	Cites/Paper	Top Papers
1	NORTHERN IRELAND	1,699	38,725	22.79	39
2	SINGAPORE	13,171	285,091	21.65	44
3	USA	255,905	5,505,008	21.51	5,69
4	NETHERLANDS	19,879	407,513	20.50	35
5	SWITZERLAND	22,717	465,207	20.48	43
6	HONG KONG	9,382	185,863	19.81	21
7	WALES				

化学领域中，按照篇均被引排名，美国处于第3位，而中国在第40位

Filter Results By ?

Changing the filter field removes all current filters.

Add Filter »

× Chemistry

Include Results For

Top Papers

Clear

Save Criteria

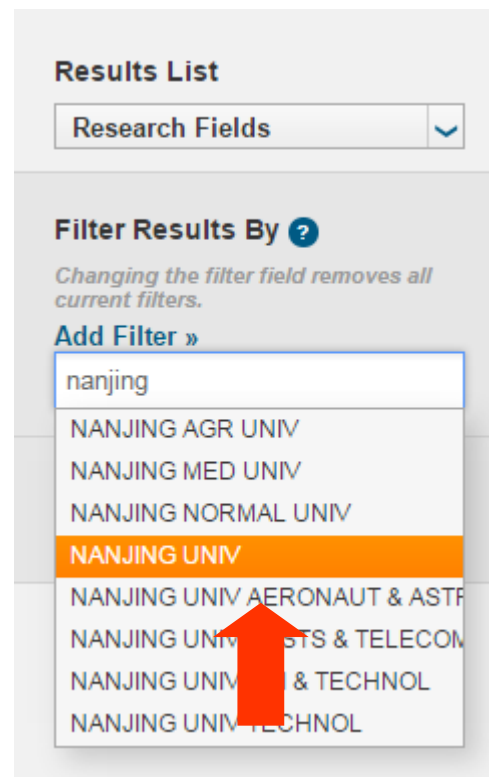
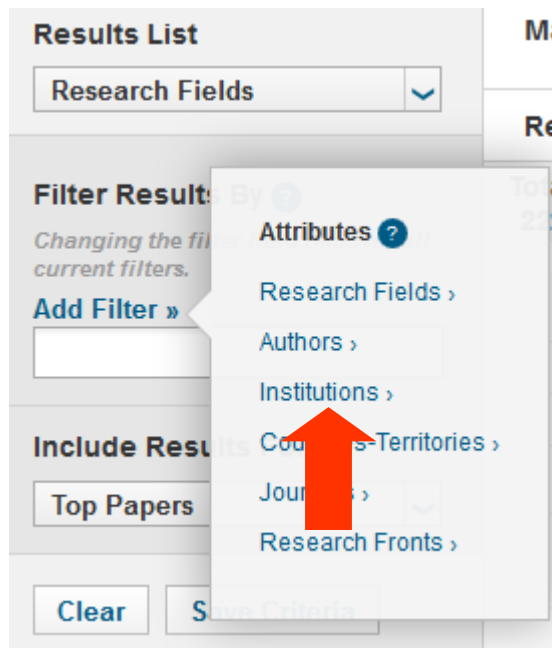
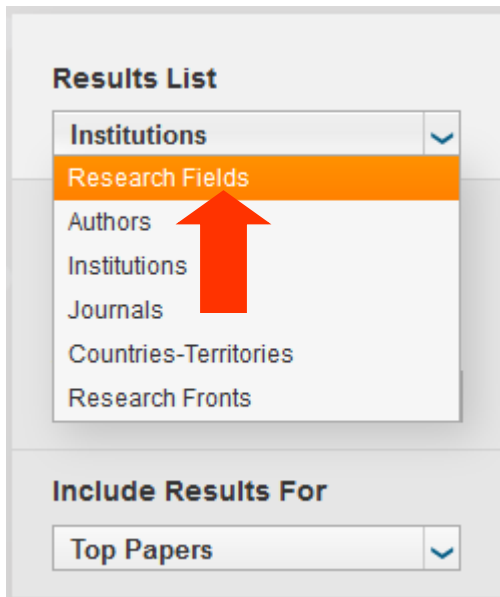
Total: 97	Countries-Territories	Web of Science Documents	Cites	Cites/Paper	Top Papers
40	CHINA MAINLAND	341,120	3,703,859	10.86	3,60
41	HUNGARY	8,509	90,621	10.65	38
42	SLOVENIA	4,205	42,696	10.15	19
43	CUBA	1,036	10,482	10.12	10
44	VENEZUELA	1,354	13,324	9.84	10
45	SRI LANKA	314	3,020	9.62	10
46	THAILAND	6,659	62,882	9.44	11

ESI: 定量分析研究绩效的工具, 它可以帮助您解决

- 在化学研究领域, 哪个国家的影响力最高?
- 在某个特定研究领域里, 哪个机构产出了高被引的研究成果?
- 在免疫学领域中, 被引次数最高的论文有哪些?
- 研究领域里现在最热门的话题是什么?
- 我们所在地区的机构在某一研究领域中的排名情况如何?
- 在这个领域里, 谁是最具影响力的研究人员?
- 我们所在机构发表文献的影响力排名在全球范围内是上升, 还是下降?



如何查找某机构已经进入前1%的ESI学科



影响力排在某学科前1%的机构被收录在ESI中

Results List

Research Fields

Filter Results By ?

Changing the filter field removes all current filters.

Add Filter »

x NANJING UNIV

Include Results For

Top Papers

Clear

Save Criteria

Map View by Top / Hot / Highly Cited Papers

Show Visualization +

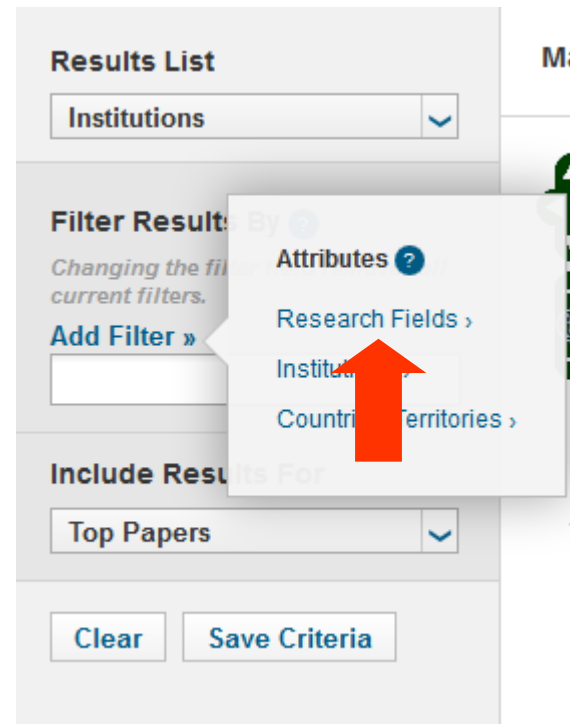
Report View by Selection

Customize

Total: 17	Research Fields	Web of Science Documents	Cites ▾	Cites/Paper	Top Papers
1	CHEMISTRY	8,867	136,104	15.35	13
2	PHYSICS	7,322	75,823	10.36	9
3	MATERIALS SCIENCE	2,432	31,256	12.85	4
4	GEOSCIENCES	2,573	25,886	10.06	2
5	CLINICAL MEDICINE	2,971	25,071	8.44	3
6	ENVIRONMENT/ COLOGY	1,616	14,520	8.99	5
7	ENGINEERING	1,584	13,256	8.37	4
8	BIOLOGY & BIOCHEMISTRY	1,108	12,405	11.20	5
9	MOLECULAR BIOLOGY & GENETICS	615	10,665	17.34	2
10	PHARMACOLOG Y & TOXICOLOGY	699	7,807	11.17	3
11	NEUROSCIENCE	571	5,887	10.31	3



如何查找某机构在某个ESI学科中的引用排名



如何查找某机构在某个ESI学科中的引用排名

影响力排在某学科前1%的机构被收录在ESI中

Results List

Institutions

Filter Results By ?
Changing the filter field removes all current filters.
Add Filter »
× Chemistry

Include Results For
Top Papers

Clear Save Criteria

Map View by Top / Hot / Highly Cited

Report View by Selection Customize

Total: 1052	Institutions	Web of Science Documents	Cites	Cites/Paper	Top Papers
30	NANJING UNIV		110,223	13.74	115
463	NANJING UNIV TECHNOL			6.23	14
528	NANJING UNIV SCI & TECHNOL	2,055	14,636	7.12	9
733	NANJING NORMAL UNIV	984	9,791	9.95	11
929	NANJING UNIV POSTS & TELECOMMUNIC AT	485	7,017	14.47	18
1002	NANJING UNIV AERONAUT & ASTRONAUT	677	6,140	9.07	8
8	CSIC	12,482	201,668	16.16	18
9	UNIV CALIF BERKELEY	5,412	172,718	31.91	30
10	RUSSIAN ACAD	27,001	101,705	1.00	

ESI应用实例一

—各机构进入全球前1%学科对比

1%

北京大学有19个学科进入全球排名的前1%。

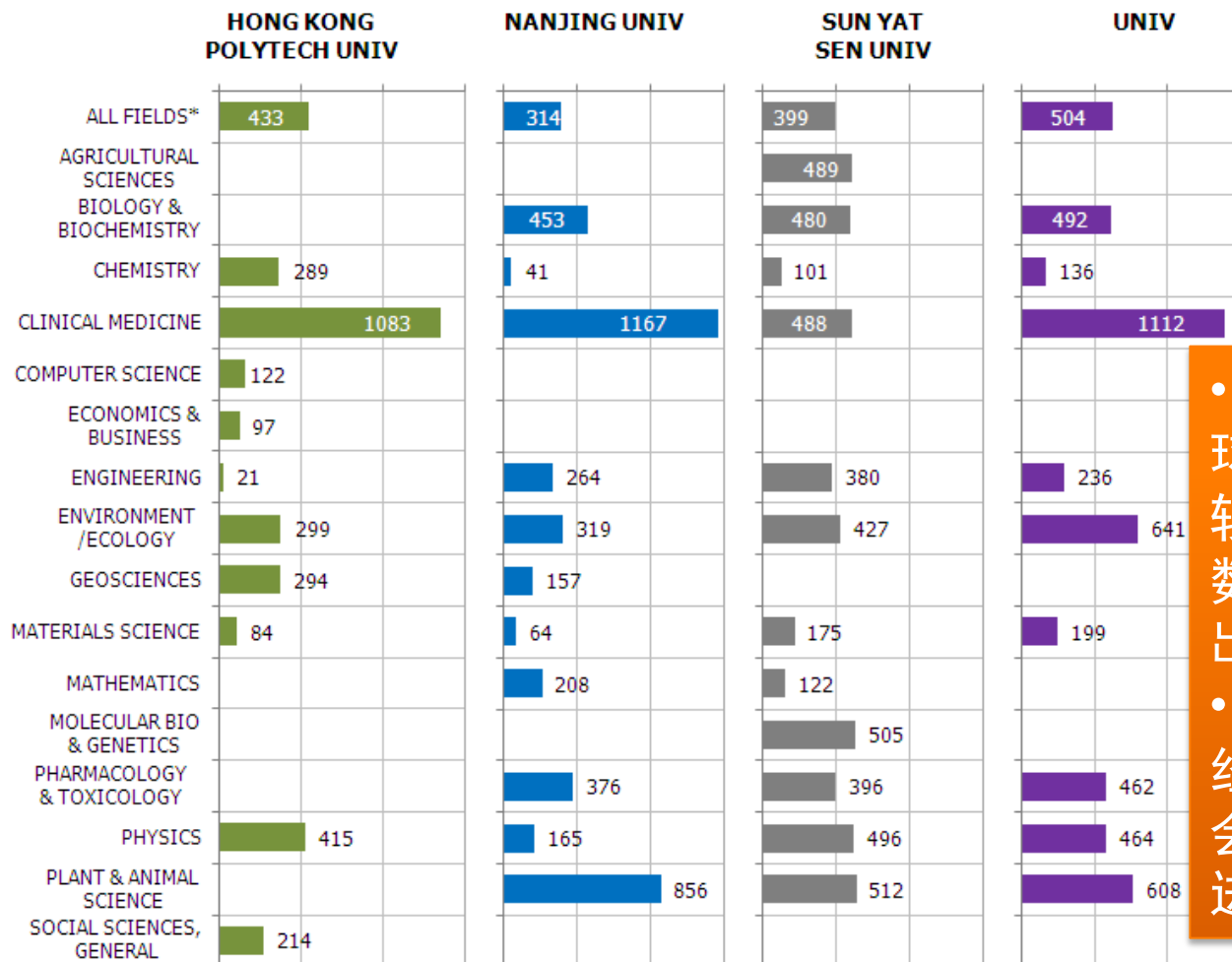
北京大学	19
浙江大学	18
复旦大学	17
上海交通大学	16
清华大学	16
南京大学	16
中国科学技术大学	10
西安交通大学	11
哈尔滨工业大学	8

C9 大学进入全球排名的前1%的学科数量
(2005-2015)

Data Source: Essential Science Indicators (ESI)

ESI应用实例二

学科排名—从优秀到卓越



- 中山大学进入全球排名前1%的学科较多，且在化学和数学等领域表现突出；
- 香港理工大学在经济学与商学和社会科学领域排名均进入了全球前1%

ESI：定量分析研究绩效的工具，它可以帮助您解决

- 在化学研究领域，哪个国家的影响力最高？
- 哪个机构产出了高被引的研究成果？
- 在免疫学领域中，被引次数最高的论文有哪些？
- 研究领域里现在最热门的话题是什么？
- 我们所在地区的机构在某一研究领域中的排名情况如何？
- 在这个领域里，谁是最具影响力的研究人员？
- 我们所在机构发表文献的影响力排名在全球范围内是上升，还是下降？



Essential Science Indicators的构成

1. 引用排名

- 机构, 科学家, 国家, 期刊

2. 被引频次较高的论文

- 高被引论文 (过去 10 年)
- 热点论文 (过去2 年)

3. 引文分析

- 全球22个学科领域的基准数据
- 研究前沿

Results List

Research Fields

Filter Results By ?

Changing the filter field removes all current filters.

Add Filter »

Include Results For

Top Papers

Top Papers

Highly Cited Papers

Hot Papers

Map View by Top / Hot / Highly Cited Papers

Show Visualization +

Report View by Selection

Customize

Total: 22	Research Fields	Web of Science Documents	Cites	Cites/Paper	Top Papers
1	CLINICAL MEDICINE	2,494,294	32,297,297	12.95	24,723
2	CHEMISTRY	1,546,690	20,542,003	13.28	15,523
3	PHYSICS	1,167,257	12,841,019	11.00	11,690
4	BIOLOGY & BIOCHEMISTRY	695,466	11,763,637	16.91	6,984
5	MOLECULAR BIOLOGY & GENETICS	419,837	10,727,717	25.55	4,236
6	NEUROSCIENCE & BEHAVIOR	485,645	8,854,377	18.23	4,898
7	ENGINEERING	1,085,403	6,993,166	6.44	10,833

名词定义：

- 高被引论文 (Highly cited papers): 过去10年中所发表的论文中,其总被引次数排在同学科、同年份前1%的论文
- 热门论文(Hot papers): 过去两年的论文中,同年度同学科领域中被引频次在最近两个月排名位于全球前0.1%的论文。
- 高水平论文 (Top papers): 高被引论文与热门论文去重后的总和

Papers by Research Field

Citation Trends

Documents

Filter Results By ?

Add Filter »

× PEKING UNIV

Include Results For

Highly Cited Papers

Clear

Save Criteria

Sort By Citations

Customize Documents

1 - 10 of 916

1 OBSERVATION OF A NEW BOSON AT A MASS OF 125 GEV WITH THE CMS EXPERIMENT AT THE LHC

Times Cited: 2,667

By: CHATRCHYAN, S; KHACHATRYAN, V; SIRUNYAN, AM; et.al
Source: PHYS LETT B 716 (1): 30-61 SEP 17 2012
Research Fields: PHYSICS

Research Front

2 PIEZOELECTRIC NANOGENERATORS BASED ON ZINC OXIDE NANOWIRE ARRAYS

Times Cited: 2,631

By: WANG, ZL; SONG, JH;
Source: SCIENCE 312 (5771): 2
Research Fields: PHYSICS

某个机构的所有高被引论文

Citation Trends

Documents

Filter Results By ?

Add Filter »

× Immunology

Include Results For

Highly Cited Papers

Clear

Save Criteria

Sort By Citations

Customize Documents

1 - 10 of 2,382

1 RECIPROCAL DEVELOPMENTAL PATHWAYS FOR THE GENERATION OF PATHOGENIC EFFECTOR T(H)17 AND REGULATORY T CELLS

Times Cited: 2,930

By: BETTELLI, E; CARRIER, YJ;
Source: NATURE 441 (7090): 235
Research Fields: IMMUNOLOGY

某个领域的所有高被引论文

2 INTERLEUKIN 17-PRODUCING T CELLS DEVELOP VIA A LINEAGE DISTINCT AND 2 LINEAGES

By: HARRINGTON, LE; HATTON
Source: NAT IMMUNOL 6 (11): 11
Research Fields: IMMUNOLOGY

每篇文章都可以直接链接到 Web of Science 查看更多信息

Search

Full Text Options

 Look Up Full Text 

Save to EndNote online

Add to Marked List

Reciprocal developmental pathways for the generation of pathogenic effector T(H)17 and regulatory T cells

By: Bettelli, E (Bettelli, E); Carrier, YJ (Carrier, YJ); Gao, WD (Gao, WD); Korn, T (Korn, T); Strom, TB (Strom, TB); Oukka, M (Oukka, M); Weiner, HL (Weiner, HL); Kuchroo, VK (Kuchroo, VK)

[View ResearcherID and ORCID](#)

NATURE

Volume: 441 Issue: 7090 Pages: 235-238

DOI: 10.1038/nature04753

Published: MAY 11 2006

[View Journal Information](#)

Abstract

On activation, T cells undergo distinct developmental pathways, attaining specialized properties and effector functions. T-helper (T-H) cells are traditionally thought to differentiate into T(H)1 and T(H)2 cell subsets. T(H)1 cells are necessary to clear intracellular pathogens and T(H)2 cells are important for clearing extracellular organisms(1,2). Recently, a subset of interleukin (IL)-17-producing T(H)17 cells has been described and shown to have a crucial role in the induction of autoimmune tissue injury.

还可以看到所有引文的
的详细信息

3,095 Times Cited

23 Cited References

[View Related Records](#) [View Citation Map](#) [Create Citation Alert](#)*(data from Web of Science™ Core Collection)*

All Times Cited Counts

3,373 in All Databases

3,095 in Web of Science Core Collection

2,618 in BIOSIS Citation Index

232 in Chinese Science Citation

在Web of Science中
有完整的题录信息

高被引论文的导出——新增

Indicators Documents

Papers by Research Field

Sort By Citations Customize Documents 1 - 10 of 49

1 USE OF IONIC LIQUIDS AS GREEN SOLVENTS FOR EXTRACTIONS Times Cited: 416
By: ZHAO, H; XIA, SQ; MA, PS;
Source: J CHEM TECHNOL BIOTECHNOL
80 (10): 1089-1096 OCT 2005
Research Fields: CHEMISTRY

2 UPDATE 1 OF: ASYMMETRIC FLUORINATION, TRIFLUOROMETHYLATION, AND PERFLUOROALKYLATION REACTIONS Times Cited: 413
By: MA, JA; CAHARD, D;
Source: CHEM REV 108 (9): PR1-PR43 SEP 2008
Research Fields: CHEMISTRY

3 CATALYTIC ASYMMETRIC TANDEM TRANSFORMATIONS TRIGGERED BY CONJUGATE ADDITIONS Times Cited: 408
By: GUO, HC; MA, JA;
Source: ANGEW CHEM INT ED 45 (3): 354-366 2006

Select download format
CSV
XLS

Citation Trends

Documents

Filter Results By ?
Add Filter »
x TIANJIN UNIV

Include Results For
Highly Cited Papers

Clear Save Criteria

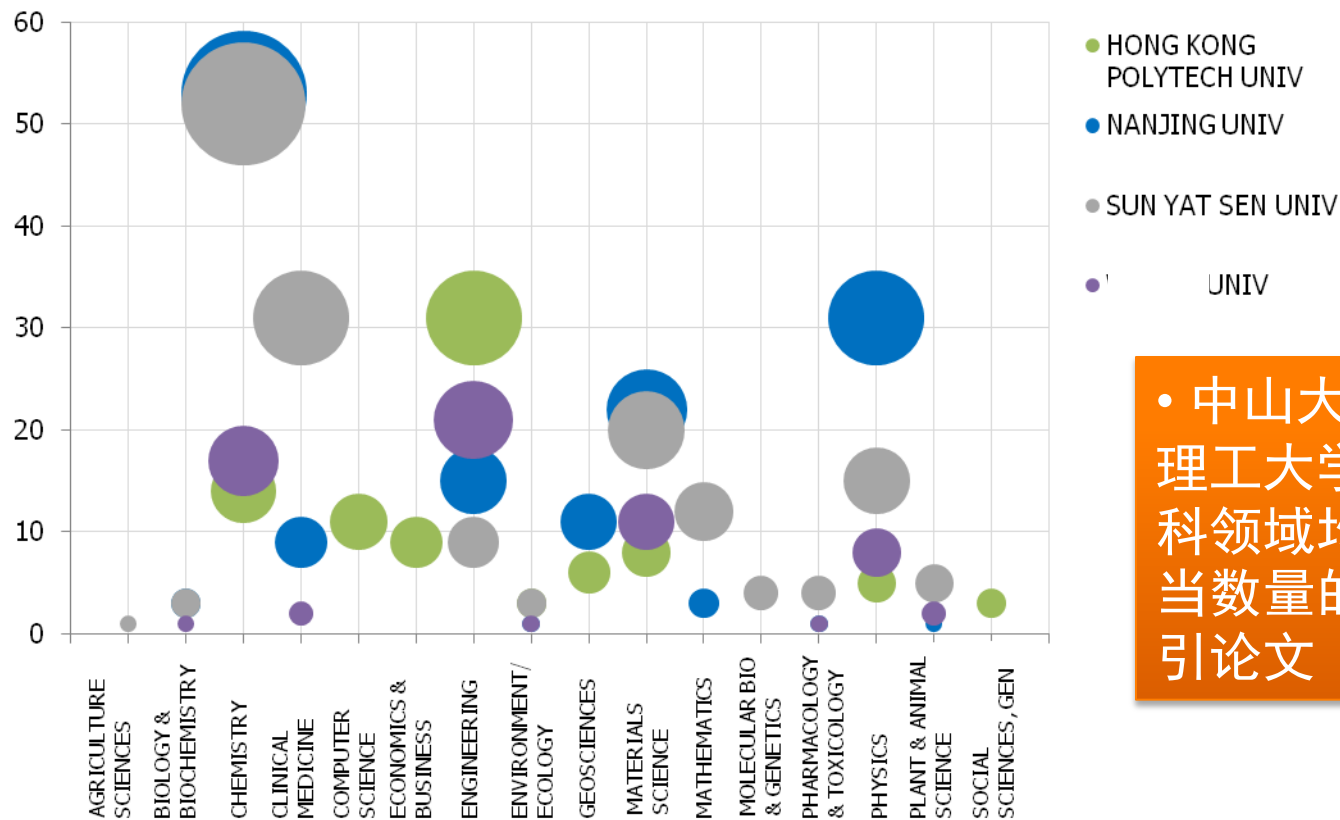
A	B	C	D	E	F	G	H	I	J	K	L	M
Documents Result List: Institutions - 'TIANJIN UNIV' Research Fields - 'CHEMISTRY' Show - Highly Cited Papers												
Accession Number	DOI	PMID	Article Na	Authors	Source	Research Field	Times Cited	Countries	Addresses	Institution	Publication Date	
WOS:000232379700001	10.1002/jctb.1333		USE OF IO	ZHAO, H;X	J CHEM TE	CHEMISTRY	416	CHINA MA	SAVANNA NA-SAVAI	NA-SAVAI	2005	
WOS:000259119300012	10.1021/cr80022	MEDLINE::	UPDATE 1	MA, JA;CA	CHEM REV	CHEMISTRY	413	CHINA MA	UNIV MT S	CNRS;TIAN	2008	
WOS:000234604400006	10.1002/anie.20	MEDLINE::	CATALYTIC	GUO, HC;N	ANGEW C	CHEMISTRY	408	CHINA MA	TIANJIN U	MAX PLAN	2006	
WOS:000282314300018	10.1039/c002639e		ENHANCE	ZHANG, B;	ENERGY EI	CHEMISTRY	383	CHINA MA	NANKAI U	NANKAI U	2010	
WOS:000243123000001	10.1016/j.progsolidstchem		SIZE DEPE	SUN, CQ	PROG SOL	CHEMISTRY	376	CHINA MA	NANYANG	NANYANG	2007	
WOS:000291807600022	10.1039/c1cs150	MEDLINE::	RECENT AI	WANG, W	CHEM SOC	CHEMISTRY	362	CHINA MA	TIANJIN U	TIANJIN U	2011	
WOS:000271951200052	10.1021/nn9009	MEDLINE::	LOW-TEM	LV, W;TAN	ACS NANC	CHEMISTRY	319	CHINA MA	TIANJIN U	CHINESE A	2009	
WOS:000287620600007	10.1021/cr10016	MEDLINE::	ASYMMET	NIE, J;GUC	CHEM REV	CHEMISTRY	297	CHINA MA	TIANJIN U	CHINA AG	2011	
WOS:000249413300001	10.1016/j.jfluchem.2007.04		STRATEGII	MA, JA;CA	J FLUORIN	CHEMISTRY	296	CHINA MA	UNIV ROU	TIANJIN U	2007	
WOS:000234785600009	10.1016/j.apcata.2005.10.0		TRANSEST	XIE, WL;PE	APPL CAT	CHEMISTRY	282	CHINA MA	TIANJIN U	NA-HENAI	2006	
WOS:000235284300022	10.1021/jp05582	MEDLINE::	DYE-SENSI	JIU, JT;ISO	J PHYS CH	CHEMISTRY	267	CHINA MA	KYOTO UN	KYOTO UN	2006	
WOS:000226856100002	10.1016/j.eurpolymj.2004.		STUDY ON	ZHANG, C	EUR POLYI	CHEMISTRY	253	CHINA MA	TIANJIN U	TIANJIN U	2005	
WOS:000281991000001	10.1016/j.apcata.2010.06.0		BIOMASS	TONG, XL;	APPL CAT	CHEMISTRY	245	CHINA MA	TIANJIN U	TIANJIN U	2010	
WOS:000245760300010	10.1021/ie061491k		CARBON /	CHEN, DM	IND ENG C	CHEMISTRY	232	CHINA MA	TIANJIN U	TIANJIN U	2007	
WOS:000236061800004	10.1016/j.molcata.2005.10.		CALCINED	XIE, WL;PE	J MOL CAT	CHEMISTRY	227	CHINA MA	TIANJIN U	NA-HENAI	2006	
WOS:000237934700013	10.1021/ie0600902		EFFECTS C	CHEN, D;Y	IND ENG C	CHEMISTRY	222	CHINA MA	TIANJIN U	TIANJIN U	2006	
WOS:000322417400070	10.1021/nn4021	MEDLINE::	NANOPOF	JI, JY;ZHA	ACS NANC	CHEMISTRY	213	CHINA MA	UNIV TEXA	TIANJIN U	2013	
WOS:000239040000038	10.1021/ic06055	MEDLINE::	SYNTHESI	GAO, HL;Y	INORG CH	CHEMISTRY	203	CHINA MA	NANKAI U	NANKAI U	2006	
WOS:000244348900048	10.1021/ol07016	MEDLINE::	HIGHLY EN	LIU, K;CUI	ORG LETT	CHEMISTRY	177	CHINA MA	TIANJIN U	TIANJIN U	2007	
WOS:000319856300085	10.1021/nn4010	MEDLINE::	CARBON-I	HE, CN;WI	ACS NANC	CHEMISTRY	176	CHINA MA	TIANJIN U	TIANJIN U	2013	
WOS:000303320400019	10.1039/c2cs153	MEDLINE::	ETHER- AN	TANG, SK;	CHEM SOC	CHEMISTRY	173	CHINA MA	SAVANNA NA-SAVAI	NA-SAVAI	2012	
WOS:000306415000016	10.1039/c2cc338	MEDLINE::	HIGHLY LU	ZHAI, XY;Z	CHEM COM	CHEMISTRY	169	CHINA MA	TIANJIN U	ACAD MIL	2012	

一次最多导出20000条记录

ESI应用实例一

各机构热点/高被引论文对比分析

Hot papers & Highly cited paper - most recent 10 years cumulative



• 中山大学和香港理工大学在较多学科领域均累积了相当数量的热点/高被引论文

ESI应用实例二

中国各学科中的高被引论文和热点论文

- 高被引论文 (近十年年内发表且被引次数在各领域排名前1%)

World: 134,834

China: 16,007

% World: 11.9%

- 热点论文(近2年内发表且被引次数在最近两个月内各领域排名前0.1%)

World: 2732

China:506

%World: 18.5%

中国发表了18.5% 的热点论文 vs. 11.9%的高被引论文:
中国的近年来展现出很高的影响力



SHARE



MENU



2015高影响力科学家

HIGHLY CITED RESEARCHERS

Highly Cited Researchers 2015 represents some of world's most influential scientific minds.

Subscribe for Updates

<http://hcr.stateofinnovation.thomsonreuters.com/>

Home > Highly Cited Researchers

HIGHLY CITED RESEARCHERS

PURPOSE

METHODOLOGY

FAQS

ARCHIVES

REFINE YOUR HIGHLY CITED RESEARCHERS LIST



First name

Last name

Category

Primary Affiliation

Secondary Affiliation

2015HCR的区域分布

中国大陆共107位高影响力科学家



方法论：

- 数据来源：2003至2013间收录的ESI中的高被引论文（共120,793篇），被引次数也截止到2013年
- 每个学科的作者按照高被引论文的数量由高到低排序（算法分析和人工校对）
- 入选数量：由各学科高被引论文的作者总数(未进行算法分析和人工校对)的平方根来大致决定
- 比阈值少一篇的作者：若其高被引论文的总被引频次超过了已入选高被引科学家前50%的，也将入选高被引科学家行列
- 高能物理：超过30个机构地址的物理学文章被排除

Essential Science Indicators

- ESI数据库介绍
- 如何利用ESI数据库来进行科学研究成果评价
- 如何利用ESI数据库追踪前沿研究
- 新平台ESI的功能展示

科学研究成果的评价和追踪前沿研究关注的问题

- 在化学研究领域，哪个国家的影响力最高？
- 在某个特定研究领域里，哪个机构产出了高被引的研究成果？
- 在免疫学领域中，被引次数最高的论文有哪些？
- 研究领域里现在最热门的话题是什么？
- 我们所在地区的机构在某一研究领域中的排名情况如何？
- 在这个领域里，谁是最具影响力的研究人员？
- 我们所在机构发表文献的影响力排名在全球范围内是上升，还是下降？

Essential Science Indicators的构成

1. 引用排名

- 机构, 科学家, 国家, 期刊

2. 被引频次较高的论文

- 高被引论文 (过去 10 年)
- 热点论文 (过去2 年)

3. 引文分析

- 全球22个学科领域的基准数据
- 研究前沿

Top Papers by Research Field

Results List		Map View by Top / Hot / Highly Cited Papers				Show Visualization +
Research Fields		Report View by Selection				Customize
Total: 22	Research Fields	Web of Science Documents	Cites	Cites/Paper	Top Papers	
1	CLINICAL MEDICINE	2,494,294	32,297,297	12.95	24,720	
2	CHEMISTRY	1,546,690	20,542,003	13.28	15,520	
3	PHYSICS	1,167,257	12,841,019	11.00	11,690	
4	BIOLOGY & BIOCHEMISTRY	695,466	11,763,637	16.91	6,980	
5	MOLECULAR BIOLOGY & GENETICS	419,837	10,727,717	25.55	4,230	
6	NEUROSCIENCE & BEHAVIOR	485,645	8,854,377	18.23	4,890	

Essential Science Indicators(ESI)以及研究前沿(Research Front)的诞生

Report View by Selection Customize

	Research Fronts	Highly Cited Papers	Mean Year
1	HALOGEN BONDING INCLUDING SYMMETRY ADAPTED PERTURBATION THEORY ANALYSES; HALOGEN BONDING; HALOGEN BONDING; HALOGEN BOND (IUPAC RECOMMENDATIONS 2013); HALOGEN BOND TUNABILITY II	50	2011.4
1	ACUTE ISCHAEMIC STROKE (THE THIRD INTERNATIONAL STROKE TRIAL [IST-3]); ACUTE ISCHEMIC STROKE (SWIFT PRIME) TRIAL; 56 CONSECUTIVE ACUTE ISCHEMIC STROKE PATIENTS; ACUTE ISCHEMIC STROKE PATIENT CHARACTERISTICS; ACUTE ISCHEMIC STROKE	50	2012.5
3	CHRONIC HEPATITIS C VIRUS GENOTYPE 1 INFECTION (QUEST-2); CHRONIC HEPATITIS C VIRUS GENOTYPE 1 INFECTION (QUEST-1); GENOTYPE 1 HEPATITIS C VIRUS INFECTION (LONESTAR); HEPATITIS C VIRUS GENOTYPE 1 INFECTION; GENOTYPE 1 HEPATITIS C VIRUS INFECTION	49	2014.3
3	INVERSE SPIN HALL EFFECT; GIANT SPIN HALL EFFECT; SPIN HALL EFFECT; QUANTIFYING SPIN TORQUE		
3	CRISPR RNA-GUIDED DNA REPAIR; CRISPR CAS9; RNA-GUIDED ENGINEERING; DIMERIC CRISPR NUCLEASES; CRISPR RNA-G		
4	TOPOLOGICAL INSULATOR; DIMENSIONAL TOPOLOGICAL		

点击查看高被引论文

论文的平均发表年份

利用co-citation analysis 对highly cited papers进行分析，一组高被引论文的题名中的主要关键词组成了研究前沿

Henry Small: 共被引(co-citation)分析的创始人

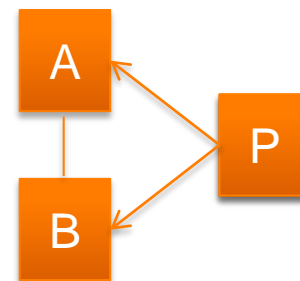
- “共被引”是一种新的文献耦合形式，即两篇文献被共同引用的情形。两篇文献的共被引频率是通过对比SCI中施引文献列表并计算相同条目得到的；
- 共被引文献形成的网络能够用来定义特定的科学领域；
- **共被引文献聚类**能够为我们提供一种全新的视角来**探索科学的结构**。



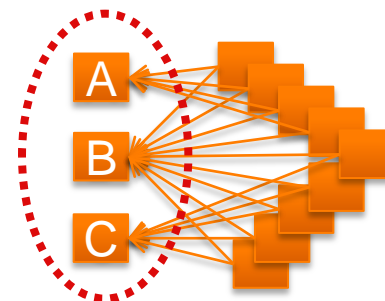
共被引：分析原理

- 计算一对文献（或作者或期刊）被第三方同时引用的次数。越多的文献引用这一对文献，它们之间的相关性就越强。这种关系是动态且具有前瞻性的。

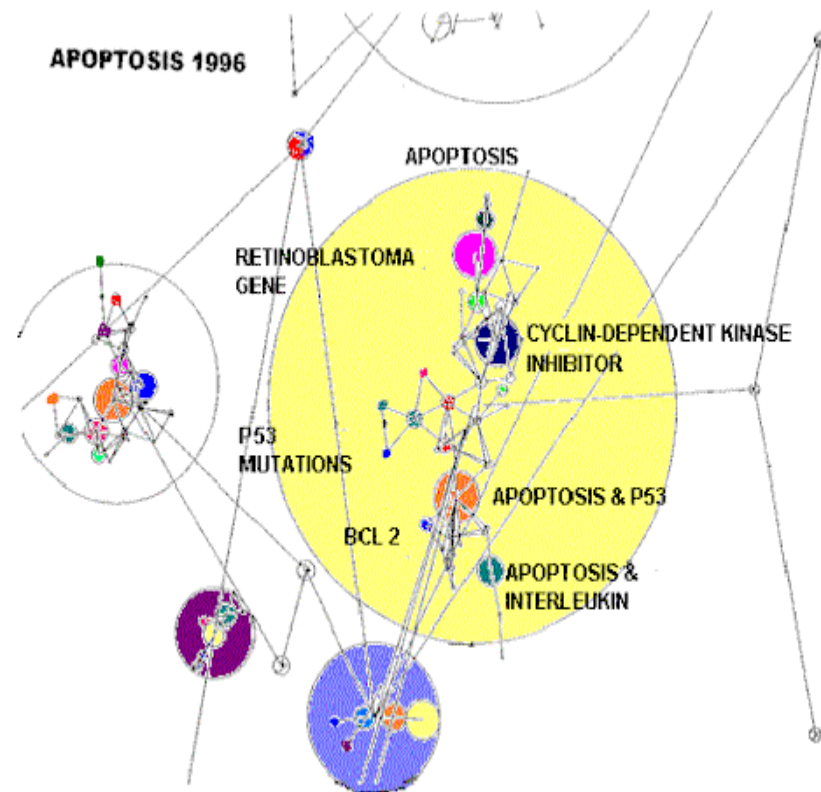
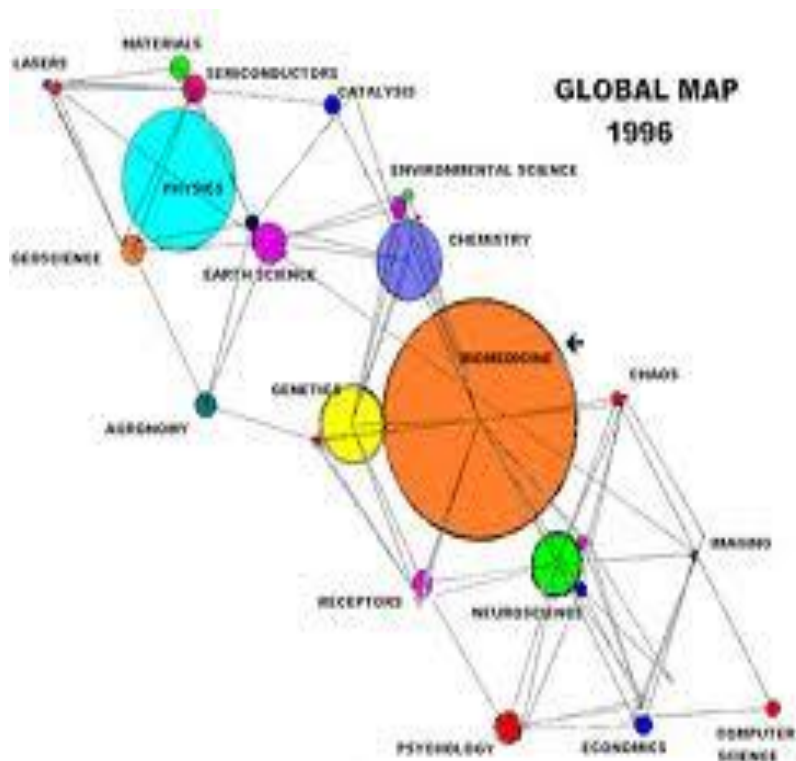
1. 当论文A和论文B同时被论文P引用，A和B很有可能具有研究主题方面的相关性



2. 当共被引频率较高时，即形成了一组文献，它们之间具有研究主题方面的相关性



Small利用共被引分析建立的世界科学图景



临床医学研究前沿

I:	Research Fronts	Highly Cited Papers	Mean Year
1	<p>ACUTE ISCHAEMIC STROKE (THE THIRD INTERNATIONAL SWIFT STROKE PATIENTS; ACUTE ISCHEMIC STROKE PATIENT CHARACTERISTICS; ACUTE ISCHEMIC STROKE</p> <p>急性缺血性脑卒中</p>	50	2012.5
2	<p>CHRONIC HEPATITIS C VIRUS GENOTYPE 1 INFECTION (QUEST-2); CHRONIC HEPATITIS C VIRUS GENOTYPE 1 INFECTION; GENOTYPE 1 HEPATITIS C VIRUS INFECTION</p> <p>慢性丙型肝炎病毒感染</p>	49	2014.3
3	<p>MAGNETIC RESONANCE IMAGING/ULTRASOUND-FUSION BIOPSY SIGNIFICANTLY UPGRADES PROSTATE CANCER; MAGNETIC RESONANCE IMAGING GUIDED PROSTATE BIOPSY; MAGNETIC RESONANCE IMAGING GUIDED PROSTATE BIOPSY; MAGNETIC RESONANCE IMAGING GUIDED PROSTATE BIOPSY; MAGNETIC RESONANCE IMAGING GUIDED PROSTATE BIOPSY</p> <p>核磁融合超声前列腺穿刺活检</p>	48	2012.8
3	<p>ENDOVASCULAR ABDOMINAL AORTIC ANEURYSM REPAIR; ABDOMINAL AORTIC ANEURYSM REPAIR; ABDOMINAL AORTIC ANEURYSM REPAIR; ABDOMINAL AORTIC ANEURYSM REPAIR; ABDOMINAL AORTIC ANEURYSM REPAIR</p> <p>腹主动脉瘤腔内修复术</p>	48	2011.8

关于云计算的研究前沿

Results List

Research Fronts

Map View by Top / Hot / Highly Cited Papers [Show Visualization +](#)

Report View by Selection [Customize](#)

Filter Results By ?
Changing the filter field removes all current filters.
Add Filter »

- × CLOUD COMPUTING;COMPUTING;5TH UTILITY;REALITY;EMERGING
- × CLOUD COMPUTING;TRUST MANAGEMENT;COMPUTATION
- × CLOUD DATA CENTERS;CLOUD COMPUTING ENVIRONMENTS;CLOUD COMPUTING;ENERGY-AWARE RESOURCE ALLOCATION HEURISTICS;RE SOURCE PROVISIONING ALGORITHMS
- × MOBILE CLOUD COMPUTING APPLICATION MODELS;MOBILE CLOUD COMPUTING;MOBILE COMPUTING;CLOUD COMPUTING;SMART MOBILE DEVICES

cloud computing

SECURE CLOUD STORAGE;ENAB

Include Results For

Highly Cited Papers

Clear Save Criteria

Total: 4

	Research Fronts	Highly Cited Papers	Mea Year
1	MOBILE CLOUD COMPUTING APPLICATION MODELS;MOBILE CLOUD COMPUTING;MOBILE COMPUTING;CLOUD COMPUTING;SMART MOBILE DEVICES	12	201
2	CLOUD DATA CENTERS;CLOUD COMPUTING ENVIRONMENTS;CLOUD COMPUTING;ENERGY-AWARE RESOURCE ALLOCATION HEURISTICS;RESOURCE PROVISIONING ALGORITHMS	3	201
3	CLOUD COMPUTING;TRUST MANAGEMENT;COMPUTATION;PRIVACY;SECURITY	2	201
3	CLOUD COMPUTING;COMPUTING;5TH UTILITY;REALITY;EMERGING	2	200

关于云计算的研究前沿

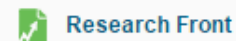
	Research Fronts	Highly Cited Papers	Mean Year
1	MOBILE CLOUD COMPUTING APPLICATION MODELS; MOBILE CLOUD COMPUTING; SMART MOBILE DEVICES 移动云计算应用模型	12	2012.9
2	CLOUD DATA CENTERS; CLOUD COMPUTING ENVIRONMENTS; CLOUD COMPUTING; ENERGY-AWARE RESOURCE ALLOCATION HEURISTICS; RESOURCE PROVISIONING ALGORITHMS	3	2011.7
3	SECURE CLOUD STORAGE; ENABLING PUBLIC AUDITABILITY; PRIVACY-PRESERVING PUBLIC AUDITING; CLOUD COMPUTING; STORAGE SECURITY	2	2012
3	CLOUD COMPUTING; COMPUTING; 5TH UTILITY; REALITY; EMERGING	2	2009.5
3	CLOUD MANAGEMENT; COMPUTATION; PRIVACY; SECURITY 云计算的数据安全问题	2	2014

跨学科研究

9 A SURVEY OF MOBILE CLOUD COMPUTING APPLICATION MODELS

Times Cited: 14

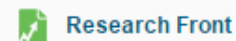
By: KHAN, AUR; OTHMAN, M; MADANI, SA; et.al
Source: IEEE COMMUN SURV TUTOR 16 (1): 393-413 2014
Research Fields: **COMPUTER SCIENCE**



10 MANAGING PERFORMANCE OVERHEAD OF VIRTUAL MACHINES IN CLOUD COMPUTING: A SURVEY, STATE OF THE ART, AND FUTURE DIRECTIONS

Times Cited: 14

By: XU, F; LIU, FM; JIN, H; et.al
Source: PROC IEEE 102 (1): 11-31 JAN 2014
Research Fields: **ENGINEERING**

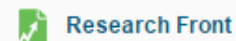


计算机科学和工程学的交叉研究

11 INVESTIGATION ON RUNTIME PARTITIONING OF ELASTIC MOBILE APPLICATIONS FOR MOBILE CLOUD COMPUTING

Times Cited: 13

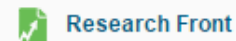
By: SHIRAZ, M; AHMED, E; GANI, A; et.al
Source: J SUPERCOMPUT 67 (1): 84-103 JAN 2014
Research Fields: COMPUTER SCIENCE



12 MOBILE CLOUD COMPUTING: A SURVEY, STATE OF ART AND FUTURE DIRECTIONS

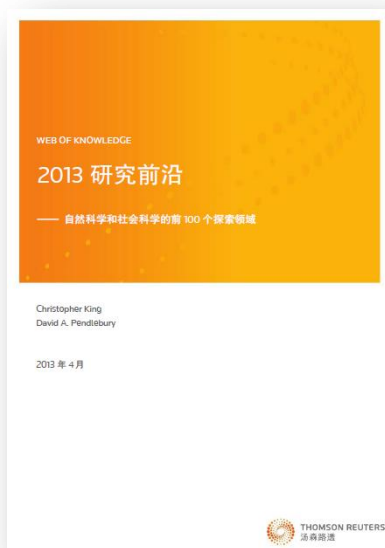
Times Cited: 11

By: RAHIMI, MR; REN, J; LIU, CH; et.al
Source: MOBILE NETW APPL 19 (2): 133-143 APR 2014
Research Fields: COMPUTER SCIENCE



研究前沿报告

汤森路透与中科院文献情报中心联合发布《2014研究前沿》《2015研究前沿》报告



下载链接：http://ip-science.thomsonreuters.com.cn/press/research_fronts_2015.pdf

《2014年研究前沿》报告发布暨科学家论坛

汤森路透与中科院文献情报中心联合发布《2014研究前沿》报告



- 基于汤森路透的 Essential Science Indicators (ESI)数据库 9,700多个研究前沿,
- 甄选出了2014年排名最前的**100个热点研究前沿**和**44个新兴研究前沿**, 涉及自然科学和社会科学的**10大学科领域**。

揭示100个全球热点研究前沿和44个新兴研究前沿

《2015年研究前沿》报告发布暨专家研讨会



时间	议程	主持人	主讲人
13:00-14:00			嘉宾签到
14:00-14:15	开幕致辞	黄向阳	李静海院士 中国科学院副院长 刘煜 汤森路透全球高级副总裁，中国区总裁
14:15-14:45	《2015 研究前沿》报告发布	研究员 中国科学院	冷伏海研究员 中国科学院文献情报中心情报研究部主任
14:45-15:05	中美研究前沿贡献与表现分析	文献情报中心 主任	张晓林研究员 中国科学院文献情报中心
15:05-15:25	研究前沿一解读		姚檀栋院士 中国科学院青藏高原研究所所长
15:25-15:45	研究前沿二解读		姜辛丑研究员 中国科学院高能物理研究所实验物理中心主任
15:45-16:05	研究前沿三解读		侯剑辉研究员 中国科学院化学研究所高分子物理与化学国家重点实验室
16:05-17:30	讨论	郭利 汤森路透知识产权与科技事业部 中国区总裁	参与讨论的嘉宾： 姚檀栋院士，中国科学院青藏高原研究所所长 姜辛丑研究员，中国科学院高能物理研究所实验物理中心主任 侯剑辉研究员，中国科学院化学研究所高分子物理与化学国家重点实验室 冷伏海研究员，中国科学院文献情报中心情报研究部主任 Joshua Schnell 博士，汤森路透知识产权与科技事业部学术与政府部总监 岳卫平博士，汤森路透知识产权与科技事业部中国区首席科学家
17:30			会议结束

时间:2015年10月29日(周四) 14:00-17:30

地点:中国科学院文献情报中心报告厅(北京市中关村北四环西路33号)

Essential Science Indicators的构成

1. 引用排名

- 机构, 科学家, 国家, 期刊

2. 被引频次较高的论文

- 高被引论文 (过去 10 年)
- 热点论文 (过去2 年)

3. 引文分析

- 全球22个学科领域的基准数据
- 研究前沿

InCites™ Essential Science IndicatorsSM



THOMSON REUTERS™

Indicators

Field Baselines

Citation Thresholds

Indicators



THOMSON REUTERS
汤森路透

论文篇均被引次数 - Baselines 基准数据
 可用于判断科技论文是否达到了某一学科中
 学术影响力的平均水平

Field Baselines

Baselines are annualized expected citation rates for

Citation Rates are yearly averages of citations per

Citation Rates	RESEARCH FIELDS ▲	2005	2006	2007	2008	2009	2010	2011	2012
	ALL FIELDS	24.07	22.13	20.33	18.06	16.02	13.71	10.96	8.27
Percentiles	AGRICULTURAL SCIENCES	18.45	17.02	14.94	12.43	10.87	9.33	7.32	5.50
	BIOLOGY & BIOCHEMISTRY	34.62	31.64	28.37	25.42	22.74	18.80	14.85	11.08
	CHEMISTRY	23.92	22.19	20.39	19.66	17.55	15.85	13.33	10.82
	CLINICAL MEDICINE	28.23	25.55	22.28	19.62	17.36	14.53	11.54	8.65
	COMPUTER SCIENCE	8.00	7.60	10.81	9.79	9.22	7.61	6.06	4.27
	ECONOMICS & BUSINESS	19.98	17.84	14.84	11.97	10.29	8.34	6.25	4.15
	ENGINEERING	11.37	11.42	11.06	9.87	9.52	8.29	6.83	5.07
	ENVIRONMENT/E COLOGY	29.86	26.67	23.98	21.31	17.70	15.17	11.76	8.82
	GEOSCIENCES	24.08	22.67	19.68	18.13	16.40	13.47	11.18	8.09
	IMMUNOLOGY	41.29	37.22	34.11	30.33	26.70	22.06	17.51	12.68
	MATERIALS SCIENCE	17.37	16.45	17.09	15.38	14.38	13.33	11.15	8.89
	MATHEMATICS	8.60	7.97	7.24	6.59	5.73	4.90	3.76	2.66
	MICROBIOLOGY	34.45	30.52	27.37	23.84	21.42	18.28	13.50	9.93
	MOLECULAR BIOLOGY & GENETICS	54.79	50.34	46.85	39.88	34.96	29.07	22.97	16.18
	MULTIDISCIPLINARY	28.89	31.57	27.15	21.03	24.82	20.39	15.17	10.89

论文被引次数百分比 - Baselines 基准数据 可用于确定达到全球排名前0.01%, 前0.1% 以及前1%等的科技论文

Field Baselines

Baselines are annualized expected citation rates for papers in a field.

Percentiles define levels of citation activity. The larger the minimum number of citations, the smaller the peer group.

Citation Rates	RESEARCH FIELDS ▲	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
	ALL FIELDS										
Percentiles	0.01%	1,829	1,590	1,508	1,337	1,278	965	727	599	341	
	0.10%	638	584	534	476	416	352	270	197	127	
	1.00%	206	186	170	151	132	112	88	65	43	
Field Rankings	10.00%	55	51	46	41	37	31	25	19	13	
	20.00%	33	30	28	25	22	19	16	12	8	
	50.00%	11	10	10	9	8	7	6	5	3	
		AGRICULTURAL SCIENCES									
	0.01%	1,353	514	477	546	398	333	225	131	117	
	0.10%	291	291	256	206	173	147	115	78	48	
	1.00%	129	113	103	88	71	64	47	36	24	
	10.00%	44	41	36	31	27	23	18	14	10	
	20.00%	28	26	23	20	17	15	12	9	6	
	50.00%	11	10	9	7	6	6	5	4	3	
	BIOLOGY & BIOCHEMISTRY										
	0.01%	1,945	2,092	1,845	1,357	1,810	1,332	852	1,145	456	
	0.10%	729	660	631	537	480	367	290	208	153	
	1.00%	254	231	211	189	162	132	101	75	49	
	10.00%	76	68	61	54	48	41	32	24	16	

ESI 國值

Indicators



ascending order by citation count and then selecting the top fraction or percentage of papers.

The **ESI Threshold** reveals the number of citations received by the top 1% of authors and institutions and the top 50% of countries and journals in a 10-year period.

	RESEARCH FIELDS ▲	AUTHOR	INSTITUTION	JOURNAL	COUNTRY
ESI Thresholds	AGRICULTURAL SCIENCES	353	1,532	1,298	761
Highly Cited Thresholds	BIOLOGY & BIOCHEMISTRY	863	5,549	5,947	490
	CHEMISTRY	1,353	5,510	4,909	761
Hot Paper Thresholds	CLINICAL MEDICINE	1,726	1,778	3,519	2,736
	COMPUTER SCIENCE	259	2,276	1,007	159
	ECONOMICS & BUSINESS	330	3,520	879	129
	ENGINEERING	377	1,530	1,448	513
	ENVIRONMENT/ECOLOGY	595	3,208	2,234	1,098
	GEOSCIENCES	951	4,616	1,842	859
	IMMUNOLOGY	908	3,832	6,356	1,256
	MATERIALS SCIENCE	846	3,150	1,597	547
	MATHEMATICS	279	3,437	1,237	251
	MICROBIOLOGY	646	4,550	3,611	717
MOLECULAR BIOLOGY & GENETICS	1,865	9,974	5,932	859	
MULTIDISCIPLINARY	1,170	7,825	155	115	

Essential Science Indicators

- ESI数据库介绍
- 如何利用ESI数据库来进行科学研究成果评价
- 如何利用ESI数据库追踪前沿研究
- 新平台ESI的功能展示

InCites:ESI如何实现老版本ESI的常用功能

筛选区

Results List
Research Fields

Filter Results By ?
Changing the filter field removes all current filters.
Add Filter »
* PEKING UNIV

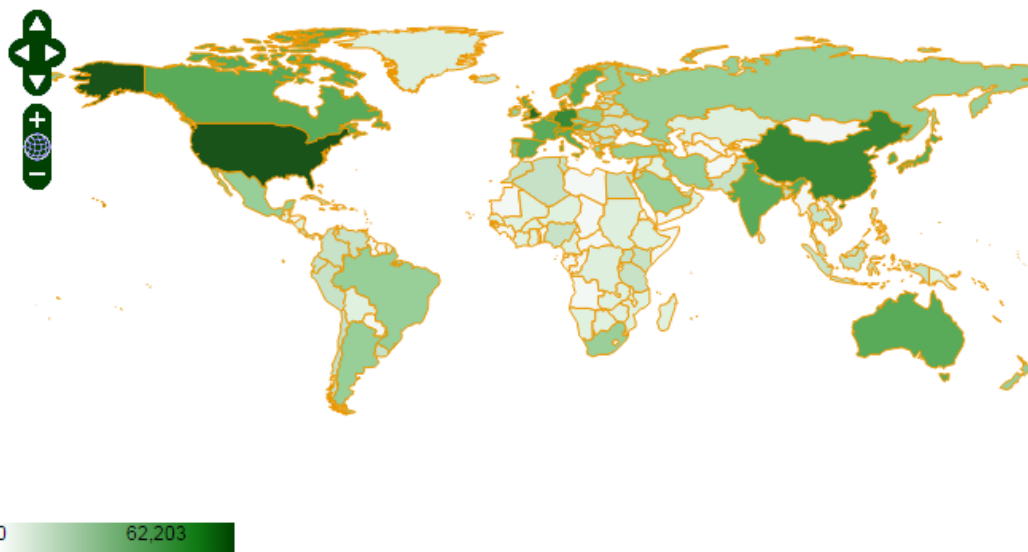
Include Results For
Top Papers

Clear Save Criteria

Map View by Top / Hot / Highly Cited Papers



Hide Visualization —



图示区

Report View by Selection

Customize

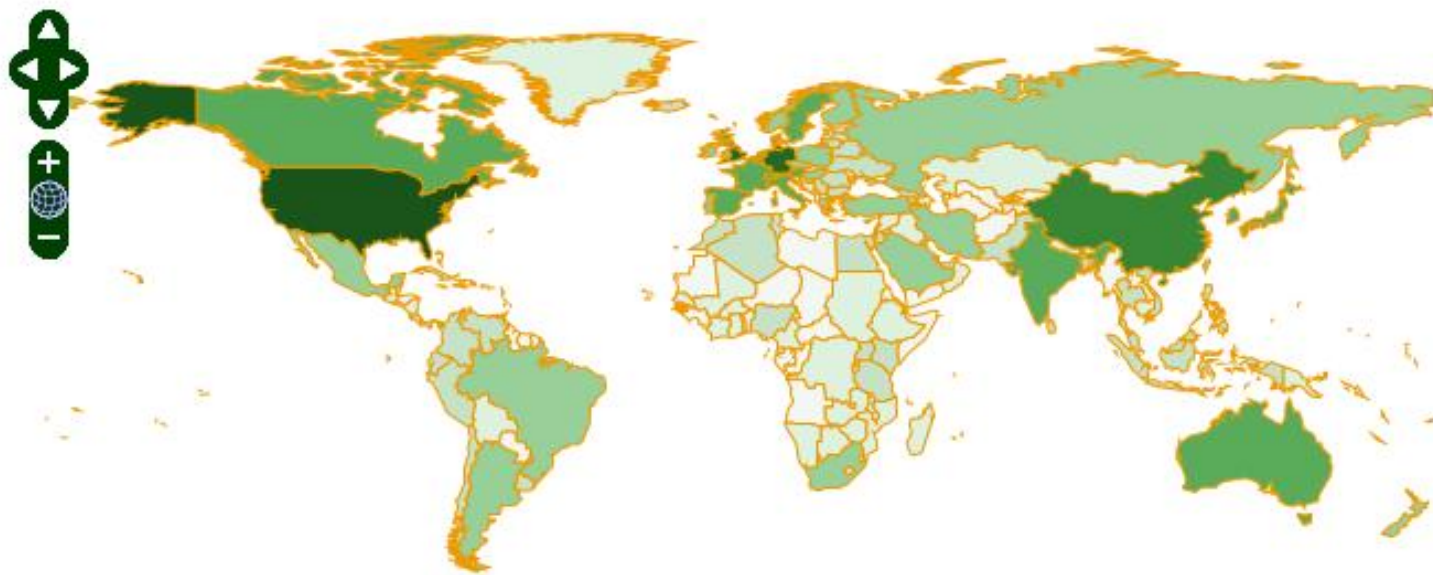
Total: 20	Research Fields	Web of Science Documents	Cites	Cites/Paper	Top Papers
1	CHEMISTRY	6,984	105,095	15.05	13
2	PHYSICS	8,636	94,549	10.95	15
3	CLINICAL MEDICINE	6,801	67,673	9.95	7

结果区

世界地图展示各个国家/地区的高影响力论文的实力

Map View by Top / Hot / Highly Cited Papers

Hide Visualization —



Report View by Selection

Customize



THOMSON REUTERS

直接获取到某机构在各ESI学科的高被引论文/热点论文

Results List

Research Fields

Filter Results By ?

Changing the filter field removes all current filters.

Add Filter »

× SHANGHAI JIAO TONG UNIV

Include Results For

Highly Cited Papers

Top Papers

Highly Cited Papers

Hot Papers

Map View by Top / Hot / Highly Cited Papers

Show Visualization +

Report View by Selection

Customize

Total: 17	Research Fields	Web of Science Documents	Cites	Cites/Paper	Highly Cited Papers
1	CLINICAL MEDICINE	10,228	87,178	8.52	96
2	CHEMISTRY	4,774	54,892	11.50	39
3	ENGINEERING	8,666	48,308	5.57	93
4	PHYSICS	5,351	47,068	8.80	51
5	MATERIALS SCIENCE	5,295	46,643	8.81	61
6	BIOLOGY & BIOCHEMISTRY	2,774	31,746	11.44	27
7	MOLECULAR BIOLOGY & GENETICS	2,031	29,779	14.66	20
8	PHARMACOLOGY & TOXICOLOGY	1,469	12,827	8.73	7
9	NEUROSCIENCE & BEHAVIOR	1,367	12,242	8.96	5
10	COMPUTER SCIENCE	2,495	8,376	3.36	29



根据需求选择大学科

Highly Cited Papers by Territories

Results List

Countries-Territories

Filter Results By ?
Changing the filter field removes all

Add Filter »

- × Biology & Biochemistry
- × Environment/Ecology
- × Mathematics
- × Microbiology

Include Results For

Highly Cited Papers

Clear Save Criteria

多个ESI学科

Report View by Selection

Total: 128	Countries-Territories	Web of Science Documents	Cites	Cites/Paper	Highly Cited Papers
1	USA	469,302	8,723,916	18.59	8,377
2	GERMANY (FED REP GER)	113,807	1,824,803	16.03	1,593
3	ENGLAND	94,415	1,792,839	18.99	1,802
4	CHINA MAINLAND	185,225	1,353,634	7.31	1,597
5	FRANCE	94,550	1,301,180	13.76	1,147
6	JAPAN	103,023	1,274,473	12.37	600
7	CANADA	78,471	1,233,040	15.71	1,127
8	AUSTRALIA	50,725	793,218	15.64	866
9	ITALY	66,309	776,126	11.70	644
10	SPAIN	61,756	766,131	12.41	679
11	NETHERLANDS	34,402	651,582	18.94	641
12	SWITZERLAND	28,290	602,044	21.28	734

更灵活的导出功能

Indicators

Highly Cited Papers by Institutions

Map View by Top / Hot / Highly Cited Papers

Report View by Selection Customize

Results List
Institutions

Filter Results By ?
Changing the filter field removes all current filters.
Add Filter »

Include Results For
Highly Cited Papers

Clear Save Criteria

Total: 4796	Institutions	Web of Science Documents	Cites	Cites/Paper	Highly Cited Papers
1	UNIV CALIF SYSTEM	346,841	8,225,640	23.72	11,156
2	CNRS	419,721	6,239,819	14.87	6,185
3	HARVARD UNIV	176,138	5,379,483	30.54	7,734
4	US DEPT HLTH HUMAN SERVICES	118,862	3,593,143	30.23	4,333
5	US DEPT ENERGY	163,699	3,531,340	21.57	5,391
6	UNIV LONDON	161,441	3,235,386	20.04	4,141
7	UNIV TEXAS SYS	138,326	2,984,274	21.57	3,786
8	NATL INST HLTH (NIH) - USA	88,510	2,911,063	32.89	3,462
9	CHINESE ACAD SCI	252,224	2,860,200	11.34	3,663
10	MAX PLANCK SOCIETY PENNSYLVANIA	97,519	2,362,578	24.23	3,024

Select download format

- PDF
- CSV
- XLS



Indicators Results List: Institutions Filter Results By: Institutions Filter Value(s): None Show: Highly Cited

	Institutions	Web of Science Documents	Cites	Cites/Paper	Highly Cited Papers
1	UNIV CALIF SYSTEM	346841	8225640	23.72	11156
2	CNRS	419721	6239819	14.87	6185
3	HARVARD UNIV	176138	5379483	30.54	7734
4	US DEPT HLTH HUMAN SERV	118862	3593143	30.23	4333
5	US DEPT ENERGY	163699	3531340	21.57	5391
6	UNIV LONDON	161441	3235386	20.04	4141
7	UNIV TEXAS SYS	138326	2984274	21.57	3786
8	NATL INST HLTH (NIH) - USA	88510	2911063	32.89	3462
9	CHINESE ACAD SCI	252224	2860200	11.34	3663
10	MAX PLANCK SOCIETY	97519	2362578	24.23	3024
11	PENNSYLVANIA COMMONW	113418	2266290	19.98	2642
12	JOHNS HOPKINS UNIV	76505	2006501	26.23	2521
13	UNIV TORONTO	95047	1939384	20.4	2447
14	STANFORD UNIV	68056	1838025	27.01	2912
15	UNIV WASHINGTON	71532	1812904	25.34	2582
16	UNIV WASHINGTON TACOM	71375	1810237	25.36	2577
17	UNIV CALIF LOS ANGELES	72341	1808993	25.01	2422
18	UNIV SYS OHIO	107911	1796029	16.64	2040



Highly Cited Papers by **Research Fronts**

Select download format

PDF

CSV

XLS

Results List

Research Fronts

Map View by Top / Hot / Highly Cited Papers

Filter Results By ?

Changing the filter field removes all current filters.

Add Filter »

Include Results For

Highly Cited Papers

Clear

Save Criteria

Report View by Selection

Customize

	Research Fronts	Highly Cited Papers	Me Ye
1	HALOGEN BONDING INCLUDING SYMMETRY ADAPTED PERTURBATION THEORY ANALYSES;HALOGEN BONDING (X-BONDING);HALOGEN BONDING;X-C CENTER DOT CENTER DOT CENTER DOT Y (X = O/F;BR CENTER DOT CENTER DOT CENTER DOT O COMPLEXES	50	2
2	HUMAN CORONAVIRUS MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS;MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS NEUTRALISING SERUM ANTIBODIES;MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS INFECTION;MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS ANTIBODY REACTORS;MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS INFECTIONS	49	2
2	INTERDEPENDENT NETWORKS BASED;OPTIMALLY INTERDEPENDENT NETWORKS;INTERDEPENDENT NETWORKS;WEIGHTED NETWORKS BASED;LARGE-SCALE SOCIAL NETWORKS	49	
2	SPARSE HIGH-DIMENSIONAL REGRESSION MODELS;HIGH-DIMENSIONAL VARIABLE SELECTION;HIGH-DIMENSIONAL GENERALIZED LINEAR MODELS;HIGH-DIMENSIONAL PARTIALLY LINEAR MODELS;HIGH-DIMENSIONAL SPARSE MODELS	49	2
2	CRISPR RNA-GUIDED DNA RECOGNITION;RNA-GUIDED CRISPR CAS9;RNA-GUIDED HUMAN GENOME ENGINEERING;CRISPR RNA-GUIDED ACTIVATION;CRISPR-GUIDED ADAPTIVE BACTERIAL	49	2



InCites™ Essential Science Indicators™

Indicators Results List: ResearchFronts Filter Results By: ResearchFronts Filter Value(s): None Show: Highly Cited

	Research Fronts	Highly Cited Papers	Mean Year
1	HALOGEN BONDING INCLUDING SYMMETRY ADAPTED PERTURBATION THEORY ANALYSIS	50	2011.1
2	HUMAN CORONAVIRUS MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS;MIDDLE	49	2013.3
2	INTERDEPENDENT NETWORKS BASED;OPTIMALLY INTERDEPENDENT NETWORKS;INTERD	49	2012
2	SPARSE HIGH-DIMENSIONAL REGRESSION MODELS;HIGH-DIMENSIONAL VARIABLE SELE	49	2009.7
2	CRISPR RNA-GUIDED DNA RECOGNITION;RNA-GUIDED CRISPR CAS9;RNA-GUIDED HUMA	49	2011.7
6	COMBINING CHOUS PSEUDO AMINO ACID COMPOSITION;CHOUS AMPHIPHILIC PSEUDO	48	2011.7
6	METFORMIN SELECTIVELY TARGETS CANCER STEM CELLS;CANCER RISK;INCIDENT BREAS	48	2011.1
6	SURGEONS BARIATRIC SURGERY CENTER NETWORK LAPAROSCOPIC SLEEVE GASTRECTO	48	2011.3
6	HIGH-DENSITY LIPOPROTEIN VASCULAR PROTECTIVE EFFECTS;HIGH-DENSITY LIPOPROTE	48	2011.2
10	3D SPIN-ORBIT COUPLED DEGENERATE FERMI GASES;SPIN-ORBIT COUPLED DEGENERAT	47	2011.7
10	POTENTIAL ALGAL BIODIESEL PRODUCTION;SUSTAINABLE ALGAL BIOFUEL PRODUCTION	47	2010.1
10	TOPOLOGICAL SUPERCONDUCTING WIRES SUPPORTING MAJORANA FERMIONS;TOPOLO	47	2010.8
10	MITOCHONDRIAL DEPOLARIZATION RECRUITS PARKIN;PARKIN E3 UBIQUITIN LIGASE AC	47	2010.5
10	HIGH THERMAL CONDUCTIVE PHASE CHANGE MATERIALS;THERMAL ENERGY STORAGE M	47	2011.5
15	DI DIESEL ENGINE PERFORMANCE;DIRECT INJECTION DIESEL ENGINE PERFORMANCE;DI	46	2011.8
15	INTERFEROMETRIC FLUORESCENT SUPER-RESOLUTION MICROSCOPY RESOLVES 3D CELLU	46	2010.7
17	CLOUD SERVICES ORIENTED ENTERPRISE INFORMATION SYSTEMS;SERVICE ENTERPRISE	45	2012.8
17	GLOBAL SEA LEVEL ACCELERATION STARTED;GLOBAL SEA LEVEL LINKED;GLOBAL SEA LEV	45	2011.5
19	SOLVING EQUILIBRIUM PROBLEM FIXED POINT PROBLEM;GENERALIZED MIXED EQUILIBR	44	2010.4



ESI期刊列表的下载链接

	A	B	C	D	E	F
1	Full title	Title29	Title20	ISSN	EISSN	Category name
2	4OR-A Quarterly Journal of Operations Research	4OR Q J OPER RES	4OR-Q J OPER RES	1619-4500	1614-2411	ENGINEERING
3	AAPG BULLETIN	AAPG BULL	AAPG BULL	0149-1423	1558-9153	GEOSCIENCES
4	AAPS Journal	AAPS J	AAPS J	1550-7416	1550-7416	PHARMACOLOGY & TOXICOLOGY
5	AAPS PHARMSCITECH	AAPS PHARMSCITECH	AAPS PHARMSCITECH	1530-9932	1530-9932	PHARMACOLOGY & TOXICOLOGY
6	AATCC REVIEW	AATCC REV	AATCC REV	1532-8813	1532-8813	MATERIALS SCIENCE
7	ABDOMINAL IMAGING	ABDOM IMAGING	ABDOM IMAGING	0942-8925	1432-0509	CLINICAL MEDICINE
8	ABHANDLUNGEN AUS DEM MATHEMATISCHEN SEMINAR DER UNIVERSITAT HAMBURG	ABH MATH SEM UNIV HAMBURG	ABH MATH SEM HAMBURG	0025-5858	1865-8784	MATHEMATICS
9	ABSTRACTS OF PAPERS OF THE AMERICAN CHEMICAL SOCIETY	ABSTR PAP AMER CHEM SOC	ABSTR PAP AM CHEM S	0065-7727	null	CHEMISTRY
10	ACADEMIC EMERGENCY MEDICINE	ACAD EMERG MED	ACAD EMERG MED	1069-6563	1553-2712	CLINICAL MEDICINE
11	ACADEMIC MEDICINE	ACAD MED	ACAD MED	1040-2446	1938-808X	CLINICAL MEDICINE
12	ACADEMIC PSYCHIATRY	ACAD PSYCHIATRY	ACAD PSYCHIATR	1042-9670	1545-7230	PSYCHIATRY/PSYCHOLOGY
13	ACADEMIC RADIOLOGY	ACAD RADIOL	ACAD RADIOL	1076-6332	1878-4046	CLINICAL MEDICINE
14	ACADEMY OF MANAGEMENT JOURNAL	ACAD MANAGE J	ACAD MANAGE J	0001-4273	1948-0989	ECONOMICS & BUSINESS
15	ACADEMY OF MANAGEMENT REVIEW	ACAD MANAGE REV	ACAD MANAGE REV	0363-7425	1930-3807	ECONOMICS & BUSINESS
16	ACAROLOGIA	ACAROLOGIA	ACAROLOGIA	0044-586X	2107-7207	PLANT & ANIMAL SCIENCE
17	ACCIDENT ANALYSIS AND PREVENTION	ACCID ANAL PREVENT	ACCIDENT ANAL PREV	0001-4575	1879-2057	SOCIAL SCIENCES
18	ACCOUNTING AND BUSINESS RESEARCH	ACCOUNT BUS RES	ACCOUNT BUS RES	0001-4788	2159-4260	ECONOMICS & BUSINESS
19	ACCOUNTING ORGANIZATIONS AND SOCIETY	ACCOUNT ORGAN SOC	ACCOUNT ORG SOC	0361-3682	1873-6289	ECONOMICS & BUSINESS
20	ACCOUNTING REVIEW	ACCOUNT REV	ACCOUNT REV	0001-4826	1558-7967	ECONOMICS & BUSINESS
21	ACCOUNTS OF CHEMICAL RESEARCH	ACCOUNT CHEM RES	ACCOUNTS CHEM RES	0001-4842	1520-4898	CHEMISTRY
22	ACCREDITATION AND QUALITY ASSURANCE	ACCREDIT QUAL ASSUR	ACCREDIT QUAL ASSUR	0949-1775	1432-0517	CHEMISTRY
23	ACI MATERIALS JOURNAL	ACI MATER J	ACI MATER J	0889-325X	1944-737X	MATERIALS SCIENCE
24	ACI STRUCTURAL JOURNAL	ACI STRUCT J	ACI STRUCT J	0889-3241	1944-7361	ENGINEERING
25	ACM COMPUTING SURVEYS	ACM COMPUT SURV	ACM COMPUT SURV	0360-0300	1557-7341	COMPUTER SCIENCE
26	ACM Journal on Emerging Technologies in Computing Systems	ACM J EMERG TECHNOL COMPUT SY	ACM J EMERG TECH COM	1550-4832	1550-4840	COMPUTER SCIENCE

▶ Glossary - A to Z



ESI与Web of Science的紧密连接

国家/地区

ESI高水平论文

- Highly Cited Papers (503)
- Hot Papers (20)

精炼

开放获取

要获得更多精炼选项, 请使用

分析检索结果

8. Isolation and characterisation of sericin antitreeze peptides and molecular dynamics modelling of their ice-binding interaction
作者: Wu, Jinhong; Rong, Yuzhi; Wang, Zhengwu; 等.
FOOD CHEMISTRY 卷: 174 页: 621-629 出版年: MAY 1 2015
被引频次: 0
(来自 Web of Science的核心合集)

9. CENTER OF PLANAR QUINTIC QUASI-OMOGENEOUS POLYNOMIAL DIFFERENTIAL SYSTEMS
作者: Tang, Yilei; Wang, Long; Zhang, Xiang
DISCRETE AND CONTINUOUS DYNAMICAL SYSTEMS 卷: 35 期: 5 页: 2177-2191 出版年: MAY 2015
被引频次: 0
(来自 Web of Science的核心合集)

10. A new nonlinear dynamic model of the rotor-bearing system considering preload and varying contact angle of the bearing
作者: Zhang, Xuening; Han, Qinkai; Peng, Zhike; 等.
COMMUNICATIONS IN NONLINEAR SCIENCE AND NUMERICAL SIMULATION 卷: 22 期: 1-3 页: 821-841 出版年: MAY 2015
被引频次: 0
(来自 Web of Science的核心合集)

1. Congruency Sequence Effects without Feature Integration or Contingency Learning Confounds

作者: Schmidt, James R.; Weissman, Daniel H.
PLOS ONE 卷: 9 期: 7 文献号: e102337 出版年: JUL 14 2014

  出版商处的全文  查看摘要

被引频次: 12
(来自 Web of Science的核心合集)

 热点论文
 高被引论文