

构建独有叙词，保证深度挖掘

——Inspec超过百年的人工数据标引，让科技在每个角落闪闪发光

IET英国工程技术学会 刘闯

2020年10月



- 成立于1871年的非盈利机构
- 欧洲最大的工程技术专业机构
- 全球150个国家拥有16.8万会员
- 提供世界一流的出版和信息服务



Global youth campaign



Junior membership



Global Engagement Fund

Fashion partnership
Engineering



Augmented reality



FIRST® LEGO® League
International Open



Bigger and better awards



Primary Schools
engagement programme



IET学术资源

- Inspec: 科技文摘数据库

IET Inspec

- Inspec Analytics大数据分析工具

Inspec Analytics

- IET电子书

IET eBOOK COLLECTIONS

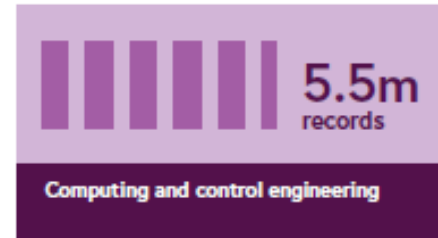
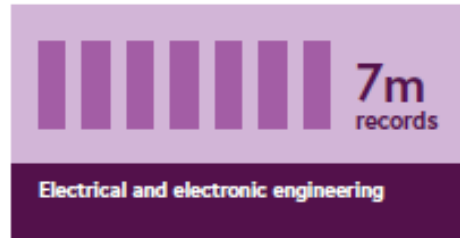
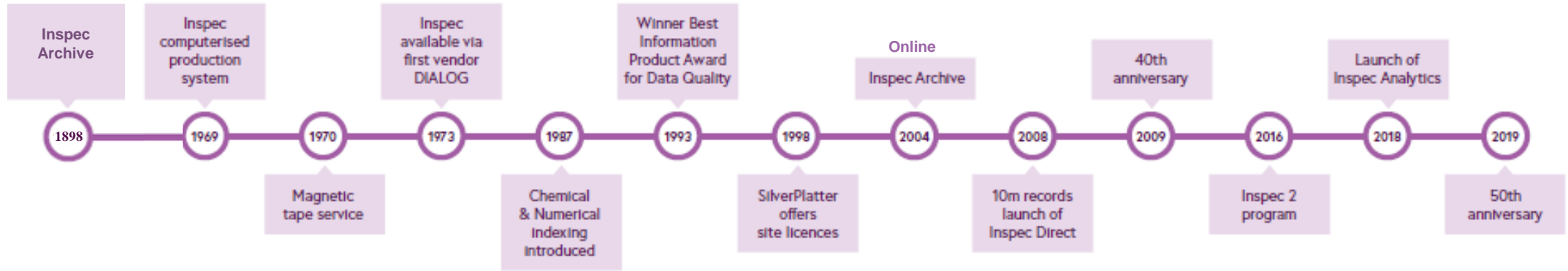
- IET期刊

IET JOURNALS

- IET.TV

iet.tv

IET Inspec 120+ Years



1969 to date
19.5 m records
Feb 2020

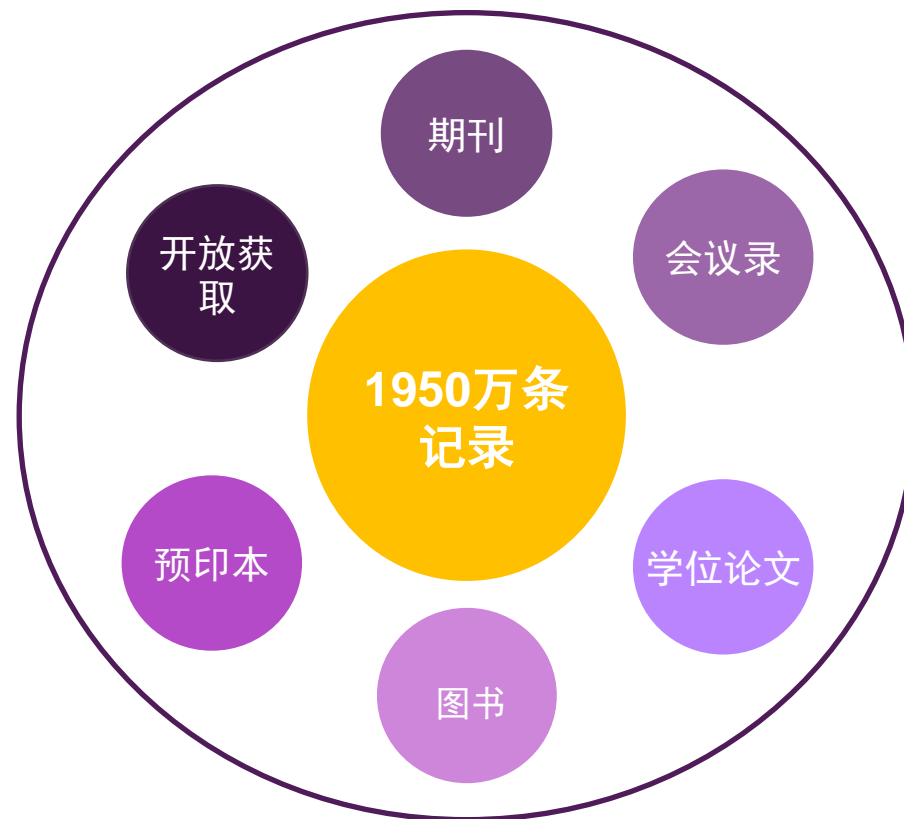
or 1898 with the Archive
Optional Archive adds another
873,699 records

In 2019

- 900,000 records added**
- 3,000 other publications from 700 publishers**
- 45,000 journals**
- Over 15% open access**

Inspec百年历史：卓越的知识积累

- 不仅仅是120+年的积累
- 数据专家，人工标引
- 科技文献语料库
- 每周更新
- 精准索引，提高科研效率



4,500+ 本期刊 15% 开放获取期刊 3,000+会议论文集等

知识的海洋



精准检索，定位到你想要的每一滴

LET Inspec



Inspec标引信息

文献目录

- 标题
- 摘要
- 关键词
- 参考文献

主题词检索

- 控制表
- 主题词

特殊索引

- 学科分类代码
- 处理代码
- 化学索引
- 数值索引
- 天体物理标识号索引
- IPC国际专利号索引



Inspec数据专家:
Dr. Christopher Marker

- 物理学博士学位
- 超过20年的Inspec数据分析经验

来自于出版机构元数据

人工团队添加的额外索引字段

Inspec的基础--叙词表

```
graph TD; A[Inspec的基础--叙词表] --- B[Classification Codes  
学科分类代码  
3,500+]; A --- C[Control Terms  
控制词  
9,900+]; A --- D[Uncontrol Terms  
非控制词  
10,000+];
```

Classification Codes
学科分类代码
3,500+

Control Terms
控制词
9,900+

Uncontrol Terms
非控制词
10,000+

Solid Electrolytes for Li-S Batteries: Solid Solutions of Poly(ethylene oxide) with $\text{Li}_x\text{PON-}$ and $\text{Li}_x\text{SiPON-}$ Based Polymers

By: Temeche, E.; Xinyu Zhang; Laird
View Web of Science ResearcherID

ACS Applied Materials & Interfaces
Volume: 12 Issue: 27 Pages: 30
DOI: 10.1021/acsami.0c06196
Published: 8 July 2020
Document Type: Journal Paper

Abstract

We report here efforts to synthesize transparent, solid-solution films 25 ambient. These values are much higher degC; (2) offer activation energies of mAh/cm^2 . Galvanostatic cycling of 0.25C and 800 mAh/g sulfur at 1C w

Author Information

Author Address: Temeche, E.; Xinyu

Publisher

American Chemical Society, USA

Categories / Classification

Research Areas: Energy & Fuels; Electrochemistry (provided by Clarivate Analytics)

International Patent Classification: B01F1/00 Dissolving; C25B11/00 Electrodes; Manufacture thereof not otherwise provided for; C25D17/10 Electrodes; H01M4/00 Electrodes; H01M10/00 Secondary cells; Manufacture thereof

Chemical Indexing: Li/el; Mn/el; Li-S/int Li/int S/int Li/el S/el

Classification Code(s): A8630F Secondary cells; A8245 Electrochemistry and electrophoresis; B8410E Secondary cells

Controlled Indexing: composite materials; current density; dendrites; dissolving; electrochemical electrodes; ionic conductivity; lithium; lithium compounds; polymer electrolytes; secondary cells; solid electrolytes; sulphur compounds

Uncontrolled Indexing: solid electrolytes; lithium-sulphur batteries; solid solutions; dry polymer electrolytes; superior ionic conductivities; polymer systems; solid-solution films; PEO crystallinity; solid-solution polymer electrolytes; poly(ethylene oxide); lithium anodes; galvanostatic cycling; coulombic efficiency; temperature 100.0 degC; temperature 900.0 K; size 25.0 μm to 50.0 μm ; electrical conductivity 3.0 S/cm to 10.0 S/cm; electron volt energy 0.2 eV to 0.5 eV; Li^+ ; Mn; Li-S

Document Information

Language: English

Accession Number: INSPEC:19785171

ISSN: 1944-8244

Number of References: 70

Other Information

Treatment: Practical, Experimental

Numerical Data Indexing: electrical conductivity 3.0E+02 to 1.0E+03 S/m; electron volt energy 2.0E-01 to 5.0E-01 eV; size 2.5E-05 to 5.0E-05 m; temperature 3.7315E+02 K; temperature 9.0E+02 K

- 叙词表及分类代码
- IPC国际专利号索引
- 化学索引
- 数值索引

Chemical index 化学索引

为所有涉及到无机化合物和材料物质的研究所建立的控制索引

- 可以检索涉及单一化学元素或化合物的所有文献 (/el、/bin、/ss)
- 可以检索与某一化学元素作为吸附物 (/ads)、掺杂物 (添加物) (/dop) 相关的所有文献
- 可以检索与某一化合物或合金的表面 (/sur) 或界面物质 (/int) 相关的所有文献

Numerical Indexing 数值索引

为所有涉及到数值数据的研究所建立的标准化索引

- 数值按科学记数法表示：
 - $18000 = 1.8E+01$
- 物理性质 (多达47种参数)
 - 如: 频率、温度、功率、长度等

检索结果: 132

(来自 Inspec)

您的检索: 受控索引:

(semiconductors) AND 分类: (B1350H)
AND 化学物质索引: (Gan/bin) AND 频率: (2.65E+10 4E+10)

时间跨度: 所有年份. 索引: Inspec.

...更少内容

创建跟踪

精炼检索结果

在如下结果集内检索...

过滤结果依据:

 开放获取 (5)

精炼

出版年

- 2020 (3)
- 2019 (33)
- 2018 (28)
- 2017 (5)
- 2016 (11)

更多选项/分类...

精炼

分类

- MICROWAVE INTEGRATED CIRCUITS (132)
- AMPLIFIERS (112)

排序方式: 日期 ▾ 被引频次 使用次数 相关性 更多 ▾

◀ 1 / 14 ▶

 选择页面

导出...

添加到标记结果列表

1. **A 23-31 GHz gallium nitride high-robustness low-noise amplifier with 1.1-dB noise figure and 28-dBm saturation output power**

作者: Penghui Zheng; Shiyong Zhang; Jianxing Xu; 等.

Microwave and Optical Technology Letters 卷: 62 期: 3 页: 1077-81 出版年: March 2020

出版商处的全文 查看摘要 ▾

2. **A Phase Shifter with Integrated PA MMIC for Ka-Band Frequencies**

作者: Neinger, P.; Amirpour, R.; John, L.; 等.

会议信息: 2020 German Microwave Conference (GeMiC) 会议地点: Cottbus, Germany 会议日期: 9-11 March 2020
2020 German Microwave Conference (GeMiC) 页: 13-16 出版年: 2020

查看摘要 ▾

3. **A 39 GHz Power Amplifier in 0.15 μm GaN**

作者: Van Dung Tran; Chakraborty, S.; Milner, L.E.; 等.

会议信息: 2020 4th Australian Microwave Symposium (AMS) 会议地点: Sydney, NSW, Australia 会议日期: 13-14 Feb. 2020

2020 4th Australian Microwave Symposium (AMS) 页: 2 pp. 出版年: 2020

出版商处的全文 查看摘要 ▾

4. **D-band and G-band High-performance GaN Power Amplifier MMICs**

作者: Cwiklinski, M.; Bruckner, P.; Leone, S.; 等.

IEEE Transactions on Microwave Theory and Techniques 卷: 67 期: 12 页: 5080-9 出版年: Dec. 2019

出版商处的全文 查看摘要 ▾

5. **Degradation of Ka-band GaN LNA under high-input power stress: experimental and theoretical insights**

作者: Xiaodong Tong; Rong Wang; Shiyong Zhang; 等.

IEEE Transactions on Electron Devices 卷: 66 期: 12 页: 5091-6 出版年: Dec. 2019

分析检索结果

被引频次: 0

(来自 Web of Science 的核心合集)

使用次数 ▾

被引频次: 0

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使用次数 ▾

被引频次: 0

(来自 Web of Science 的核心合集)

使用次数 ▾

被引频次: 0

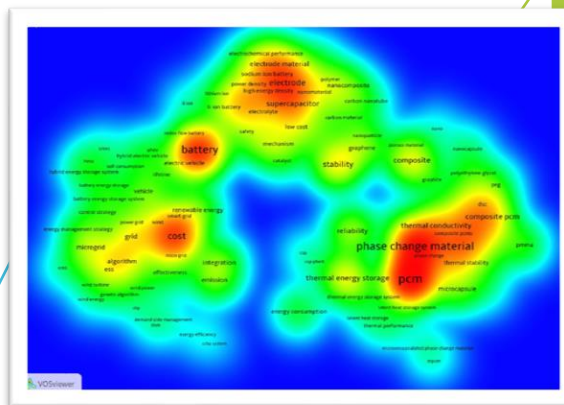
(来自 Web of Science 的核心合集)

使用次数 ▾

被引频次: 0

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Inspec
35,392篇相关文献



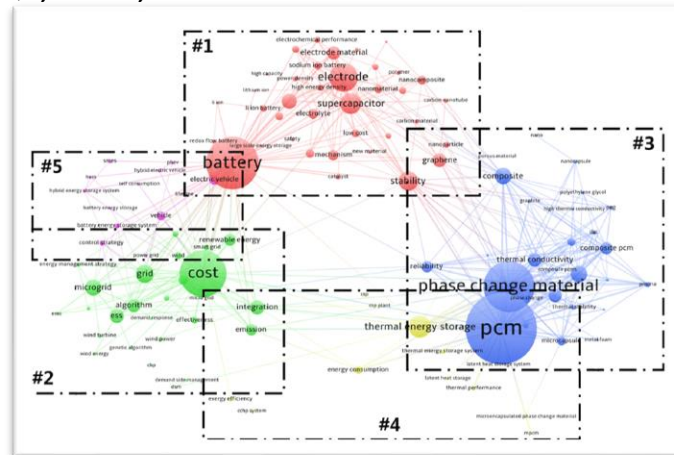
发文趋势
(孕育期、高速增长期)

学科分布
(明显的学科交叉研究特征)

国家及地区表现
(欧美储能市场)

研究主题

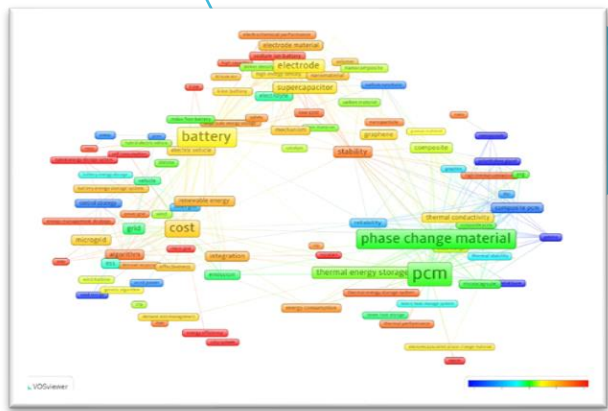
研究热点及演变趋势



聚类研究主题

定位技术应用上下游的研究热点

分析技术演变历程



信息化建设研讨会暨CALIS第十七届引进数据库培训

11.2 文摘索引数据库：使用分析—首次检索量 (TOP27)



序号	数据库	2018	2017	涨幅	序号	数据库	2018	2017	涨幅
1	Inspec	895328	621037	44.17%	15	Essential Science Indicators	72139	69089	4.41%
2	Derwent Innovations Index	566363	422459	34.06%	16	Thomson Innovation	68361	70462	-2.98%
3	BIOSIS Citation Index	544718	404726	34.59%	17	InCites	37364	31463	18.76%
4	CSCD中国科学引文索引	402494	300757	33.83%	18	Scopus	30704	28622	7.27%
5	Biosis Previews	355360	152783	132.59%	19	PQDT A	13546	16058	-15.64%
6	Web of Science-SCIE	346226	259074	33.64%	20	Westlaw International	12012	9806	22.50%
7	CPCI会议录引文索引	309962	191279	62.05%	21	PQDT B	11951	12895	-7.32%
8	Web of Science-A&HCI	271485	182872	48.46%	22	EBSCO园林园艺索摘数据库	11662	16222	-28.11%
9	JCR Web	236907	279435	-15.22%	23	OCLC FirstSearch	5049	4287	17.77%
10	Web of Science-SSCI	152434	101494	50.19%	24	CAB Abstracts database	1785	3353	-46.76%
11	ProQuest学科专辑数据库	143357	219083	-34.56%	25	FSTA数据库	1384	2488	-44.37%
12	SciFinder	105870	97732	8.33%	26	AGRICOLA	1118	1562	-28.43%
13	Engineering Village Compendex	91842	37144	147.26%	27	AGRIS	1103	1190	-7.31%
14	Reaxys	74122	95776	-22.61%					

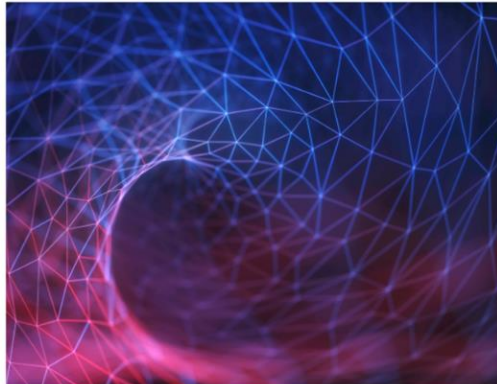

INSPEC Analytics

<https://inspec-analytics-app.theiet.org>

welcome to inspec Analytics

Explore the interconnected data within Inspec to uncover patterns and trends in engineering, computing & physics research to understand your place in a global landscape. With these precision research analytics, you can set the direction for your research outputs and monitor their impact.

Search for an organisation, subject classification or controlled term

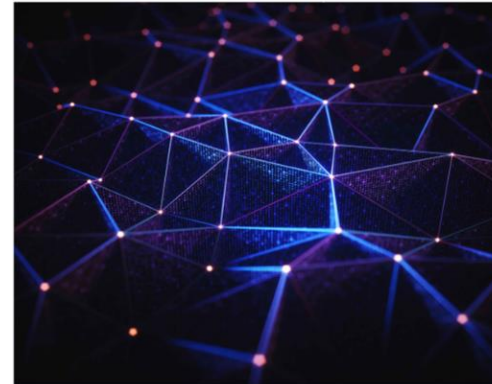
29,330
Organisations

Monitor the research output for your organisation and compare trends with laboratories and competitors.



3,571
Subject classifications

Explore our subject classifications to identify global trends for high-level research areas or niche fields.





9,988
Controlled terms

Discover emerging topics related to your field, find collaboration opportunities and identify relevant publications.

- 近三万个机构中，细分到3571学科，9988个控制词
- 大数据分析工具

Inspec Classification Counts

#	Subject classification	Articles				Co-occurring controlled terms	Co-occurring subject classifications	Organisations	Journals	Conferences
		Count▼	% Change 2013-2019	Times cited 	Avg times cited 					
1	A8000 - Cross-disciplinary physics and related areas of science and technology	1427342	14.37%▲	4774863	3.35	8962	3264	19737	4678	11930
2	B6000 - Communications	956854	29.35%▲	1041784	1.09	8267	2768	15277	4328	15229
3	C1000 - Systems and control theory	861434	47.31%▲	1270999	1.48	8071	2747	15084	4798	15808
4	A6000 - Condensed matter: structure, thermal and mechanical properties	822212	1.95%▲	3092412	3.76	7098	2888	12497	3005	2644
5	B0000 - General topics, engineering mathematics and materials science	818793	20.31%▲	1339512	1.64	8948	3126	15073	4737	14855
6	E1000 - Manufacturing and production	776423	48.79%▲	1683729	2.17	7889	2641	16019	4677	9232
7	C7000 - Computer applications	767773	50.77%▲	898604	1.17	8575	3065	18870	5076	16234
8	C6000 - Computer software	746475	62.49%▲	870516	1.17	7714	2753	15773	4476	16099
9	C6100 - Software techniques and systems	746475	62.49%▲	870516	1.17	7714	2753	15773	4476	16099
10	B6100 - Information and communication theory	734053	37.65%▲	841364	1.15	7970	2673	14097	4000	14445
11	A0000 - General	701115	49.61%▲	2129815	3.04	9179	3428	15297	4681	10921
12	C5000 - Computer hardware	699789	57.47%▲	846327	1.21	8318	2833	14581	4395	15537
13	C1100 - Mathematical techniques	695476	61.67%▲	997193	1.43	7901	2693	14394	4672	15505
14	E0000 - General topics in manufacturing and production engineering	673489	55.66%▲	1302277	1.93	7548	2469	16352	4929	10595
15	A8100 - Materials science	659105	-1.63%▼	2485676	3.77	6817	2738	11775	2841	2617

Organisations

Controlled terms

Subject classifications

光刻机制造厂商：阿斯麦公司 ASML Holding NV

Controlled terms for ASML Holding NV

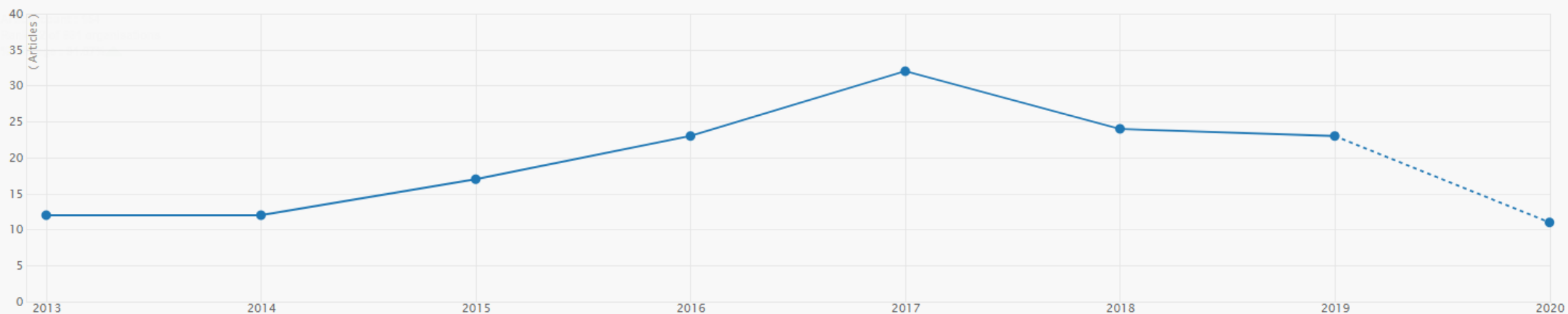
Export

From 2013 To 2020

Trend Chart Histogram

ultraviolet lithography

Partial data



Update graph 1

Search for a controlled term

Advanced

<input type="checkbox"/>	#	Controlled term	Articles	Authors	Global rank (Rank applicable from 2013 - 2020)
<input checked="" type="checkbox"/>	1	ultraviolet lithography	154	426	2 of 681
<input type="checkbox"/>	2	nanolithography	91	317	2 of 1457
<input type="checkbox"/>	3	masks	87	220	3 of 1167
<input type="checkbox"/>	4	photolithography	53	254	3 of 1518

Stuttgart, Germany
Other

8. lithography

40 3 of 948

中国科技峰会—世界科技期刊论坛



IET The Institution of Engineering and Technology

IET The Institution of Engineering and Technology

IET supporting Chinese Engineering Research

CAST June 2020

Vincent Cassidy
Director of Research and Academic

IET是世界领先的多学科工程机构

find us on

The image shows a video frame with a man in glasses speaking. The background is a large, modern architectural structure with a curved roof and a grid-like floor. The IET logo and name are visible in the top left and top center. A large text box in the center reads 'IET supporting Chinese Engineering Research'. Below this, it says 'CAST June 2020'. At the bottom, the name 'Vincent Cassidy' and his title 'Director of Research and Academic' are displayed. A Chinese subtitle at the bottom reads 'IET是世界领先的多学科工程机构'. In the bottom left corner, there is a 'find us on' section with icons for Twitter, Instagram, Facebook, and YouTube.



Antennas and Propagation for 5G and Beyond

Edited by
Gammer H. Abbesi, Syeda Fizzaah Jilani,
Akram Alomayny and Muhammad AS Ineran



Imaging and Sensing for Unmanned Aircraft Systems Volume 1: Control and Performance

Edited by
Vanis V. Estrela, Jude Hemant, Osamu Santome,
George Nikolakopoulos and Roberto Sabatini



Electrical engineering computing
Data communication equipment and techniques
General electrical engineering topics
Filters and other networks
Information theory

Computer hardware

Computer applications
Internet software
Interpolation and function approximation (numerical analysis)
Mathematical methods in physics
Amplifiers
Lower atmosphere

IET电子图书

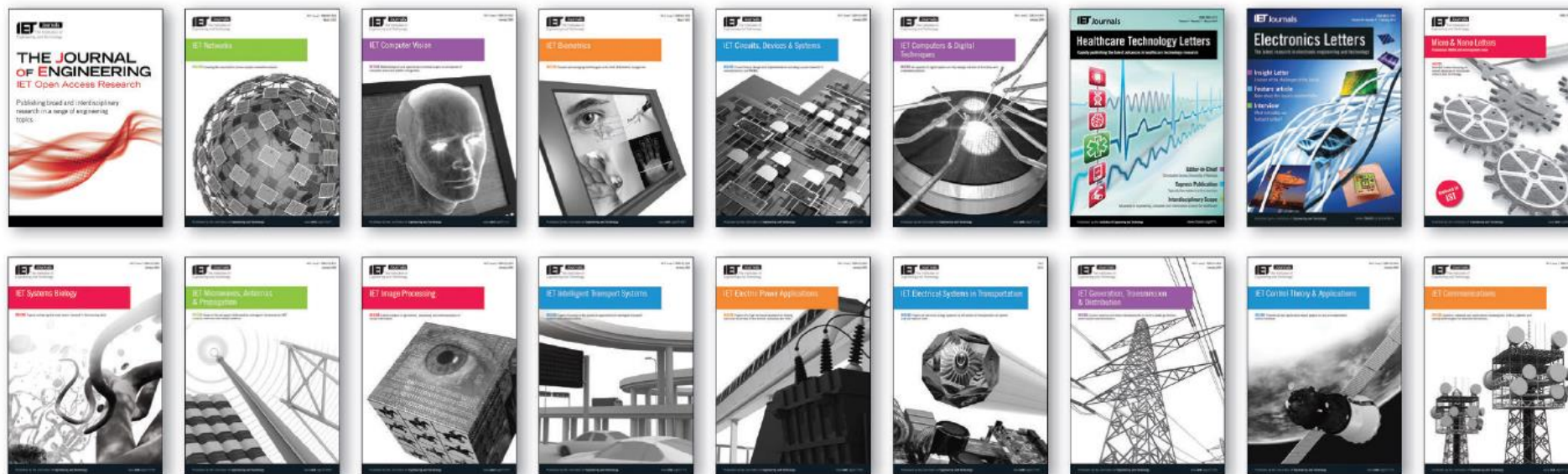
Control applications in radio and radar
Radio access systems
Signal detection
Distributed systems software
Communication switching
Control technology
Radar and radionavigation
Point-to-point radio systems
Network management
Physics
Monte Carlo methods
Satellite communication systems
Circuit theory and circuits
Television and video equipment, systems and applications
Reliability
Radiolocation and direction finding
Systems and control theory
Semiconductor materials and technology
Optical communication
Components, electron devices and materials
Military systems and equipment
Control applications
Military communications
Engineering computing
Queueing theory

DRAA集团购买方案 (2019-2021)

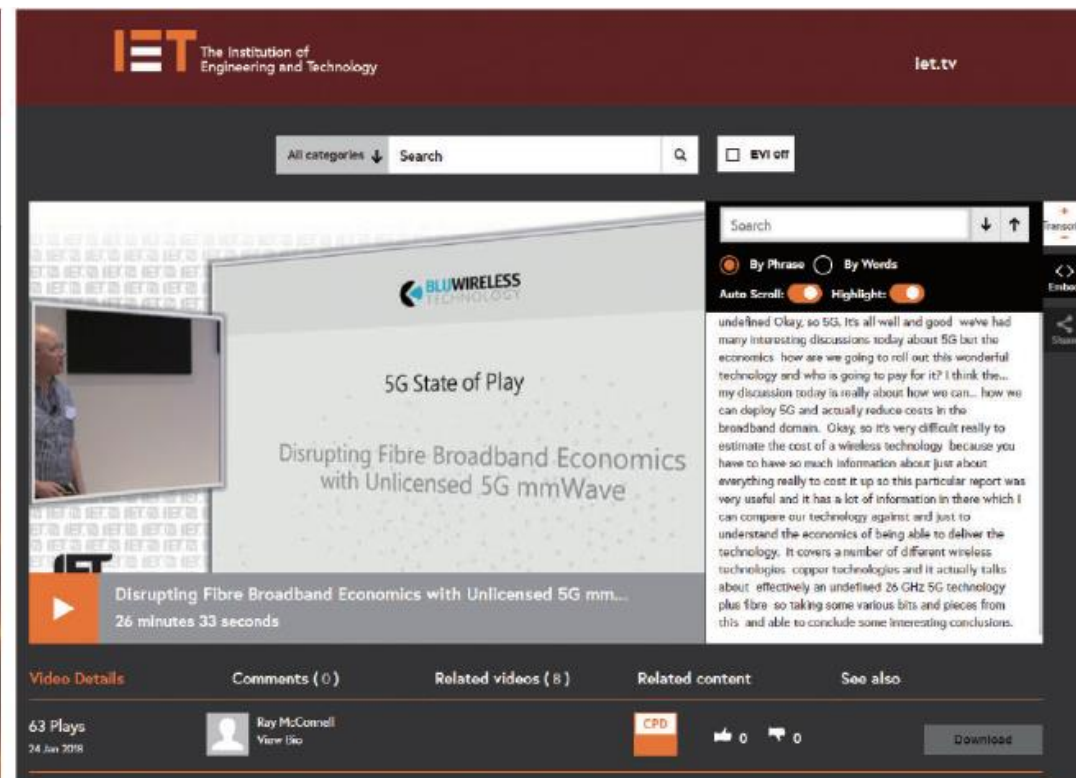
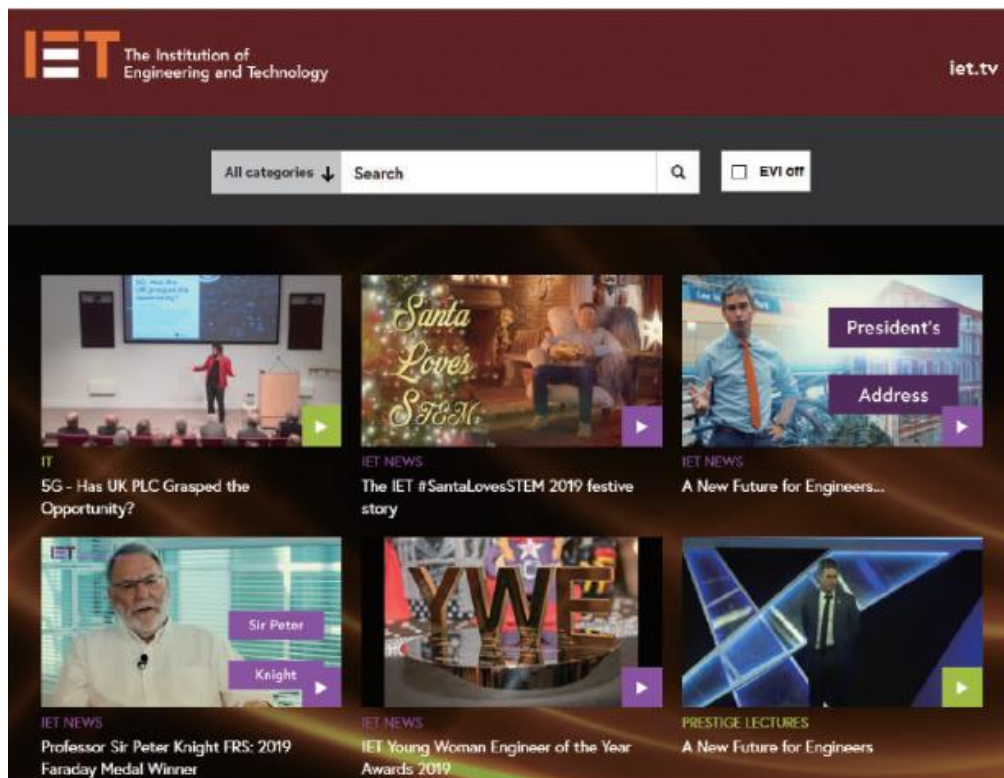
Legis design and digital techniques
Algebra
Probability and statistics
Microwave technology
Optimisation techniques
Free-space optical links
Software techniques and systems
Wireless sensor networks
Electronic circuits
Computer networks and techniques
Numerical analysis
Geophysics, astronomy, and astrophysics
Project and production engineering
Computer communications
Mathematical techniques
Computer software
Communication channel equalization and identification
Power systems and applications
General
Microwave circuits and devices
Communications computing
Numerical approximation and analysis

IET期刊

- 43种工程科技领域期刊
- 涵盖电气、电子、计算机、控制、生物医药和通信技术各学科
- NSTL已购买IET Journal Archive 1872-1993
- 2021年1月，金色OA出版模式转换
- 2013-2020已出版内容全部OA

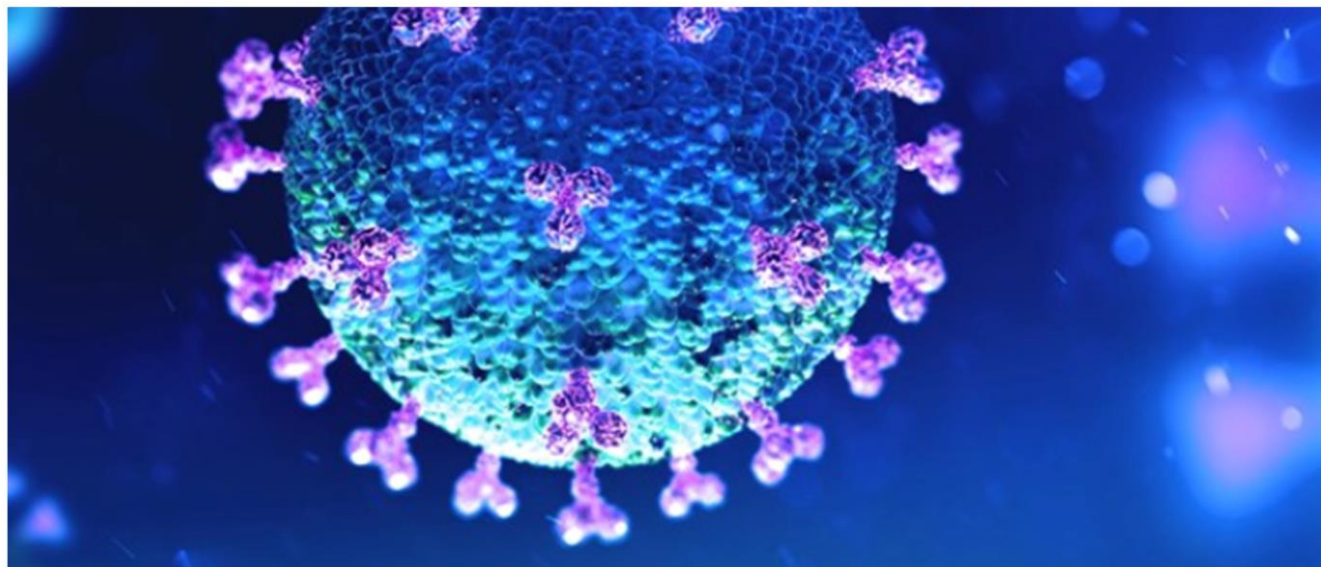


IET.TV



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- 目前拥有超过 13000 个视频资料
- 大会主题报告和研究热点访谈

- 内容涵盖工程、计算机、电信、能源、医疗、交通等学科
- 近一半的视频附带英文字幕，并可以对视频实现关键字检索定位



清华大学图书馆 6/15

竞赛

Inspec数据库使用案例分享

Inspec (Information Service in Physics, Electro-Technology, Computer and Control) 是全球著名的科技文摘数据库之一, 由IET英国工程技术学会1898年出版, 是理工学科最权威、使用最为频繁的数据库之一, 专业覆盖物理、电子与电气工程、计算机与控制工程、信息技术、生产和制造工程等领域, 还收录材料科学、海洋学、核工程、天体物理、生物医学工程、生物物理学等重要领域的文献。

Inspec数据库的核心价值在于其广泛的文献覆盖范围, 包括4,500多种精心挑选的科技期刊的论文摘要, 以及超过2,000多个会议录, 同时还有图书、研究报告、学位论文以及预印本的相关信息。

Inspec的专业人工标引专家会为记录添加Inspec独有的控制词(接近10000个)、非控制词(接近10000个), 以及详尽超过3000种的五级学科分类。同时每条记录还根据具体的来源文献添加, 数值索引, 化学索引, 天体物理标识, 国际专利分类号, 以及文章类型分类等, 这些标引能够保证使用可以迅速准确地发现他们需要的研究文献。

此次IET英国工程技术学会与清华大学图书馆联合举办Inspec数据库使用案例分享竞赛, 旨在鼓励用户深入体验Inspec的核心功能, 可以在教学及研究中精准揭示学术资源, 详细参

奖项设置	
最终大奖	大疆可编程航拍无人机 (Tello)
二等奖	樱桃 (Cherry) MX1.0 TKL G80-3811LYAEU-2 机械键盘
幸运奖	京东E卡 (100元面值)

1名

2名

10名

TELLO

非凡乐趣 从 Tello 开始

小而美CHERRY性价比之作

CHERRY MX BOARD 1.0 TKL机械键盘

Inspec总结

- 20000多个控制词、非控制词、3600个学科分类代码（五层）
- 化学索引、数值索引、IPC国际专利分类号、天体物理识别号
- API数据分享接口提供机构仓储更广泛的支持

IET培训 10月16日 10:20-10:50



感谢关注！

IET培训时间：10月16日上午10:20-10:50

咨询邮箱：cliu@theiet.org

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