IOP Publishing | science first

开放科学、开放物理--IOP数字资源长期保存的实践

徐涛| 中国区经理

DRAA第十八届数据库培训周

北京大学

Overview

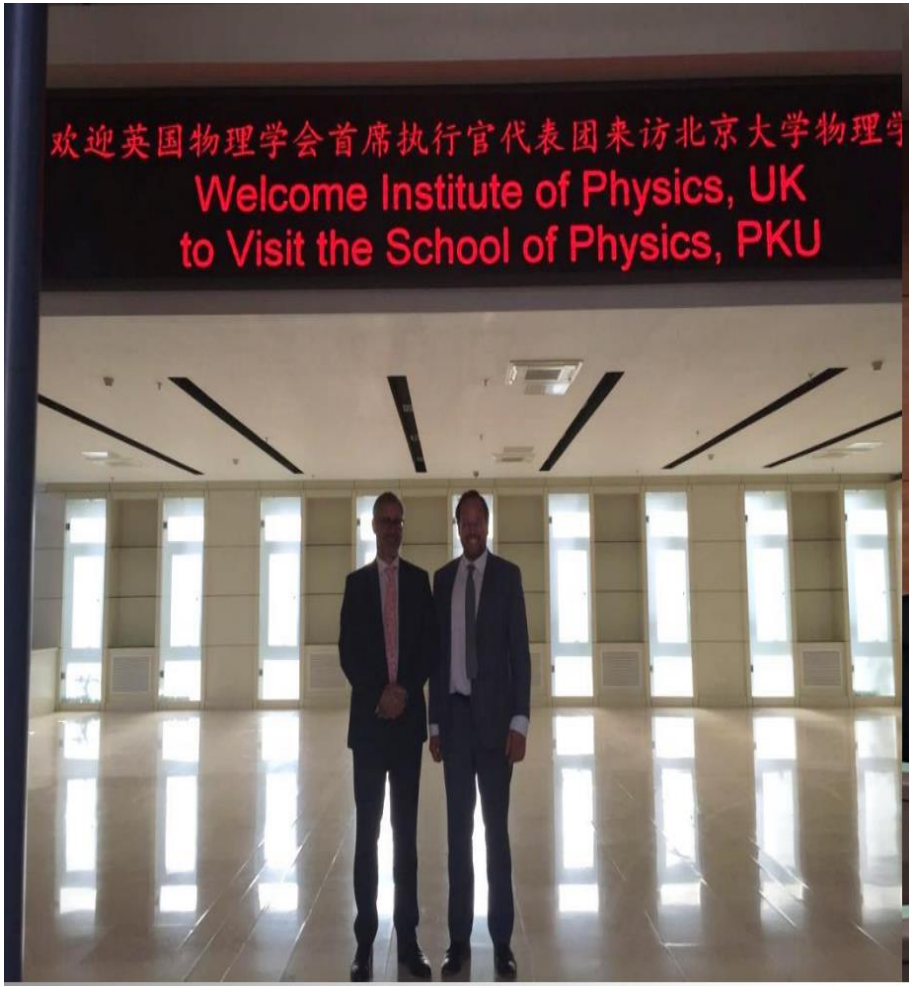
- IOP出版社的最新进展
- IOP与DRAA
- 数字资源本地保存工作的相关介绍
- 开放科学与开放物理
- 电子书平台给读者带来新的阅读体验

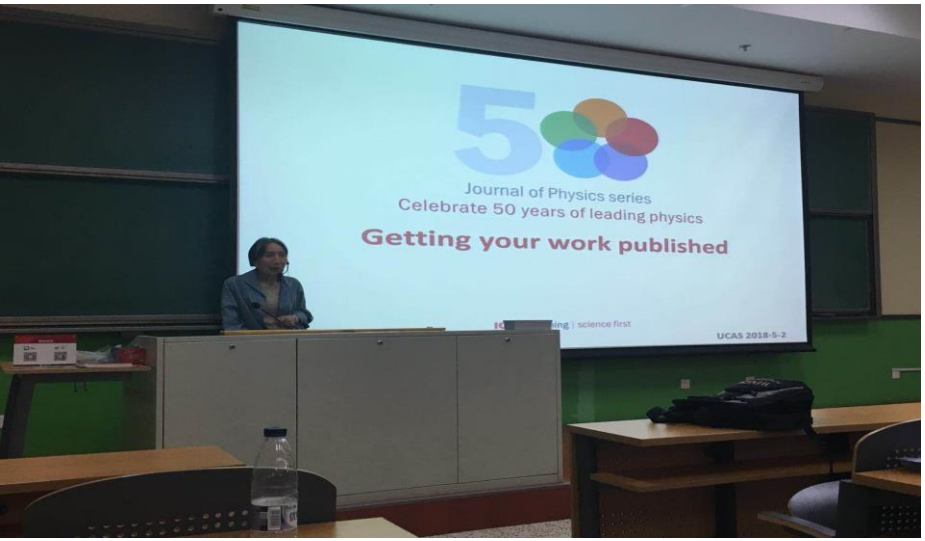
IOP
Institute of Physics

IOP
IOP Publishing | science first

IOP Publishing | science first

2019年IOP出版社在中国举办了超过30场学术讲座




Journal of Physics series
Celebrate 50 years of leading physics
Getting your work published
UCAS 2018-5-2


IOP ebooks
你知道IOP还出版这些电子书吗?
IOP Publishing


Overview
IOP Publishing


IOP


北京
5月7日
星期三
热烈欢迎
英国物理学会中国区总编、首席
代表吕铭方教授来我校讲学!
天气情况：周二，多云，13-24度，南风3-4级；


IOP Publishing | science first
合作出版
American Astronomical Society (USA)
Japan Society of Applied Physics (Japan)
Deutsche Physikalische Gesellschaft (Germany)
European Physical Society (EU)
DPG

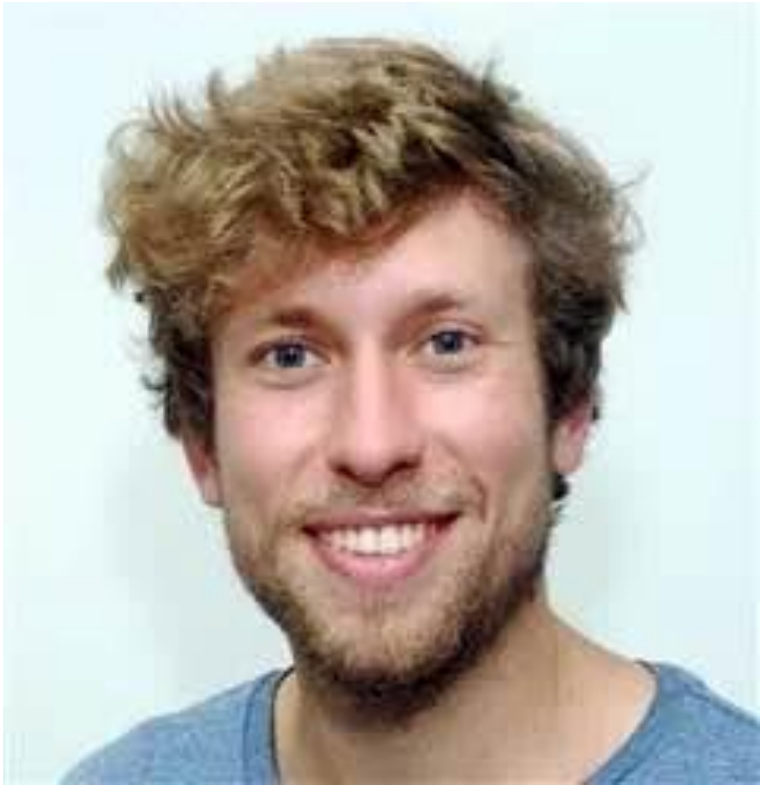
IOP Publishing | science first

2020年5月举办的线上讲座

IOP Publishing | science first

如何提升中国审稿人在物理学期刊的影响力

主讲嘉宾：Tom Sharp
IOP出版社旗下三本期刊的出版人



主讲嘉宾：段纯刚教授
华东师范大学紫江特聘教授，教育部创新团队带头人，国家杰出青年基金获得者

IOP Publishing | science first

IOP出版社2020年线上学术讲座

主讲嘉宾：戴建武研究员
Biomedical Materials (BMM)期刊主编
湖南大学生物学院讲席教授

IOP Publishing | science first

2020年6月举办的在线学术会议

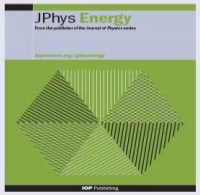
IOP Publishing

JPhys Energy: 能源材料研讨会

前沿学者与您分享： 能源材料领域的创新研究及思考

研讨会时间： 2020年6月23日(周二)
下午15:00–17:00(北京时间)

IOP Publishing



JPhys Energy: 能源材料研讨会

前沿学者与您分享： 能源材料领域的创新研究及思考

研讨会时间： 2020年6月23日(周二)下午15:00–17:00(北京时间)

主持人： 王莉娟 博士 IOP出版社中国区编辑发展负责人 Daniel Jopling IOP出版社高级出版人

日程信息：

15:00–15:15	开幕致辞
15:15–16:55	学术报告
16:55	闭幕致辞

主讲嘉宾：

John Irvine 教授
英国圣安德鲁斯大学
JPhys Energy创刊主编
演讲主题：
Nanoengineering of solid state electrochemical interfaces for increased functionality

李峰 教授
中国科学院金属研究所
JPhys Energy编委
演讲主题：
The pore and its electrochemical applications

蒋三平 教授
澳大利亚科廷大学
演讲主题：
Surface segregation and polarization in solid oxide fuel cell cathodes – mechanism and kinetics

王得丽 教授
华中科技大学
JPhys Energy编委
演讲主题：
Electrocatalysis on ordered intermetallics

欢迎您加入本次研讨会,与期刊主编及能源材料领域学者交流互动!
请扫描下方二维码填写您的注册信息,
注册成功后我们会为您的邮箱发送直播通道链接。

了解更多IOP出版社的信息,请扫描下方二维码,
关注IOP出版社微信公众号。

IOP Publishing | science first

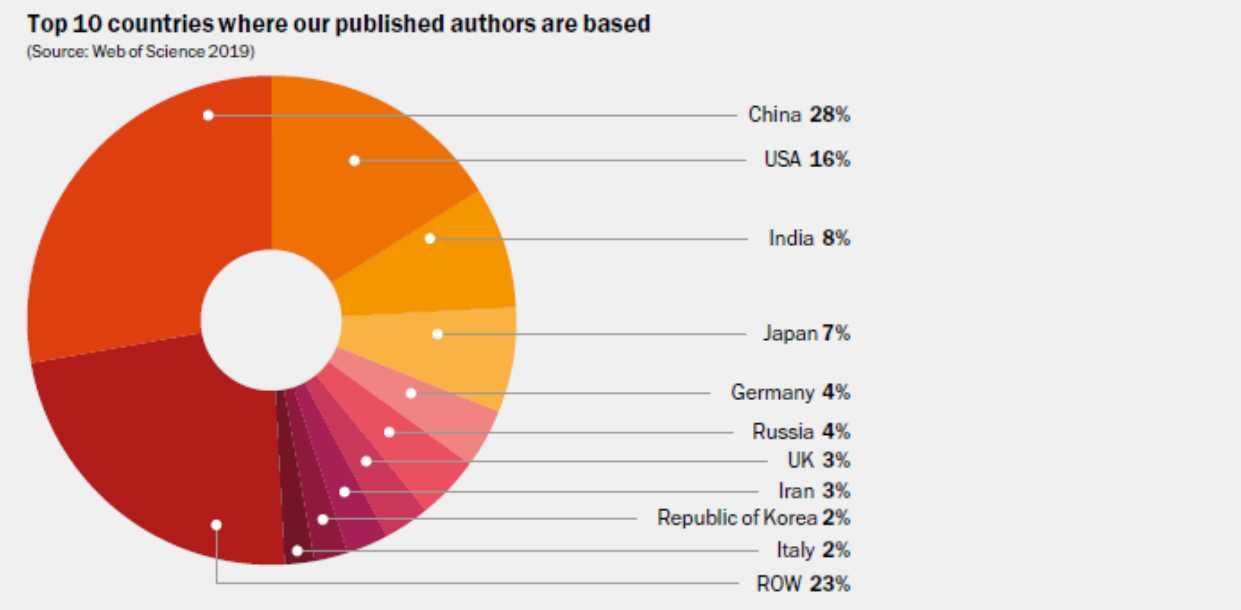
IOP出版社的“中国高被引文章奖”

IOP Publishing | science first

下载量和发表论文量排名

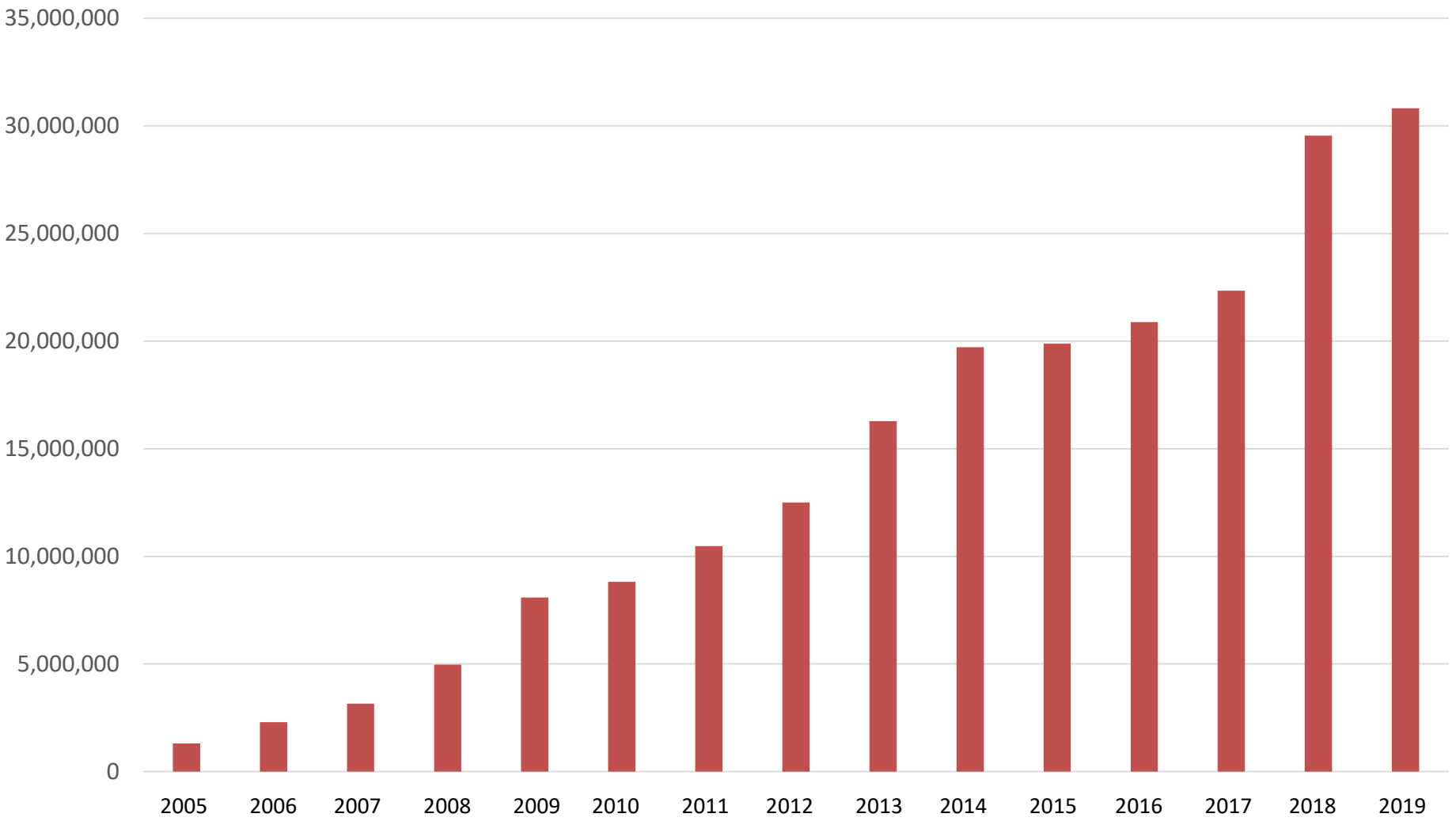
下载量前五名的国家

作者国家前十名：



IOP Publishing | science first

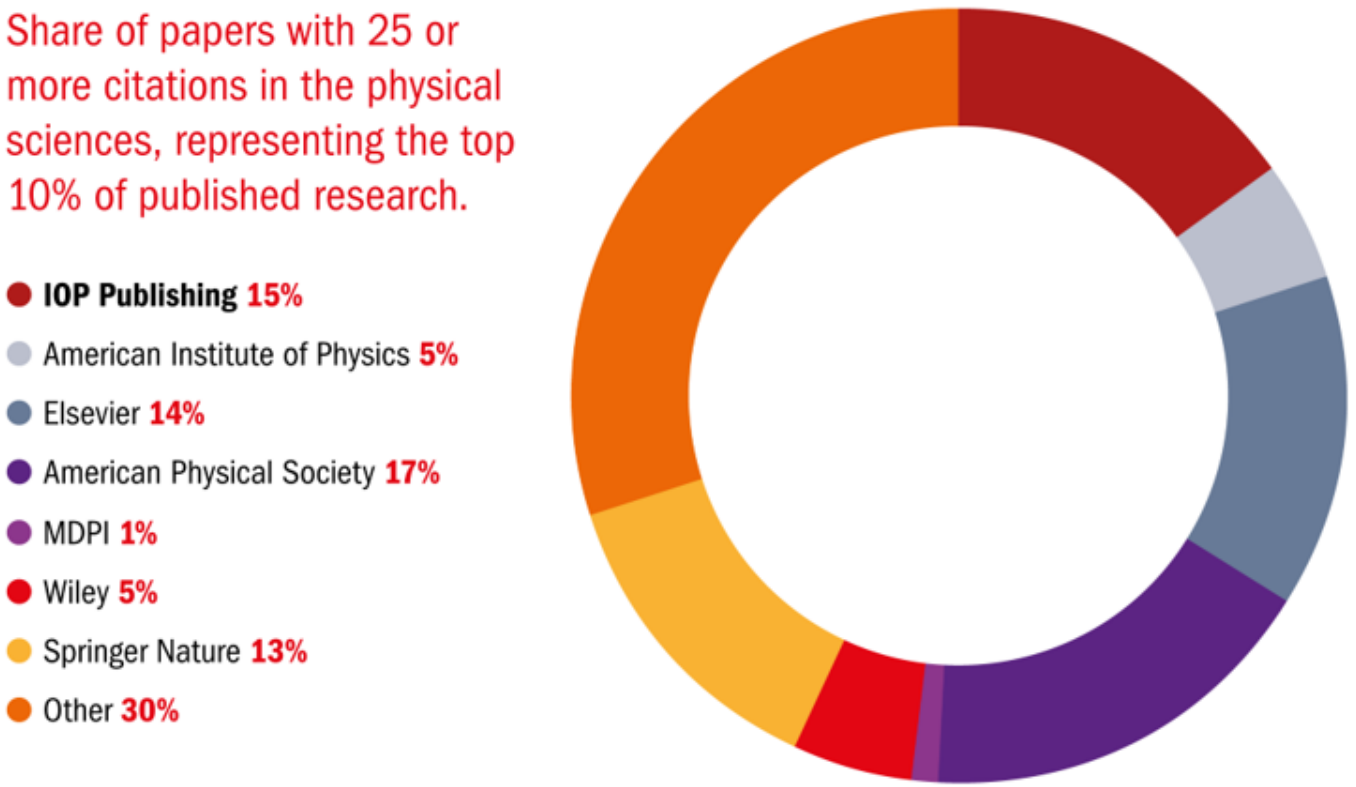
DRAA成员下载量示意图



IOP Publishing的高质量期刊 – 质量

- 在物理科学领域中，被引量超过25次的前10%顶尖论文中，有15%被发表在IOP Publishing的期刊上。

Share of papers with 25 or more citations in the physical sciences, representing the top 10% of published research.



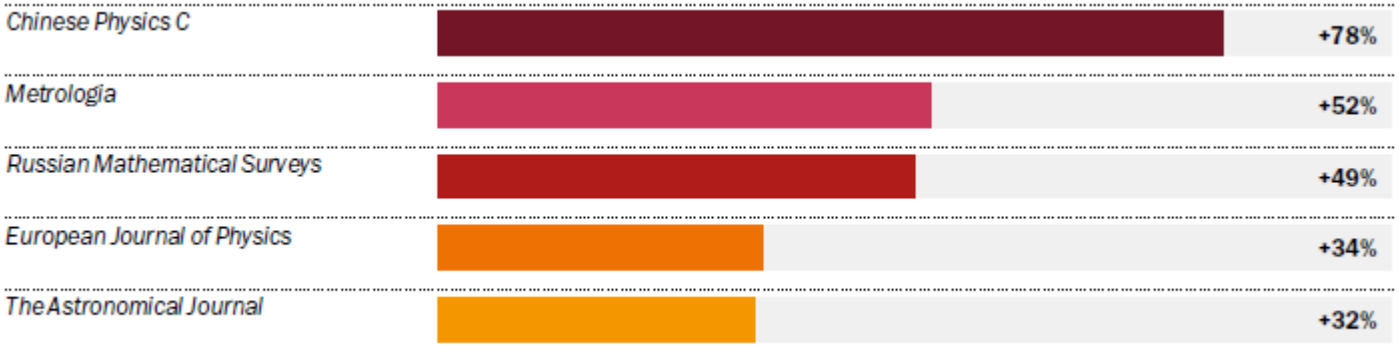
IOP Publishing –期刊进展

影响因子增长

80%的IOP期刊在2019年影响因子有所增长，目前27种期刊位于JCR Q1区。

Reports on Progress in Physics	**16.620**	*Biofabrication*	**7.236**
The Astrophysical Journal Letters	**8.374**	*Environmental Research Letters*	**6.192**
2D Materials	**7.343**	*Chinese Physics C*	**5.861**

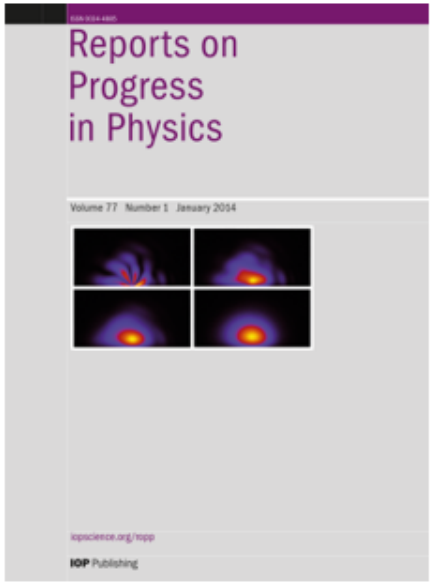
2019年影响因子大幅增长的期刊：



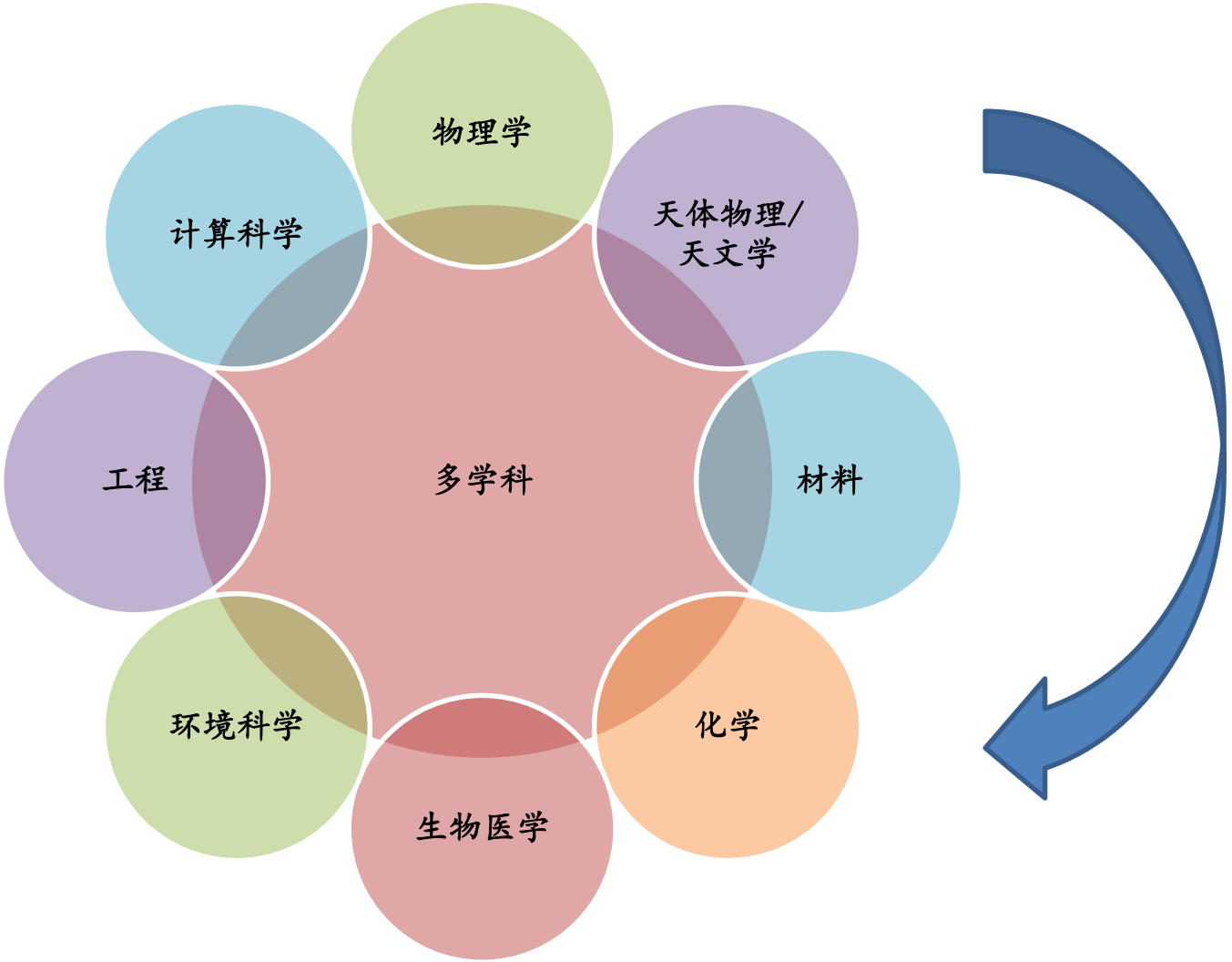
高质量的期刊内容

- 除新刊外几乎所有的期刊都被SCI收录
- 61%期刊的影响因子高于2.000
- 250余篇诺贝尔获奖者的论文
- 世界最大的**物理综述论文**出版社之一

  Reports on Progress in Physics (IF 17.032)
- IOP每年出版全世界近1/3的等离子体物理研究
- 根据JCR报告，IOP是世界最大的生物工程领域学协会出版社
- IOP的7种天文学和天体物理学期刊收获了领域内超过40%的引用



IOP Publishing的高质量期刊 – 多学科及跨学科相关性



IOP-DRAA集团概况

- IOP为DRAA集团成员开放64种电子期刊，64种电子期刊100%被SCI收录，47种期刊影响因子高于2。期刊综合影响因子：3.173
- 2002年开始期刊组团，目前有128家成员。
- 2015年开始电子书组团，目前有56家成员。

本地数据保存工作的介绍

- 从2002年CALIS组团开始，我们就开始向CALIS北京大学图书馆站点提供期刊本地数据。
- IOP会定期向CALIS提供期刊数据，CALIS将数据进行本地镜像，解决国内高校用户对于IOP电子期刊永久访问权的问题。
- CALIS本地站点：http://iop.calis.edu.cn/

本地数据保存工作的介绍

- IOP与NDPP（国家数字科技文献资源长期保存体系）的合作。

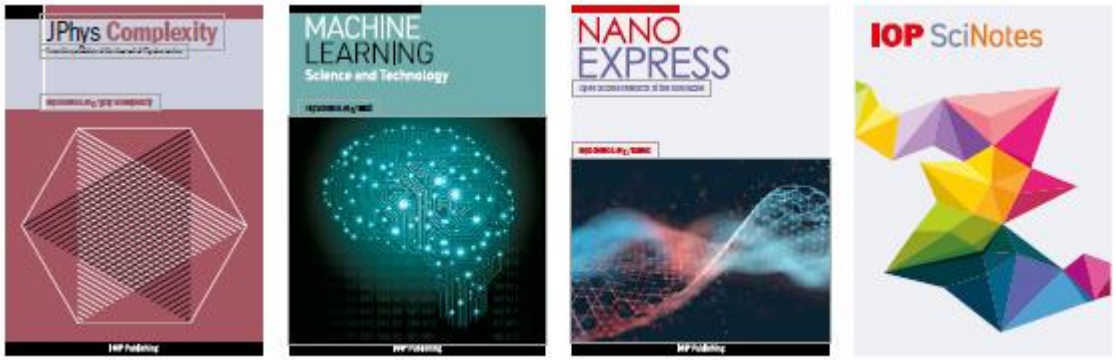
IOPP定期向NSTL-中信所和中科院文献情报中心提供IOP期刊和电子书的保存数据，用于国家级别的数字资源长期保存。

IOP Publishing – Open Physics

开放物理--访问

为了扩大作者研究论文的开放获取，我们新创立了多本纯OA期刊（目前已经有近20本纯OA期刊）；增加了现有期刊中开放获取论文的数量和比例。IOP的所有主要研究期刊中都提供了开放出版的选项。

2019年新创刊的OA期刊



2019年新合作的 OA期刊

IOP Publishing – Open Physics

开放物理--透明

为了使审稿过程更加透明，我们引入了透明同行评审。 透明的同行评审展示了从最初评审到最终决策的完整的同行评审过程，目前可在我们的三种主要期刊，《J Phys材料》，《神经工程杂志》和《环境研究快报》上找到。我们很高兴地宣布，使用透明的同行审议程序发表的第一篇文章现在已经上线。

IOP Publishing – Open Physics

开放物理-- 包容

IOP致力于开放物理的包容性，我们的举措包括确保审稿人的多样性、性别差异和国际性（特别是欢迎来自中国的审稿人）。

IOP Publishing – Open Physics

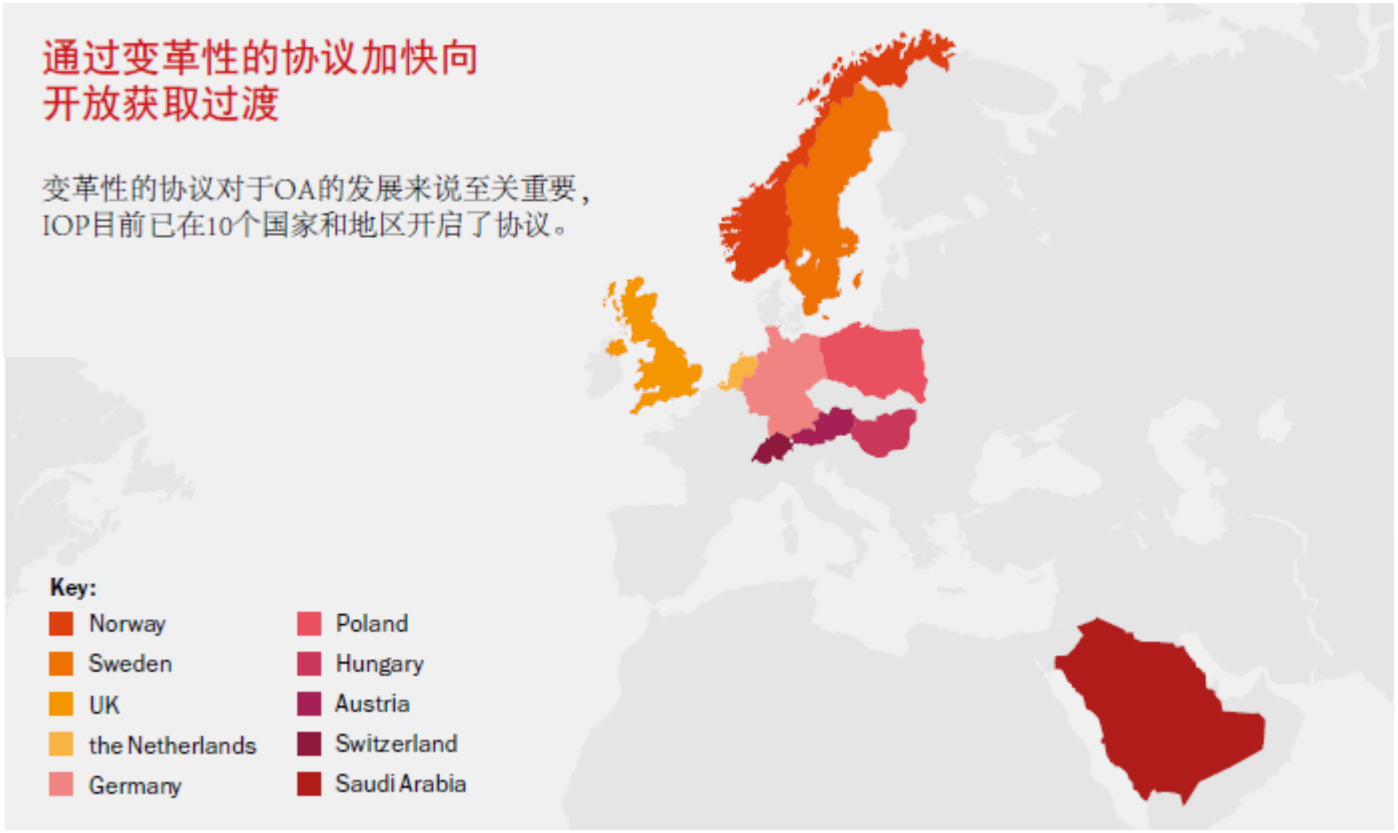
14
2019年我们出版14种纯OA学术期刊

70%
2019年我们OA论文的投稿量增加了70%

63,000
2019年IOP会议论文集出版了超过63,000篇OA论文

通过变革性的协议加快向开放获取过渡

变革性的协议对于OA的发展来说至关重要，IOP目前已在10个国家和地区开启了协议。



IOP Publishing –电子书进展

我们的电子书项目现在包含横跨16个学科领域的超过500本图书，内容涵盖物理学、天文学、材料科学和生物科学等。

- 与医学物理与工程协会（IPEM）、生物物理协会（BPS）和美国天文学会（AAS）合作，扩大这些领域的IOP电子图书项目。
- 推出量子科学系列图书
- 出版了研究生教材

100万

IOP电子书在2019年被下载了超过100万次

wave function, is larger so that the scanned measurement image gives an indication of the spatial extent of the wave function. We can see the concept of the SGM in the video of figure 2.4. In this video, the propagation through the QPC is shown in the right-hand panel. The conductance is plotted in the left-hand panel. When the probe (indicated by the white shape in the right-hand panel) is at the left, it sits over the potential barrier (red in the right-hand panel) and the conductance measured through the QPC is unaffected by it. However, as the probe moves through the actual channel, the large bias of the top serves to cut off the transmission through the QPC and the conductance drops to almost zero. Then, as the probe moves onto the potential at the right, the conductance rises back to its normal value. The fact that the conductance is nearly cut off in this video tells us that the probe tip is fairly large. However, it is possible to adjust the distance of the tip from the surface, and the bias applied, such that a spatial resolution of 5 nm, or better, can be achieved with this technique.

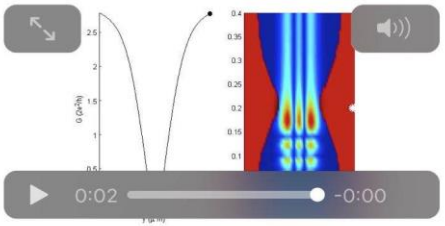
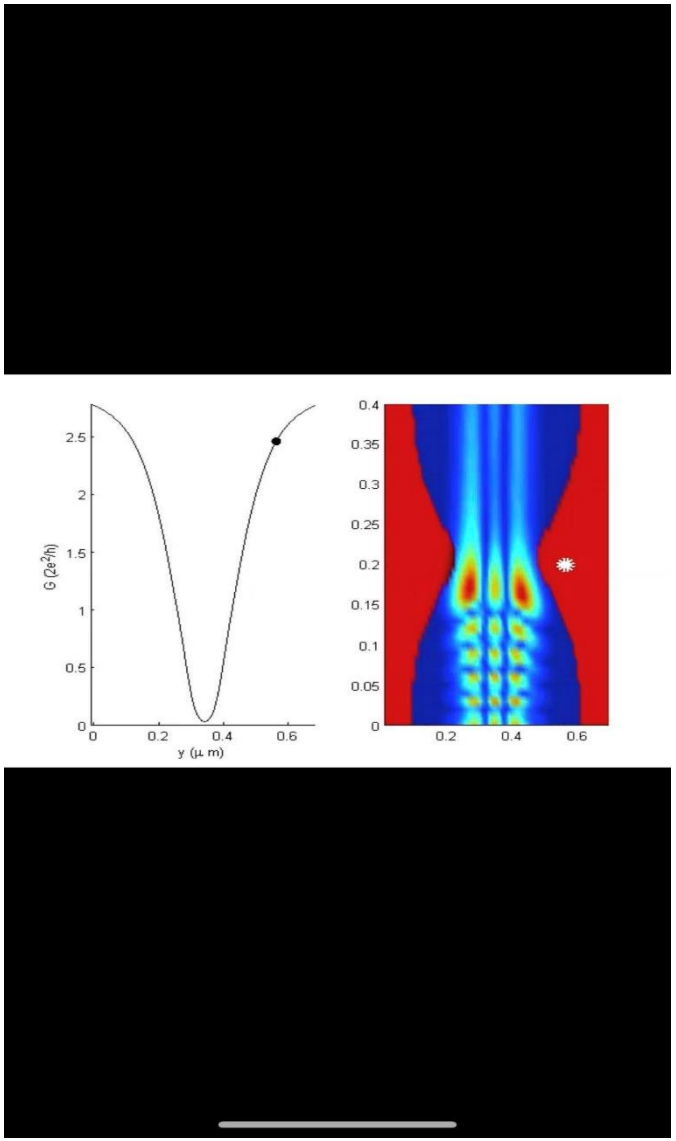


Figure 2.4. The video illustrates the method of operation of the SGM. (Video by Richard Akis, included with his permission.)



of the sample under test. It is not affected by the surface conditions or the manner of isolating the device. We have already remarked that it is not dependent upon the material being studied. Because of the topology of the experiment, we are led to the result that the Hall resistance is a result of the gauge invariance and depends only upon the ratio of these fundamental constants [7].

The stability of the quantum Hall effect is remarkable, and because of this it has become the international standard for resistance. The resistance value given by equation (6.17), when $\nu = 1$ has been called the Klitzing. One important aspect of this is that the value depends only upon fundamental constants, and efforts have been taken to assure that its value is universal among various materials [8]. Indeed, this value is so well known, that there is now a move afoot to rework all of the various international standards in terms of the value for Planck's constant, as described in the video of figure 6.6. It generally is felt that this will provide better known values for these various standards [9].

Figure 6.6. The role of the quantum Hall effect in defining new values for various SI standard quantities. (Video reproduced with the permission of J T Janssen *et al* [8] and the National Physical Laboratory. Copyright 2011 the National Physical Laboratory.)

sured. (Reprinted with permission from [11]. Copyright 2010 Macmillan Publishers.)

The above approach has since been extended to amino acids and peptides through the recognition tunneling method [13]. In this approach, the tunneling leads are modulated. Since the tunneling current depends exponentially upon both the voltage applied and the tunneling distance, the modulation leads to a series of current spikes. As an amino acid is moved into the gap between the electrodes, the amplitude of these spikes will vary according to the size of the molecule. These current spikes can then be used as a recognition signal to identify the particular amino acid that is in the tunneling gap. The process is explained further in the video of figure 8.7, from the ASU group [13]. The process of making the entire structure is further explained in [14].

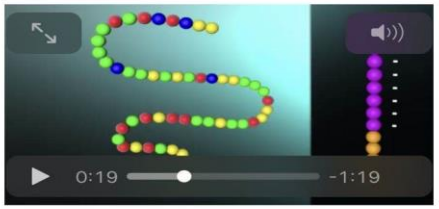


Figure 8.7. The video describes the recognition of individual amino acids as they are pulled through the gap in a tunneling structure. Here, the acids play the role of the quantum dot in, e.g., figure 8.4. (The video is from S Lindsay, included with his permission.)

Habitable zones in multiple star systems

Binary | Multiple

Render | Clear

Star A

Temperature	5780	K
Luminosity	1.0	L_{solar}
Mass	1.0	M_{solar}
Position X	4	AU
Position Y	0.0	AU

Star B

Temperature	3600	K
Luminosity	0.3	L_{solar}
Mass	0.104	M_{solar}
Position X	0.5	AU
Position Y	1	AU

Star C

Temperature	8700	K
Luminosity	4	L_{solar}
Mass	1.5	M_{solar}
Position X	3	AU
Position Y	2	AU

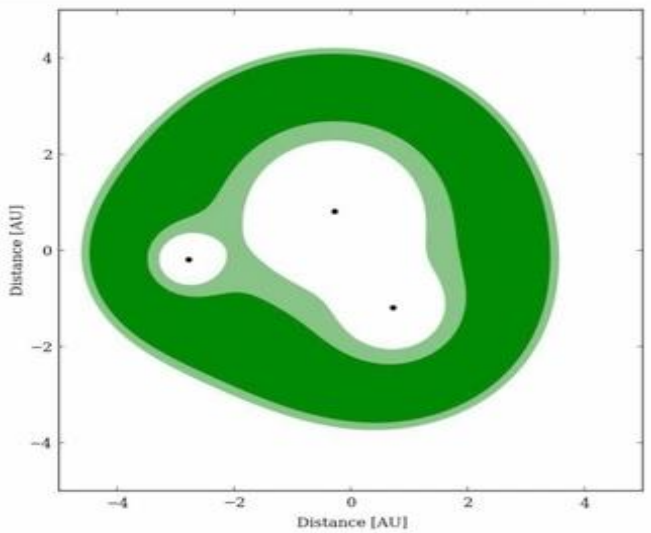
Parameters

Model	Kopparapu et al. (	
Plot region	min/max X/Y	
Minimum X	-5	AU
Maximum X	5	AU
Minimum Y	-5	AU
Maximum Y	5	AU
Aspect Ratio	1	
Resolution	0.05	AU

Center on center of mass

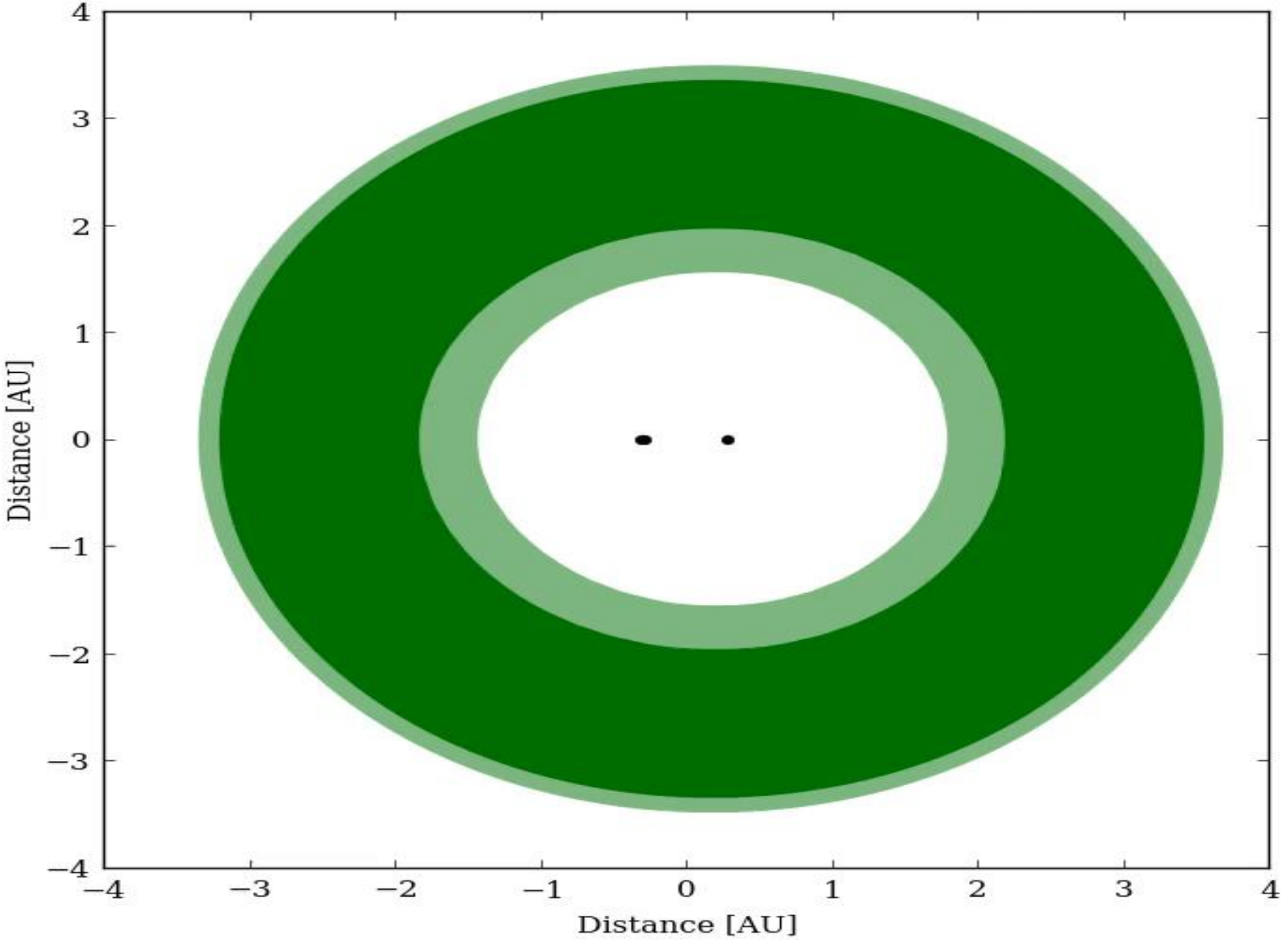
Keep history

Render

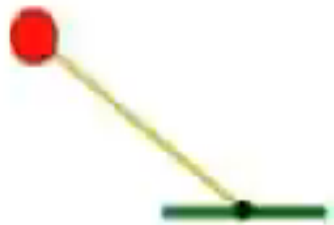


Star	Temperature	Luminosity	Mass	X	Y
A	5780 K	1 L_{solar}	1 M_{solar}	4 AU	0 AU
B	3600 K	0.3 L_{solar}	0.104 M_{solar}	0.5 AU	1 AU
C	8700 K	4 L_{solar}	1.5 M_{solar}	3 AU	2 AU

Download as PNG | Download as PDF


4
3
2
1
0
−1
−2
−3
−4
Distance [AU]
−4
−3
−2
−1
0
1
2
3
4
Distance [AU]

Pendulum Driven by $\tau = F\cos(\omega t)$



Phase Plot: $\dot{\theta}$ vs θ

IOP Publishing | science first

IOP帮助我们解锁未来科技

IOP Publishing | science first

2019年IOP成立了中国科学顾问委员会

清华大学副校长薛其坤教授担任IOP中国首席科学顾问

ANNOUNCEMENT

The Institute of Physics and IOP Publishing appoint Professor Qi-Kun Xue as chief scientific advisor for China

20 Jan 2020 Simon Davies

Professor Qi-Kun Xue

Most Recent

- Coronavirus (COVID-19) FAQs
- Aerosol-printed graphene unveiled as low cost, faster food toxin sensor
- IOP Publishing and Hungarian consortium sign open access publishing agreement
- IOP Publishing joins Researcher to keep academics on top of leading physics research
- First papers publish in J Phys Complexity – IOP Publishing's new open access journal for complex systems
- Physics World – indispensable, trusted daily news throughout the pandemic
- IOP Publishing brings the international quantum science community together virtually
- IOP Publishing launches co-review policy
- IOP Publishing becomes first publisher to integrate its article submission system with Editage's online submission system

IOP Publishing | science first

IOP北京办公室

IOP内容平台
http:iopscience.iop.org

IOP中国网站
http://china.iop.org

IOP官方微博
请搜索“IOP中国”

IOP官方微信
请关注公众号：IOP 出版社

IOP联系方式
china@iop.org

感谢您的聆听！！

Thanks！！