快速阅读外文文献

——提升学习效率

云知课堂

吉林大学图书馆2021年春季信息素养教育培训

吉林大学图书馆
刘冲娇 2021.5
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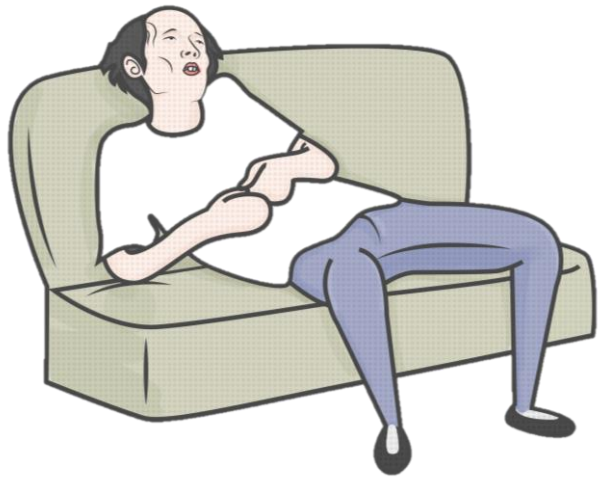
前言 Introduction

我们所说的外文主要指英文。英语是联合国的工作语言之一，是很多其他国际组织的官方语言之一，也是事实上的国际交流语言。据统计，世界上75%以上的邮件是用英文书写的，50%以上的报纸杂志是英语的，60%以上的科学论文是用英语发表的。

世界上最著名的学术文献数据库基本以英文文献为主导，这些文献反映了世界各国先进的科学技术水平，是我们及时了解国际重要科研成果和科研动向的窗口，为我们科研人员研究新课题、推出新成果提供了重要的情报来源。大量阅读英文文献除了是专业学习所必需之外，英文学术论文逻辑性比较强，在阅读过程中要学习文献中隐含的思维方式和写作方式。

开始读外文文献的你



ductors [16–18]. However, only a few bulkier organic molecules are used in the preparation of low dimensional perovskites, including $C_6H_5(CH_2)_2NH_3^+$(PEA$^+$), $CH_3(CH_2)_3NH_3^+$(n-BA$^+$, iso-BA$^+$), $C_2H_4NH_3^+$, and polyethylenimine cations (PEI$^+$). Very recently, Karunadasa and co-workers described the postsynthetic transformations in hybrid low dimensional perovskites with plenty of bulkier organic molecules [19]. The work has not only demonstrated that the perovskite structure can provide a unique chemical reaction vessel and it also provides new mol… and ideas for the preparation of l… development of perovsk… more and more bulkier… the near future.

3. Bulkier organic m…

3.1. PEA cation

Karunadasa and co-… the application of low … als in PSCs [20]. In the… enters the crystal struc… sional structure $(PEA)_2$(… tio (Fig. 2a). To invest… and $MAPbI_3$ to moistur… humidity-controlled en… exposed to relative hu… same XRD crystal phas… the $MAPbI_3$ perovskite f… PbI_2 appeared in a hu… PbI_2 peaks gradually b… dation time (Fig. 2c). Moreover, the absorption of $MAPbI_3$ thin film has a constant blue shift with increasing the exposure time due to the increased PbI_2 by perovskite film aging while the absorption of $(PEA)_2(MA)_2[Pb_3I_{10}]$ film exhibits extremely strong stability with no significant changes (Fig. 2d and e). The increase in the humidity stability of the $(PEA)_2(MA)_2[Pb_3I_{10}]$ perovskite film

significantly suppressed absorption of perovskite at wavelengths longer than 500 nm (Fig. 3c). Interestingly, the absorption of the quasi-2D perovskites film has a weak attenuation with the increase of n (n = 10, 40, 60), indicating that the number of layers is about to be less stable, and only a small PbI_2 peak appears. Furthermore, after all the films were exposed to air for 10 days, the PL decay curve of the 3D ($n = \infty$) perovskite had a significant change while the quasi-2D (n = 40, 60) perovskites have no observable variation … the charge-carrier lifetime (Fig. 3e). Additionally, quasi-2D … also been significantly improved. (n = 60) and 13.1% (n = 40) from …nder a low-humidity atmosphere …bI_3 perovskite devices stored in N_2 …han 3% (Figs. 3f–j). They concluded …ules between perovskite layers …able van der Waals interactions, …gy, and thus leading to the greatly …kite materials.

… firstly introduced bulkier or… …SCs and reported on the fab… …the low dimensional perovskite …b_nI_{3n+1} (n = 1, 2, 3, and 4) thin …y process, low dimensional per… …ndicular to the substrate, resulting …ge and a fine texture (Fig. 4a–e). …along the (110) plane (Fig. 4a). As … a competition arises between the …he planar layer and MA^+ tending to expand the perovskite growth outside the layer. Therefore, the crystal grows along the (111) crystal plane perpendicular to the substrate (Fig. 4c, d, and e). As the inorganic slabs increases, they found that the optical band gaps (E_g) decreases from 2.24 eV ($n = \infty$) to 1.52 eV (n = 1) (Fig. 4f) and the excitonic binding energies are to decrease with increasing n (from 1 to ∞), consistent

外文网站与文献快速翻译

PART 01

外文文献快速阅读

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外文网站与文献快速翻译

谷歌翻译、有道翻译、百度翻译、搜狗翻译、
知云翻译、Xtranslator、Copytranslator

网站翻译

工具1： 谷歌浏览器内置翻译

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如果没有出现这个图标，可以在网页的空白处单击鼠标右键进行翻译

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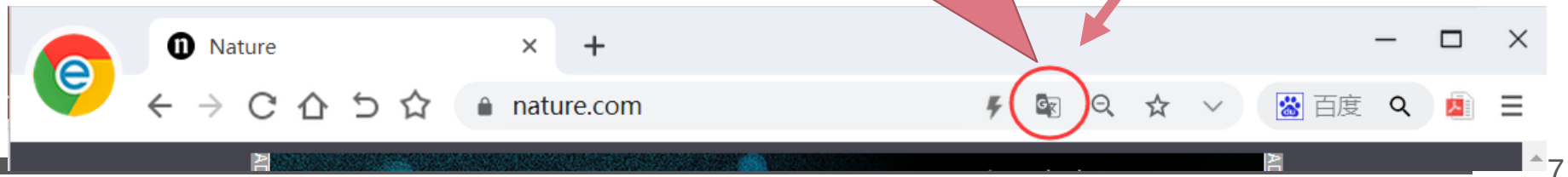

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阿拉伯语	菲律宾语	拉丁语	南非祖鲁语	索马里语	亚美尼亚语
阿姆哈拉语	芬兰语	拉脱维亚语	尼泊尔语	塔吉克语	伊博语
阿塞拜疆语	弗里西语	老挝语	挪威语	泰卢固语	意大利语
爱尔兰语	高棉语	立陶宛语	旁遮普语	泰米尔语	意第绪语
爱沙尼亚语	格鲁吉亚语	卢森堡语	葡萄牙语	泰语	印地语
奥里亚语(奥里亚文)	古吉拉特语	卢旺达语	普什图语	土耳其语	印尼巽他语
巴斯克语	哈萨克语	罗马尼亚语	齐切瓦语	土库曼语	印尼语
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保加利亚语	韩语	马耳他语	瑞典语	维吾尔语	✓ 英语
冰岛语	豪萨语	马拉地语	萨摩亚语	乌尔都语	约鲁巴语
波兰语	荷兰语	马拉雅拉姆语	塞尔维亚语	乌克兰语	越南语
波斯尼亚语	吉尔吉斯语	马来语	塞索托语	乌兹别克语	中文
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布尔语(南非荷兰语)	加泰罗尼亚语	毛利语	世界语	希伯来语	
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德语	科西嘉语	缅甸语	斯瓦希里语	信德语	

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Biotech firm Florida after complicatio

在美 子

生物技术 里达对其

India, Brazi human cost science

印度，巴 力成本

忽略或延迟按

一个孩子的坟墓是非洲最早的墓地

大约在78,000年前，在肯尼亚一个山洞中发现了一个小孩子的葬礼，这为在中石器时代象征主义在治疗死者中的作用提供了新的线索。

露易丝·汉弗莱（Louise Humphrey）

新闻与观点 | 2021年5月5日

哺乳动物早期发育的连续模型

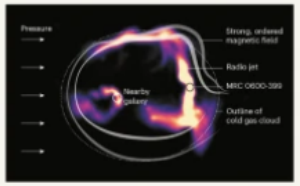
邱成祥 & 杰伊·申杜尔（Jay Shendure）

新闻与观点 | 2021年4月30日

对话以及我们如何结束对话

伊丽莎白·斯托科（Elizabeth Stokoe）

新闻与观点 | 2021年4月28日

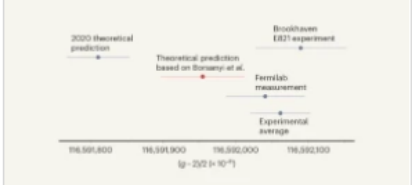


磁场弯曲的黑洞喷流

磁场对银河星团的大规模影响尚不清楚。来自MeerKAT射电望远镜的图像表明，这种场可以使从银河星团中大量黑洞喷出的粒子的喷射流弯曲。

乔迪普·巴吉（Joydeep Bagchi）

新闻与观点 | 2021年5月5日

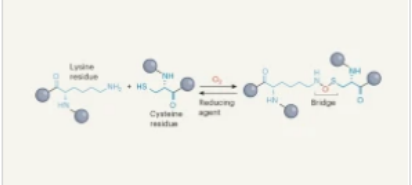


对μ子磁矩的预测有助于对粒子物理学标准模型的测试

已经报道了一种新的影响原理的计算，该计算在对μ子磁矩的计算中产生了最大的不确定性。结果可能解决了一个长期的难题，但又带来了另一个难题。

哈维·迈耶（Harvey B.Meyer）

新闻与观点 | 2021年5月5日

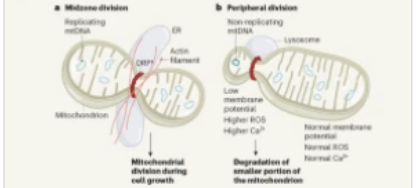


先前发现未知类型的蛋白质交联

被称为二硫键的分子交联稳定了许多蛋白质的3D结构，有时还调节蛋白质的功能。但是二硫化物并不孤单-已发现另一种调节蛋白交联类型。

黛博拉·法斯（Deborah Fass） & 谢尔盖·谢苗诺夫（Sergey N.

新闻与观点 | 2021年5月5日



分裂线粒体的两种方法的革命性观点

称为线粒体的细胞器至少在两种情况下分裂：在细胞生长期间和响应线粒体损伤时。在这两种情况下划分不同的发现为所涉及的调控途径提供了启示。

拉贾尔·查克拉巴蒂（Rajarshi Chakrabarti） & 亨利·希格斯

新闻与观点 | 2021年5月5日

斯蒂芬·佛利 & 克雷格·奥尼尔

新闻与观点 | 2021年4月28日

镁的高反应性形式，由庞大的配体稳定

卡梅伦·琼斯（Cameron Jones）

新闻与观点 | 2021年4月28日

网站翻译

工具1：谷歌浏览器内置翻译

英语家

Istat | Istituto Nazionale di Statistica

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生活条件（EU-SILC）-横截面数据

提供了生活条件调查（EU-SILC）的搜索文件

2021年5月5日

牧场技术

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2021年5月4日

监察长办公室主席的程序

2021年1月的出生率下降：偶发性疾病的症状或结

赞成的国内生产总值

2020年，以欧元为单位

26.187

居民人口

5925.8万

2021年1月1日

网站翻译

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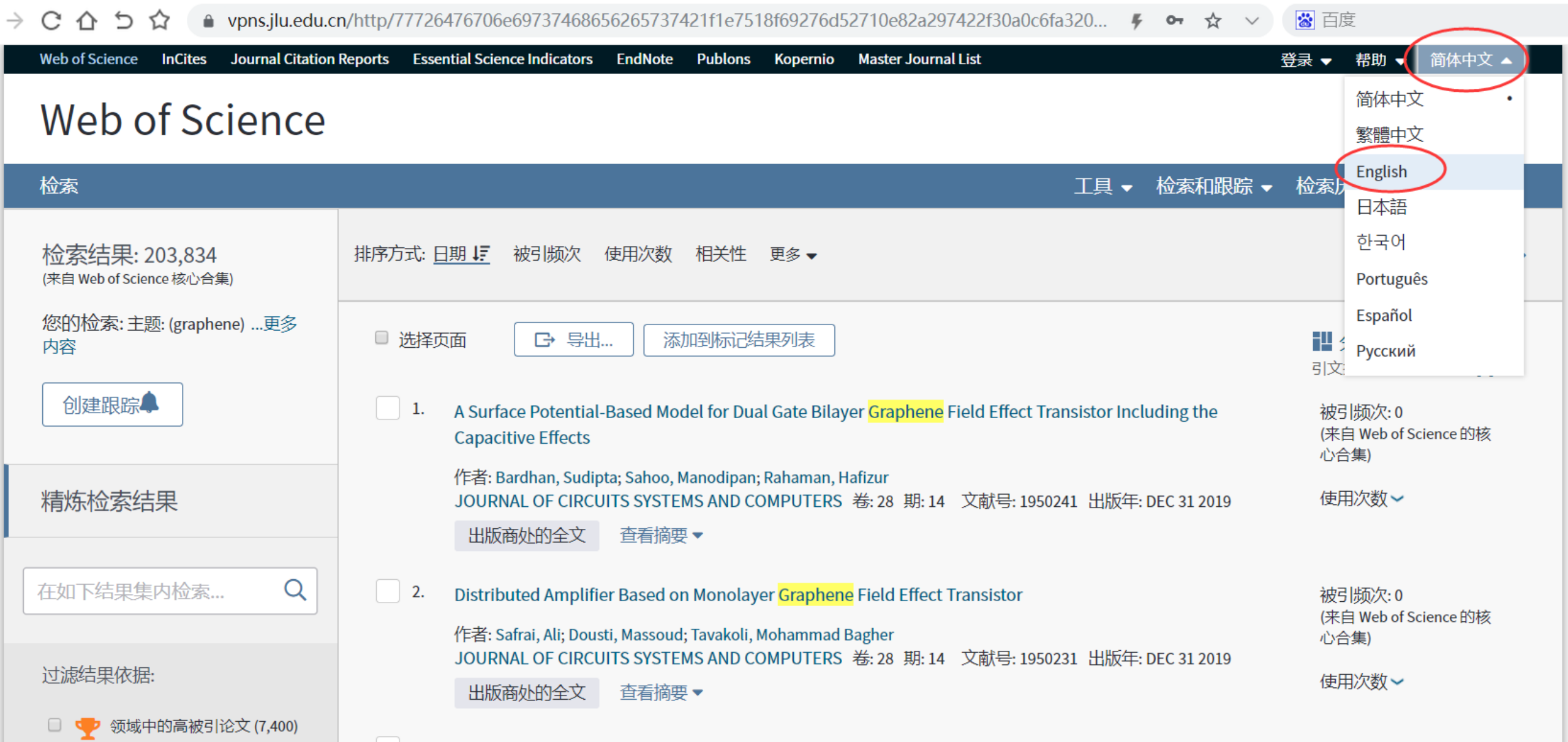

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中文 » 法语	法语 » 中文
中文 » 德语	德语 » 中文
中文 » 俄语	俄语 » 中文
中文 » 西班牙语	西班牙语 » 中文
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中文 » 阿拉伯语	阿拉伯语 » 中文
中文 » 荷兰语	荷兰语 » 中文
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India, Brazil and the human cost of sidelining science 印度，巴西以及忽视科学的人力成本

Governments that ignore or delay acting on scientific advice are missing out on a crucial opportunity to control the pandemic. 忽视或延迟按照科学建议采取行动的政府正在错失一个控制大流行的关键机会。

Editorial 编辑

04 May 2021 2021年5月04

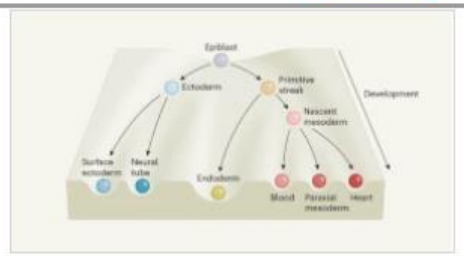
China’s COVID vaccines are going global — but questions remain 中国的新冠肺炎疫苗正在走向全球，但问题依然存在

The WHO is reviewing two of China’s COVID-19 vaccines for use worldwide, with a decision expected soon. But published trial data remain scarce. 世界卫生组织正在评估中国的两种新型冠状病毒疫苗，预计将很快做出决定。但是发表的试验数据仍然稀少。

Smriti Mallapaty 传承Mallapaty

News 新闻

04 May 2021 2021年5月04



A continuous model of early mammalian development 早期哺乳动物发育的连续模型

Characterization of the early developmental process called gastrulation has mostly been limited to snapshots at different time points. A model of mouse gastrulation now maps the transitions between cell types continuously in time. 被称为原肠形成的早期发育过程的特征主要局限于不同时间点的快照。现在，一个小鼠原肠生成模型连续地及时地描绘了细胞类型之间的转换。

Chengxiang Qiu 城乡邱 & Jay Shendure

News & Views 新闻与观点

30 Apr 2021 2021年4月30日

Daily briefing: Concussion risk is higher for female soccer players 每日简报：女足球运动员脑震荡的风险更高

Female high-school soccer players are twice as likely as their male counterparts to get a concussion. Plus, China’s COVID vaccines are going global and the first genetically modified mosquitoes are released in the United States. 高中女生足球运动员脑震荡的几率是男生的两倍。此外，中国的新型冠状病毒疫苗正在走向全球，第一批转基因蚊子已经在美国释放。

Flora Graham 植物格雷厄姆

Nature Briefing 自然简报

04 May 2021 2021年5月04

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29 Apr 2021 2021年4月29日(

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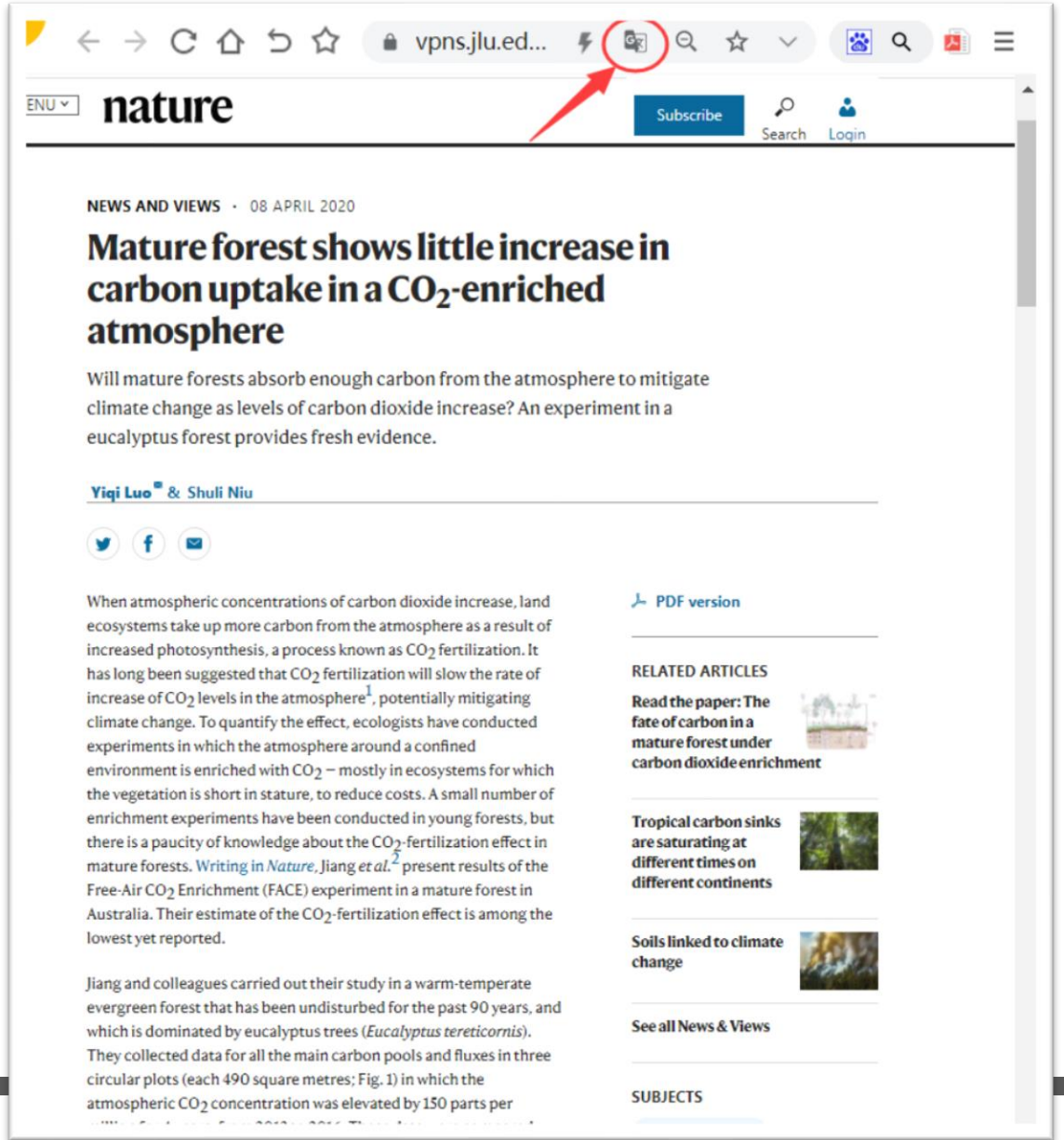

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原文 译文 对照

Carbon cycle

The fertilization effect of CO_2 on a mature forest

Yiqi Luo & Shuli Niu

Will mature forests absorb enough carbon from the atmosphere to mitigate climate change as levels of carbon dioxide increase? An experiment in a eucalyptus forest provides fresh evidence. See p.227

When atmospheric concentrations of carbon dioxide increase, land ecosystems take up more carbon from the atmosphere as a result of increased photosynthesis, a process known as CO_2 fertilization. It has long been suggested that CO_2 fertilization will slow the rate of increase of CO_2 levels in the atmosphere[1], potentially mitigating climate change. To quantify the effect, ecologists have conducted experiments in which the atmosphere around a confined environment is enriched with CO_2 — mostly in ecosystems for which the vegetation is short in stature, to reduce costs. A small number of enrichment experiments have been conducted in young forests, but there is a paucity of knowledge about the CO_2-fertilization effect in mature forests. On page 227, Jiang et al.[2] present results of the Free-Air CO_2 Enrichment (FACE) experiment in a mature forest in Australia. Their estimate of the CO_2-fertilization effect is among the lowest yet reported.

Jiang and colleagues carried out their study in a warm-temperate evergreen forest that has been undisturbed for the past 90 years, and which is dominated by eucalyptus trees (Eucalyptus tereticornis). They collected data for all the main carbon pools and fluxes in three circular plots (each 490 square metres; Fig. 1) in which the atmospheric CO_2 concentration was elevated by 150 parts per million for 4 years, from 2013 to 2016. These data were compared with those from three control plots that were not enriched from previous CO_2-enrichment experiments. How does Jiang and colleagues' estimate of the CO_2-fertilization effect in this mature forest compare with results of other studies? One difference involves the leaf area of the forest canopy (the total surface area of leaves, counting only one side of the leaves), which is a major amplifier of the fertilization effect on the efficiency of carboxylation[3] — the biochemical reaction that converts CO_2 into organic compounds. A previous investigation[4] of the same forest indicates that increased CO_2 levels do not have much of an effect on the leaf-area index (LAI, a measure of total canopy leaf area) in this location, whereas CO_2 enrichment did stimulate leaf-area expansion in field experiments in other ecosystems[5,6]. Furthermore, the plant carbon-use efficiency — the ratio of NPP to GPP — in the Australian forest, as in other mature forests[7], is relatively low compared with that of young forests. This low carbon-use efficiency substantially truncates the CO_2-fertilization effect. The two factors discussed above therefore jointly caused the CO_2-fertilization effect in the Australian forest to be small.

How can Jiang and colleagues' results be interpreted from a more theoretical perspective? As atmospheric CO_2 concentration increases, carboxylation is stimulated. This biochemical stimulation is scaled up through a biological hierarchy that progresses from leaf photosynthesis to canopy GPP, vegetation NPP, and to net changes in the carbon-pool sizes of plants and soil[3]. Across those scales, the carboxylation stimulation is amplified by some processes, but diminished by others.

For example, if the extra carbohydrate produced as a result of rising CO_2 levels is used for leaf-area expansion to capture more CO_2, then stimulation is amplified at the canopy scale (that is, through GPP). By contrast, the stimulation is diminished when the extra carbon taken up at the canopy scale is allocated for plant respiration or transferred to micro-organisms for their respiration. This theor-etical framework of hierarchical responses allows the fertilization effects on GPP and on other carbon-cycle processes to be approximately estimated for a scenario in which the LAI does not change much and where the CO_2 concentration increases by 150 p.p.m. Indeed, Jiang and colleagues' observation-based estimates of a 12% increase in GPP, 12.8% of which ends up in the carbon pools, are very close to the lower

碳循环

库恩成熟林的施肥效应 2

罗一奇，牛树理

随着二氧化碳水平的增加，成熟的森林会从大气中吸收足够的碳来减缓气候变化吗?在桉树林中进行的一项实验提供了新的证据。 看到 p.227

当大气中二氧化碳浓度增加时，由于光合作用增加，陆地生态系统从大气中吸收了更多的碳，这一过程被称为协同施肥。₂长期以来，人们一直认为，共同施肥会减缓大气中颗粒的增加速度，从而有可能减缓气候变化。₂₂[1]为了量化这种影响，生态学家们进行了一些实验，在这些实验中，为了降低成本，封闭环境周围的大气中富含二氧化碳，而二氧化碳主要存在于植被高度不足的生态系统中。₂在幼林中进行了少量的增肥试验，但对成熟林的施肥效应了解甚少。₂在 227 页，Jiang 等人。[2]介绍了在澳大利亚一个成熟森林中进行的自由空气共富集(FACE)试验的结果。₂他们对共同受精效应的估计是目前报道的最低的。₂

蒋和他的同事们在一个暖温带常绿森林中进行了这项研究，这片森林在过去的 90 年里一直没有受到干扰，主要是桉树。他们在三个圆形地块(每个 490 平方米;无花果。1)从 2013 年到 2016 年的 4 年时间里，大气中二氧化碳浓度升高了 150ppm。₂这些数据与来自三个未加 CO 的对照小区的数据进行了比较。₂

作者报告说，通过初级生产总值(GPP)，共浓缩使碳吸收增加了 12%，相当于每平方米每年增加 247 克碳;光合成 COto 有机碳的转化)。₂其中，28%最终成为净初级生产(NPP;用于生物量增长而不是用于代谢过程的 GPP 的比例)和 12。生态系统(即木材和土壤)碳库总量增加 8%。他们的研究结果增加了本已高度可变的共同受精估计的不确定性。

来自以前的共浓缩实验。₂蒋和同事对这片成熟森林中 co -施肥效应的估计与其他研究的结果相比如何?其中一个差异涉及到森林冠层的叶面积(仅包括叶片的一侧，即叶片的总表面积)，这是施肥对羧化效率影响的一个主要放大器。羧化是一种将辅酶 a 转化为有机化合物的生化反应。[3]₂之前对同一森林的研究表明，在该地区，增加的 COlevels 对叶面积指数(LAI，一种测量总冠层叶面积的方法)没有太大的影响，而在其他生态系统的田间试验中，共富集确实促进了叶面积的扩大。[4]₂[5,6]

此外，植物的碳利用效率，即 NPP 与 GPP 的比例

与其它成熟森林一样，澳大利亚森林与幼林相比相对较低。[7]这种低碳利用效率大大缩短了施肥效应。₂因此，上述两个因素共同导致了澳大利亚森林的 co -施肥效应较小。₂

如何从更理论化的角度来解释蒋及其同事的研究结果?随着大气浓度的增加，羧基化受到刺激。₂这种生化刺激是通过一个生物层次放大的，从叶片光合作用到冠层 GPP、植被 NPP，再到植物和土壤碳库大小的净变化。[3]在这些尺度上，羧基化刺激被某些过程放大，但被其他过程减弱。

例如，如果由于升高的 COlevels 而产生的额外碳水化合物被用于扩大叶面积以捕获更多的 CO，那么刺激就会在冠层尺度上被放大(即通过 GPP)。₂₂相比之下，当冠层吸收的额外碳被分配给植物呼吸或转移给微生物进行呼吸时，刺激就减少了。这一层次反应的理论框架使得施肥对 GPP 和其他碳循环过程的影响可以在 LAI 变化不大且同时浓度每分钟增加 150 的情况下进行近似估计。₂事实上，蒋和他的同事基于观察得出的估计是 GPP 增加了 12%，即 12。其中 8%最终进入了碳库，非常接近低碳库

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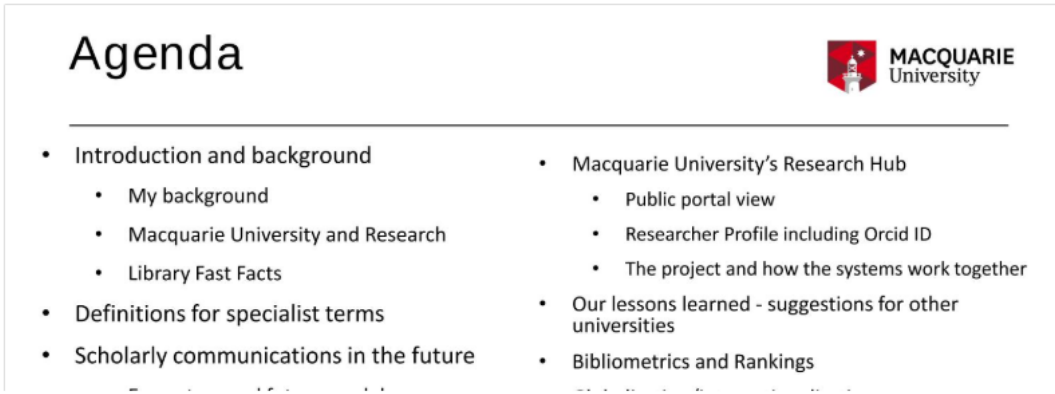

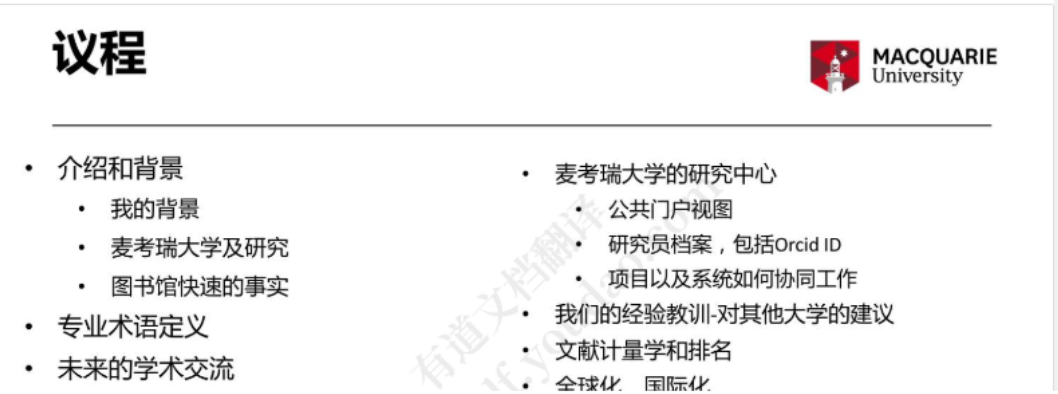

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Making the digital turn: Identifying the user requirements of digital scholarship services in university libraries[1]

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ARTICLEINFOABSTRACT

Keywords:
Case study
Digital scholarship
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User requirements

This paper reports on a research study aiming to identify the user requirements of digital scholarship services (DSS) in university libraries. Due to the exploratory nature of this study, a case study approach was adopted as the overarching methodology. Wuhan University Library (one of the top university libraries in China) was adopted as the case study. Specifically, a mixed qualitative-quantitative approach was employed for the case analysis. A qualitative study was performed aiming to identify and qualify users' DSS requirements. The analysis of qualitative interview data pointed to 17 DSS requirements under five themes: formulating research ideas, locating research partners, writing research proposals, conducting research, and publishing results. Subsequently, a quantitative Kano model analysis was undertaken to validate, verify and prioritise the DSS requirements identified. Based on measuring individual requirements' priority, DSS requirements were classified into four types: must-be, one-dimensional, attractive, and indifference. Finally, a set of strategic suggestions for DSS development were devised. This paper is of interests to library and information science researchers, as well as library managers and professionals. Although the data were collected from a university library in China, the research findings provide useful insights and implications that can be shared across international borders.

Introduction

Libraries have always been valued as the heart of a university (Montgomery, 2014; Kim, 2016). As today's universities have become increasingly connected and collaborative, libraries have become the engine and platform for knowledge creation, retention, sharing and utilisation. Some claim that libraries have emerged as beta test kitchens for novel forms of interdisciplinary investigations (Ahmad & Abawajy, 2014; Kennedy, 2018; Sinclair, 2014). The advent and universal implementation of information and communication technologies have posed both opportunities and challenges for university libraries (Le, 2015; Koltay, 2016; Li, Jiao, Zhang, & Xu, 2019; Chen, Chen, Chiu, & Zhao, 2018). Not only are academic resources increasingly expected to be digital, online, easily accessible and publicly available, but people also

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实现数字化：高校图书馆数字奖学金服务用户需求识别[1]

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ARTICLEINFOABSTRACT

关键词：
案例研究
数字奖学金
卡诺模型分析图
书馆服务
大学图书馆
用户需求

本文报告了一项旨在确定高校图书馆数字奖学金服务（DSS）用户需求的研究。由于本研究具有探索性，因此采用案例研究法作为总体方法。以武汉大学图书馆（国内一流的大学图书馆之一）为例。具体来说，案例分析采用了定性-定量相结合的方法。为了确定和确认用户的DSS需求，进行了一项定性研究。通过对定性访谈数据的分析，提出了5个主题下的17项决策支持系统需求：制定研究思路、寻找研究伙伴、撰写研究建议、开展研究和发布结果。随后，进行了定量的Kano模型分析，以验证、验证和确定DSS需求的优先级。基于对需求优先级的度量，将决策支持系统需求分为四种类型：必须、一维、吸引和无差异。最后，提出了一套发展决策支持系统的战略建议。本文对图书情报学研究者、图书馆管理者和专业人员都有一定的参考价值。虽然这些数据是从中国的一所大学图书馆收集的，但研究结果提供了有用的见解和启示，可以跨国界共享。

介绍

图书馆一直被视为大学的心脏（Montgomery，2014；Kim，2016）。随着当今大学之间的联系和协作越来越紧密，图书馆已成为知识创造、保留、共享和利用的引擎和平台。一些人声称，图书馆已经成为跨学科调查新形式的测试厨房（Ahmad&Abawajy，2014；Kennedy，2018；Sinclair，2014）。信息和通信技术的出现和普遍应用给大学图书馆带来了机遇和挑战（Le，2015；Koltay，2016；Li，Jiao，Zhang，&Xu，2019；Chen，Chen，Chiu，&Zhao，2018）。不仅越来越多的人期望学术资源是数字化的、在线的、易于访问和公开的，而且人们还期望通过方便、数字化和网络化的渠道提供更加多样化的图书馆服务（McRostie，2016；Zhou，Huang和Zijlstra，2019）。

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为了应对这场数字革命，数字学术已成为研究和发展的新常态。然而，作为一个新兴的实践和研究领域，DS的定义

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his paper reports on a research study aiming to identify the user requirements of digital scholarship services(DSS)in university libraries. Due to the exploratory nature of this study, a case study approach was adopted asthe overarching methodology. Wuhan University Library (one of the top university libraries in China)wasadopted as the case study. Specifically, a mixed qualitative-quantitative approach was employed for the caseanalysis. A qualitative study was performed aiming to identify and qualify users DSS requirements. The analysisof qualitative interview data pointed to 17 DSS requirements under five themes: formulating research ideas,locating research partners, writing research proposals, conducting research, and publishing results.Subsequently, a quantitative Kano model analysis was undertaken to validate, verify and prioritise the DSSrequirements identified Based on measuring individual requirements priority, DSS

本文报告了一项旨在确定高校图书馆数字奖学金服务（DSS）用户需求的研究。鉴于本研究的探索性，本研究采用个案研究的方法作为总体方法。以武汉大学图书馆（国内一流的大学图书馆之一）为例。具体来说，案例分析采用了混合定性-定量方法。进行了一项定性研究，旨在确定和确认用户DSS需求。对定性访谈数据的分析指出，在五个主题下，17项决策支持系统需求：制定研究思路、寻找研究伙伴、撰写研究建议、进行研究和发布结果。随后，进行了定量Kano模型分析，以验证、验证和优先排序确定的决策支持系统需求基于对单个需求优先级的度量，将DSS需求分为四类：必须、一维、吸引和无差异。最后，提出了一套发展战略建议。本文对图书情报学研究者、图书馆管理者和专业人员都有一定的参考价值。虽然这些数据是从中国的一所大学图书馆收集的，但研究结果提供了有用的见解和启示，可以跨国界共享

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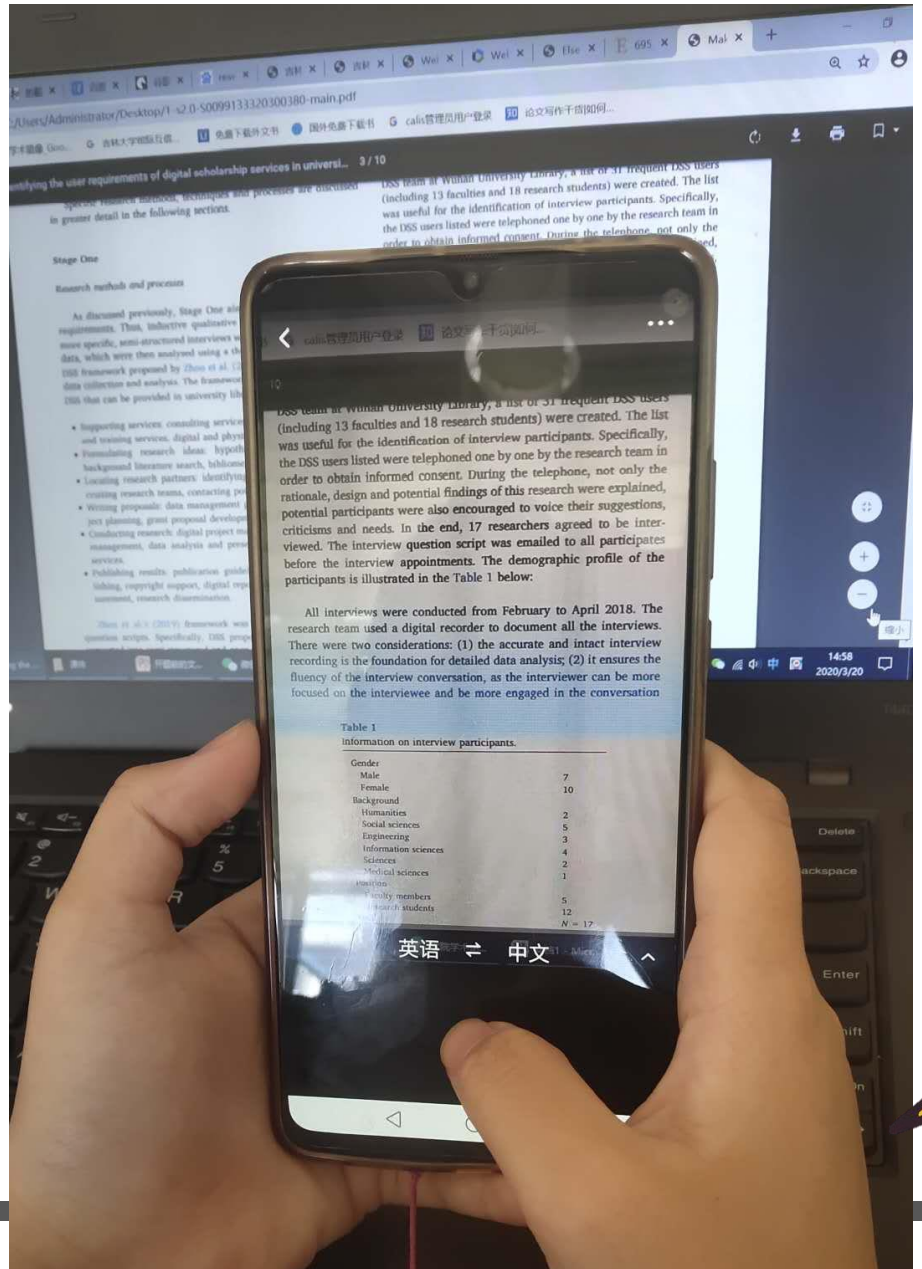

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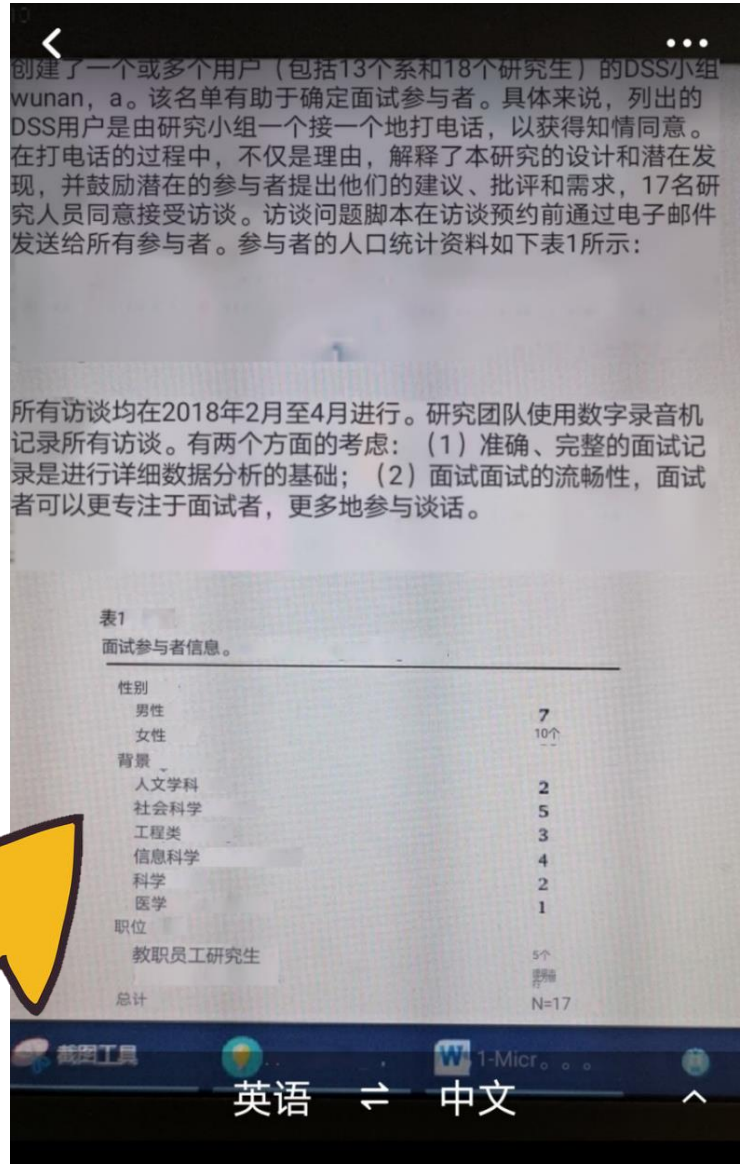

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REVIEW ARTICLE

BENTHAM SCIENCE

Use of Recursive Partitioning Analysis in Clinical Trials and Meta-Analysis of Randomized Clinical Trials, 1990-2016

Martha María Fors[1,*], Carmen Elena Viada[2] and Paloma González[3]

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ARTICLE HISTORY

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Abstract: ***Background*:** Recursive Partitioning Analysis (RPA) is a very flexible non parametric algorithm that allows classification of individuals according to certain criteria, particularly in clinical trials, the method is used to predict response to treatment or classify individuals according to prognostic factors.

***Objectives*:** In this paper we examine how often RPA is used in clinical trials and in meta-analysis. Methods: We reviewed abstracts published between 1990 and 2016, and extracted data regarding clinical trial phase, year of publication, type of treatment, medical indication and main evaluated endpoints.

***Results*:** One hundred and eighty three studies were identified; of these 43 were meta-analyses and 23 were clinical trials. Most of the studies were published between 2011 and 2016, for both clinical trials and meta-analyses of randomized clinical trials. The prediction of overall survival and progression free survival were the outcomes most evaluated, at 43.5% and 51.2% respectively. Regarding the use of RPA in clinical trials, the brain was the most common site studied, while for meta-analytic studies, other cancer sites were also studied. The combination of chemotherapy and radiation was seen frequently in clinical trials.

***Conclusion*:** Recursive partitioning analysis is a very easy technique to use, and it could be a very powerful tool to predict response in different subgroups of patients, although it is not widely used in clinical trials.

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BENTHAM SCIENCE

Use of Recursive Partitioning Analysis in Clinical Trials and Meta-Analysis of Randomized Clinical Trials, 1990-2016

玛莎·玛丽亚·福尔斯 1 *、卡门·埃琳娜·维亚达 2 和帕洛玛·冈萨雷斯 3

1 2

厄瓜多尔基多美洲大学医学院；古巴哈瓦那分子免疫学中心；

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10.1999 年，美国总统布什宣布，美国政府将于 2004 年 10 月 20 日出布联酒店古巴的封锁 18960.
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摘要:背景:递归分割分析(RPA)是一种非常灵活的非参数算法，允许根据某些标准对个体进行分类，特别是在临床试验中，该方法用于预测治疗反应或根据预后因素对个体进行分类。

***目的:在这篇文章中，我们检查了临床试验和荟萃分析中使用重组蛋白的频率。*方法:我们回顾了 1990 年至 2016 年间发表的摘要，并提取了关于临床试验阶段、发表年份、治疗类型、医学适应症和主要评估终点的数据。**

***结果:确定了 183 项研究：其中 43 项是荟萃分析，23 项是临床试验。*大多数研究发表于 2011 年至 2016 年，包括临床试验和随机临床试验的荟萃分析。总体生存率和无进展生存率的预测是评价最多的结果，分别为 43.5%和 51.2%。关于在临床试验中使用放射治疗，大脑是最常见的研究部位，而对于荟萃分析研究，也研究了其他癌症部位。化疗和放疗的结合在临床试验中很常见。**

结论:递归分割分析是一种非常容易使用的技术，尽管在临床试验中没有广泛使用，但它可能是预测不同亚组患者反应的非常有力的工具。

关键词:临床试验，决策树，元分析，预测，递归划分分析，递归划分-

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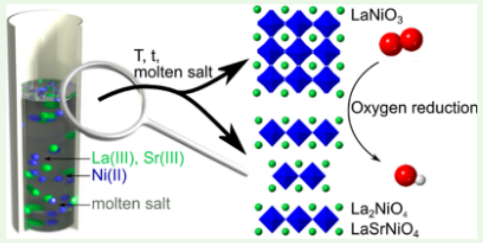
ABSTRACT: In many liquid-phase synthesis methods developed to produce nanomaterials, the key parameters governing the selective synthesis of solids and compounds are clearly identified, for example, heat treatment profile, precursors solubility, pH, and so on. Most of these well-understood approaches rely on relatively low temperature processes, below 400 °C, where conventional solvents are still stable. Interestingly, thermally stable inorganic molten salts enable to widen the temperature range for liquid-phase syntheses. They provide access to other families of crystalline solids requiring higher temperatures, as multicationic oxides. Nonetheless, the mechanisms that govern solid-state formation and phase selection when different compounds compete are poorly understood. Herein, we report how experimental parameters, such as temperature, time, reaction medium composition, and solvent oxo-basicity, enable to drive the synthesis mechanisms in molten salts toward nanoscaled multicationic oxides. We especially enlighten the phase-selective synthesis of pseudocubic perovskite $LaNiO_3$ and layered Ruddlesden−Popper phases La_2NiO_4 and $LaSrNiO_4$ at the nanoscale by suggesting that the oxidation state of the metallic precursor



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，控制固体和
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的方法大多依赖
于温度相对较低的过程，即400°C以下，而传统溶剂仍然稳定。有趣的是，热稳定的无机熔盐可以拓宽液相合成的温度范围。它们提供了进入其他需要更高温度的晶体固体的途径，如多阳离子氧化物。然而，当不同的化合物竞争时，控制固态形成和相选择的机制还不清楚。

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ABSTRACT: In many liquid-phase synthesis methods developed to produce nanomaterials, the key parameters governing the selective synthesis of solids and compounds are clearly identified, for example, heat treatment profile, precursors solubility, pH, and so on. Most of these well-understood approaches rely on relatively low temperature processes, below 400 °C, where conventional solvents are still stable. Interestingly, thermally stable inorganic molten salts enable to widen the temperature range for liquid-phase syntheses. They provide access to other families of crystalline solids requiring higher temperatures, as multicationic oxides. Nonetheless, the mechanisms that govern solid-state formation and phase selection when different compounds compete are poorly understood.

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Abstract: The anterior cruciate ligament (ACL) plays an important role in knee joint stability and it affects the pattern of gait. A large part of patients with injured ACLs also have concomitant meniscal tears, but the influence of different meniscus tears on the kinematics and kinetics in ACLD knees is not fully studied yet. The goal of this study is to distinguish between ACLD knees with/without and healthy controls based on machine learning.The results indicate that a combined ACL/meniscal injuries could be distinguished based on machine learning, as the presence and type of meniscal tears could alter the kinematics and kinetics of ACLD knees.

Keywords:ACL rupture; meniscal tears; machine learning

1 Introduction

knee joint motion data during running were normalized (0%-100% heel strike). A total of 138 knees was included in the

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前十字韧带(ACL)在膝关节稳定性中起着重要作用，它影响着膝关节的步态模式。很大一部分前交叉韧带损伤的患者还伴有半月板撕裂，但不同的半月板撕裂对膝关节运动学和动力学的影响还没有得到充分的研究。本研究的目的是基于机器学习来区分有/无半月板损伤的ACLD膝关节和健康对照膝关节。结果表明，半月板撕裂的存在和类型会改变ACLD膝关节的运动学和动力学，因此基于机器学习可以区分ACL/半月板联合损伤。

ACLD knees. However, the influence of different meniscus tears on the kinematics and kinetics in ACLD knees is not fully studied yet. Meanwhile, Zeng et al [4] used machine learning to

meniscal tears, we did not consider the type of tear (i.e., longitudinal root tear, horizontal cleavage tear, or complex tear) because of the limited sample size. None of the knee cartilage

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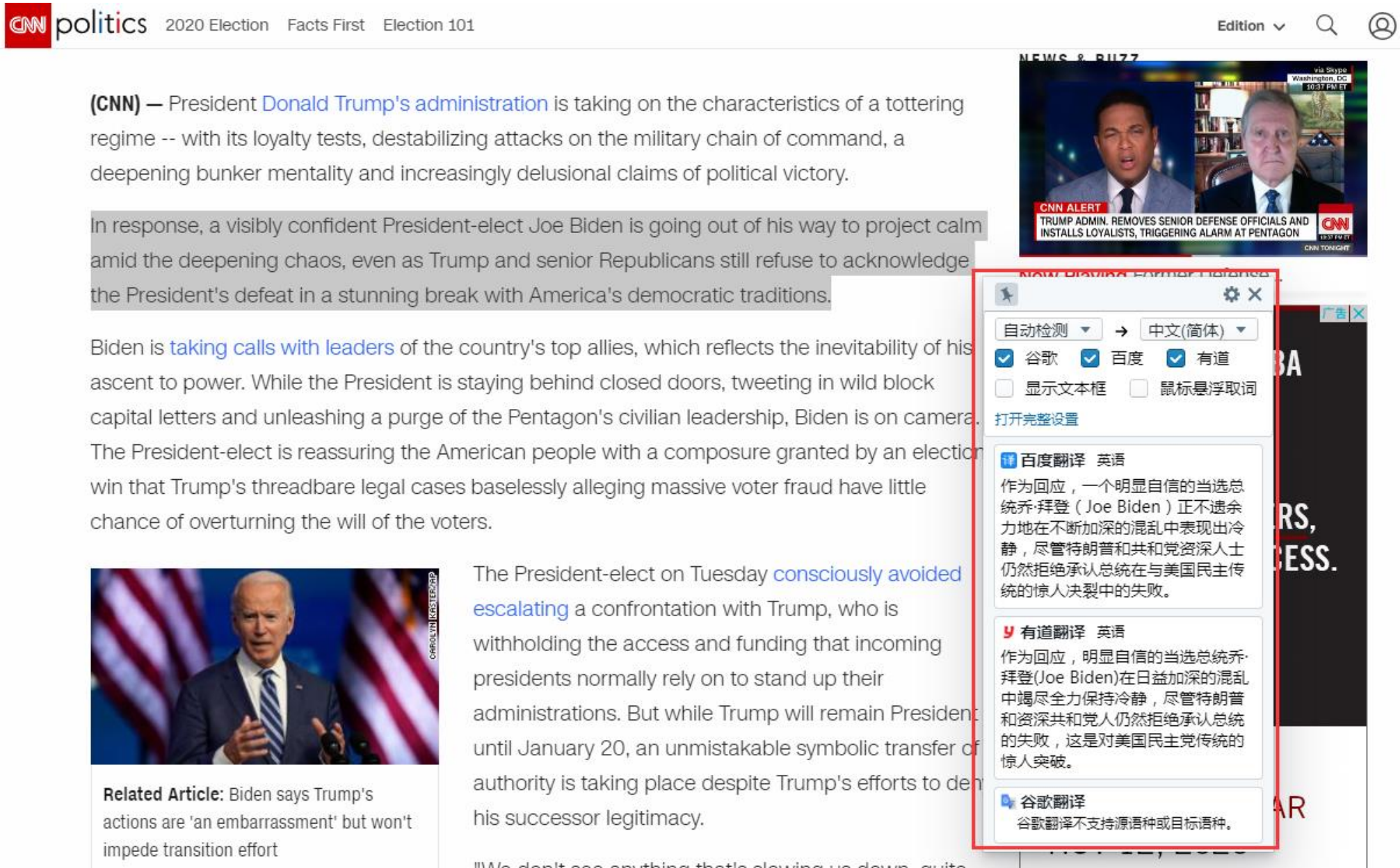

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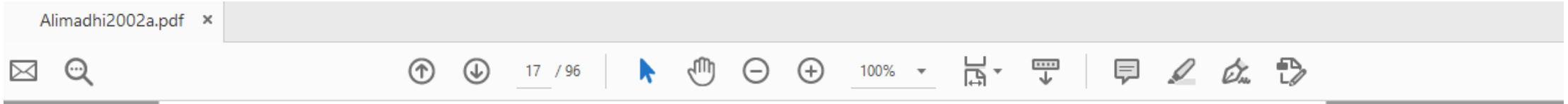

Mobile Internet: Wireless access to web-based interfaces of legacy simulations

2 MOBILE INTERNET OVERVIEW

2.1 What is mobile Internet?

Mobile Internet refers to the use of wireless communication to access network-based information and applications from mobile devices. Mobile Internet is sometimes referred to by the other terms such as *wireless Web* or *wireless Internet*. It is called *mobile* because the devices used to access network-based information are *mobile* and is called *wireless* because the information and applications are accessed through *wireless* networks

2.2 Mobile Devices

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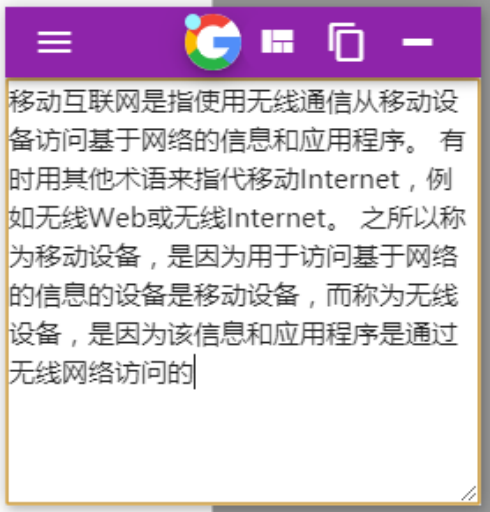

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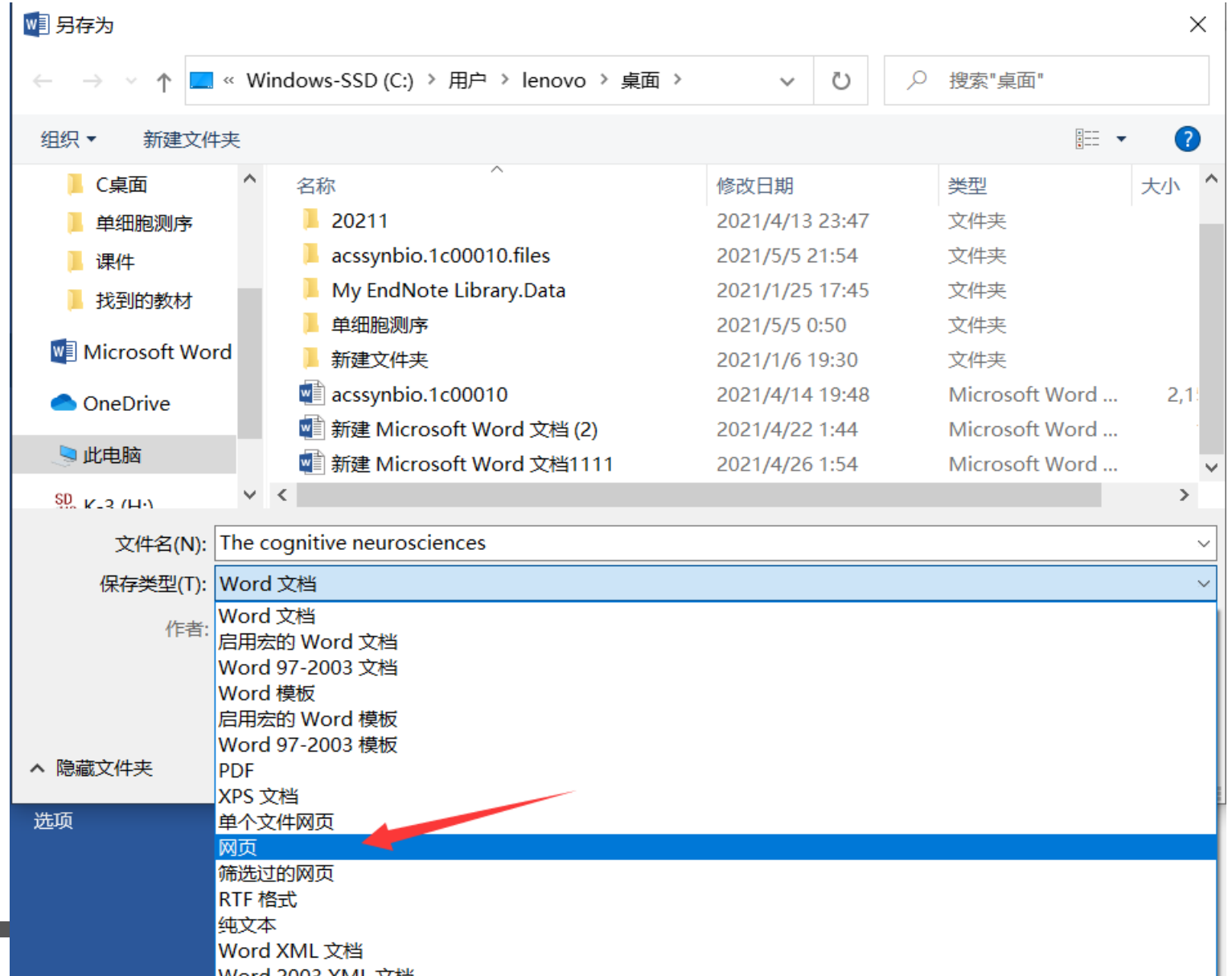

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“云知”课堂

Introduction

pasko rakic

There is no disagreement among neuroscientists that human cognitive abilities depend principally on the size and neuronal organization of the cerebral cortex. In the last 5 years, the field of developmental neurobiology has continued to make rapid progress toward understanding the genetic and molecular mechanisms underlying the development and evolution of this formidable organ. The chapters in this section summarize work elucidating the differences between human cortex and that of our nearest evolutionary relatives, as well as work illustrating the tight control over cortical patterning and the establishment of cortical connections. Although many have speculated whether the reductionist approaches of developmental neurobiology could ever be harmonized with the largely integrative approaches of cognitive neuroscience, it now appears as though that time is coming. In the last chapter, the known stages of human brain development are compared to the stages of human psychological development to argue that the biological changes associated with each stage can be mapped directly to cognitive changes. Thus, in this third edition of *The Cognitive Neurosciences*, it appears as though the gap between developmental neurobiology and developmental psychology has sufficiently narrowed that there is little doubt that it will eventually be bridged.

The chapters written from the developmental neurobiology perspective center on four major themes. The first chapter, by Preuss, addresses the question of what makes the human brain unique. Comparative studies have revealed that the human brain is distinguished by increased surface area, increased gestation time, and, some have argued, increased numbers of cortical areas, particularly in prefrontal cortex. Interestingly, the human brain does not differ from the brains of other primates in the number of genes regulating its development. However, recent work discussed by Preuss illustrates that certain genes appear to be up-regulated in the human brain, particularly those genes that increase the neuronal activity of pyramidal neurons. These increases in neuronal activity may be associated with increased cell signaling and bioenergetics. Thus, the human brain can be distinguished by changes in cortical structure as well as by increased genetic expression, resulting in changes in neuron dynamics.

The human brain can also be distinguished by its cortical neurogenesis, the second major theme of this section. Kornack points out that cell division during primate development is slower than in rodents (mice), but that the duration of neurogenesis is longer in primates. This subtle change in the temporal dynamics of neurogenesis could account for the expansion of the number of neurons in the upper cortical layers. Finally, it appears as though the human brain may also be distinguished by its inability to sustain neurogenesis throughout the life span. Although it has been argued that rodents and primates exhibit adult neurogenesis in the dentate gyrus and rostral migratory stream, the level of neuronal production is substantially smaller in the monkey than in the mouse, despite enlargement in overall size of the brain. Furthermore, recent studies in several laboratories have refuted findings from earlier and widely reported studies claiming that the primate cerebral cortex was also capable of generating new functional neurons into adulthood.

The third major theme has to do with human cortical patterning. Rakic and colleagues review recent work on the development of the cerebral cortex, specifically how neurons acquire their position by active migration from multiple sites of origin to their final, increasingly distant destinations. They have identified several families of genes and signaling molecules that control radial and tangential migration of neurons in the cerebral cortex. This work illustrates how understanding corticogenesis in the embryo provides hints of how spontaneous mutations that regulate the early developmental stages may have determined the species-specific size, parcellation of the map, and basic organization of the cerebral cortex. The next two chapters discuss the spatial control of neuronal migration, demonstrating that attractive and repulsive molecular cues can be found in gradients oriented along particular axes and functioning to shuttle neurons into their appropriate positions. Liu and Rao also discuss the temporal control of neuronal migration, demonstrating that the effect of these guidance molecules

3

The Cognitive Neurosciences

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介绍

帕斯科·拉契奇（Pasko rakic）

神经科学家之间没有分歧，即人类的认知能力主要取决于大脑皮层的大小和神经元组织。在过去的5年中，发育神经生物学领域继续取得对理解这个强大的器官的发展和演变背后的遗传和分子机制进展迅速。T他在本节的各章中总结了阐明人类皮质与我们最近的进化亲戚之间的差异的工作，并阐明了对皮质图案的严格控制和皮质连接的建立。尽管许多人推测发展神经生物学的还原论方法是否可以与认知神经科学的很大程度上整合的方法相协调，但现在看来时机已到。在上一章中，将人类大脑发育的已知阶段与人类心理发育的阶段进行了比较，以证明与每个阶段相关的生物学变化都可以直接映射到认知变化。T hus，在《认知神经科学》第三版中，似乎发育神经生物学和发育心理学之间的鸿沟已经足够缩小，几乎可以肯定它最终将被弥合。

牛逼从四大主题的发育神经生物学角度中心写他的章节。T他第一章，由普罗伊斯，地址是什么使人类大脑独特的问题。ç omparative研究表明，人的大脑是通过增加表面积来区分，增加了妊娠时间，而且，有些人认为，增加皮质区的数量，特别是在前额皮层。有趣的是，人类大脑与其他灵长类动物的大脑在调节其发育的基因数量上没有什么不同。但是，最近的工作讨论了

Preuss的论文证明了某些基因在人脑中似乎被上调，特别是那些增加锥体神经元神经元活性的基因。T在神经元活动HESE增加可能与增加的细胞信号传导和生物能相关联。T HUS，人脑可以通过在皮层结构以及通过增加的遗传表达的变化区分开来，从而导致神经元动力学的变化。

T他人类的大脑也可以通过它的皮质神经发生，本节的第二个主题区分开来。Kornack指出，灵长类动物发育过程中的细胞分裂比啮齿动物（小鼠）慢，但灵长类动物的神经发生持续时间更长。T他在神经发生的时间动态方面的细微变化可以解释皮质上层神经元数量的增加。最后，似乎人脑在其整个生命周期中都无法维持神经发生方面也可能与众不同。尽管已经有人认为啮齿动物和灵长类动物在齿状回和有喙的迁徙流中表现出成年神经发生，但是尽管大脑的整体面积增大了，但猴子的神经元产生水平却明显低于小鼠。此外，一些实验室的最新研究驳斥了先前和广泛报道的研究结果，这些研究声称灵长类动物大脑皮层也能够向成年期产生新的功能神经元。

T他第三大主题与人类皮层图案做。Rakic及其同事回顾了有关大脑皮层发育的最新工作，特别是神经元如何通过主动从多个来源站点迁移到最终的，越来越远的目的地来获得其位置。T哎已鉴定的基因的几个家庭和信号分子对照径向和在大脑皮质的神经元的切向迁移。T他的工作说明了在胚胎理解皮层如何提供如何自发调节的早期发育阶段的突变可能已经确定了种属特异性大小，地图的地块划分，以及大脑皮层的基本组织提示。T接下来的两章讨论了神经元迁移的空间控制，证明了在沿特定轴定向的渐变中可以发现有吸引力的和排斥的分子线索，并且可以将神经元穿梭到其适当的位置。Liu和Rao还讨论了神经元迁移的时间控制，证明了这些指导分子的作用

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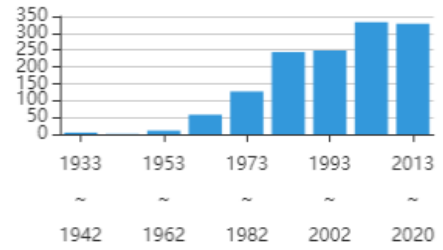

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Introduction

Earthquakes account for 60,000 deaths annually on average, 90% of which are from developing countries [Kenny 2009], and have caused $2.9+ Trillion US-dollars in damage since 1900 [Daniell et al. 2012]. To help mitigate the impacts of these disasters, Earthquake Early Warning (EEW) systems have been in development since 1991. EEW systems detect the arrivals of the first seismic waves and send an alarm to users before the strong ground shaking hits them. The physics of earthquakes puts limits on the amount of warning times that users will receive from these systems, and it has been shown that users can expect warning times of 1 minute to a few seconds depending on the ground shaking thresholds that they set [Minson et al. 2018]. This isn't much time, but it can give users enough time to seek shelter, shut down delicate equipment, allow hospitals and first responders to prepare for shaking, and allow utilities companies to shut down gas and electrical lines that can rupture and lead to fires in large earthquakes.

There are several countries that are currently operating EEW networks, but the high costs associated with the installation, maintenance, and monitoring of these networks are a prohibitive factor for developing countries to be able to implement them. The cost of installing

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地震平均每年造成6万人死亡，其中90%来自发展中国家[Kenny 2009]，自1900年以来已造成2.9万亿美元以上的损失[Daniell等人]。2012年]。为了帮助减轻这些灾害的影响，地震预警系统(EEW)自1991年以来一直在开发中。EEW系统检测到第一批地震波的到达，并在强烈的地面震动袭击用户之前向他们发送警报。地震的物理原理限制了用户将从这些系统接收到的警告时间，而且已经表明，用户可以预期1分钟到几秒的警告时间，这取决于他们设置的地面震动阈值[Minson等人]。2018年]。时间不多，但它可以让用户有足够的时间寻找避难所，关闭精密设备，让医院和急救人员做好防震准备，并允许公用事业公司关闭可能破裂并在大地震中引发火灾的燃气和电线。

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4、试验与结果（材料与方法）：
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结合文中的图表来看，可以快速理解试验结果，并在头脑中先行进行分析，看是否能与作者得出同样的结论，学习作者的思路与表达方式。

这是一篇文章的重点，需要精读，在理解作者讨论过程的同时，学习作者的讨论角度、思维方式、并问自己对此有何见解，有助于学术思维的养成。

通过参考文献进一步明确文章的内容，并可顺藤摸瓜获取更多信息做追踪研究。

Two-dimensional atomic crystals

题目

K. S. Novoselov*, D. Jiang*, F. Schedin*, T. J. Booth*, V. V. Khotkevich*, S. V. Morozov†, and A. K. Geim*‡

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Edited by T. Maurice Rice, Swiss Federal Institute of Technology, Zurich, Switzerland, and approved June 7, 2005 (received for review April 6, 2005)

We report free-standing atomic crystals that are strictly 2D and can be viewed as individual atomic planes pulled out of bulk crystals or as unrolled single-wall nanotubes. By using micromechanical cleavage, we have prepared and studied a variety of 2D crystals including single layers of boron nitride, graphene, various dichalcogenides, and complex oxides. These sheets (essentially gigantic 2D molecules unprotected from the immediate environment) are stable under ambient conditions, exhibit high crystal quality, and are continuous on a macroscopic scale.

文摘

graphene | layered material

Dimensionality is one of the most defining material parameters; the same chemical compound can exhibit dramatically different properties depending on whether it is arranged in a 0D, 1D, 2D, or 3D crystal structure. Although quasi-0D [e.g., cage molecules (1)], quasi-1D [e.g., nanotubes (2–4)], and, of course, 3D crystalline objects are well documented, dimensionality two is conspicuously absent among experimentally known crystals. On the other hand, there are many layered materials with strong in-plane bonds and weak, van der Waals-like coupling between layers. Because of this layered structure, it has long been tempting to try splitting such materials into individual atomic layers, although it remained unclear whether free-standing atomic layers could exist in principle [thin films become thermodynamically unstable (decompose or segregate) below a certain thickness, typically, of [illegible] thus far, most efforts have focused on [illegible] of strongly layered materials and, in par[illegible] intercalated graphite (5). During exfoliation, monolayers at some moment must separate from each other. However, no 2D crystals have ever been isolated from the resulting slurries, possibly because single layers appear only as a transient state and involve detachments over microscopic regions. Indeed, the latest studies of chemically exfoliated graphite have shown that its sediments consist of restacked and scrolled multilayer sheets rather than individual monolayers (6–8). An alternative approach has been the use of mechanical cleavage (9–14). The earlier reports described mechanically cleaved flakes consisting of tens and hundreds of layers, but the recently renewed interest in thin graphitic films led to flake materials with a thickness of just a few graphene layers (12–15). Now we have extended this approach to its ultimate limit: We have found single-layer crystallites from a large variety of strongly layered materials and shown that the resulting 2D crystals exhibit high crystal quality and macroscopic

引言

作者的研究及结论

Materials and Methods

材料与方法

Fig. 1 shows several examples of cleaved samples and illustrates that they are only one atomic layer thick but nearly macroscopic laterally. To extract such 2D crystallites, we used a simple but effective procedure. A fresh surface of a layered crystal was rubbed against another surface (virtually any solid surface is suitable), which left a variety of flakes attached to it (the rubbing process can be described as similar to "drawing by chalk on a blackboard"). Unexpectedly, among the resulting flakes we always found single layers. Their preliminary identification amid thicker flakes and other residue was done in an optical microscope. 2D crystallites become visible on top of an oxidized Si wafer (Fig. 1*d*), because even a monolayer adds up sufficiently to the optical path of reflected light so that the interference color changes with respect to the one of an empty substrate (phase contrast). The whole procedure takes literally half an hour to implement and identify probable 2D crystallites. Their further analysis was done by atomic force microscopy (AFM), for which single-layer crystals were selected as those exhibiting an apparent (12) thickness of approximately the interlayer distance in the corresponding 3D crystals.

Despite its simplicity, the described cleavage technique has several nonobvious features that are instructive to analyze, because it also allows one to understand why 2D crystals were not discovered earlier (e.g., see refs 9–11, 13, and 14, in which mechanically cleaved graphitic flakes 10–100 layers thick were reported). First, monolayers are in a great minority among accompanying thicker flakes. Second, unlike nanotubes, 2D crystals have no clear signatures in transmission electron microscopy (6–8). Third, monolayers are completely transparent to visible light and cannot be seen in an optical microscope on most substrates (e.g., on glass or metals). Fourth, AFM is currently the only method that allows definitive identification of single-layer crystals, but it has a very low throughput (especially for the case of the high-resolution imaging required), and in practice it would be impossible to find cleaved 2D crystallites by scanning surfaces at random. Finally, as mentioned earlier, it was not obvious that isolated atomic planes could survive without their parent crystals [for example, mechanically cleaved quasi-1D $NbSe_3$ crystallites ~100 nm in diameter were found to deteriorate rapidly (16)]. With the benefit of hindsight, the critical step that allowed us to find 2D crystallites is the discovered possibility of their tentative identification in an optical microscope when they are placed on top of an oxidized Si wafer.

Representative samples of several 2D materials (namely, of BN, MoS_2, $NbSe_2$, $Bi_2Sr_2CaCu_2O_x$, and graphite) obtained and identified by the procedures described above were investigated further by scanning tunneling, scanning electron, and high-resolution transmission electron microscopy (HRTEM). Fig. 2 shows examples of the obtained atomic-resolution images. These studies[¶] confirmed that the prepared 2D crystallites remained monocrystalline under ambient conditions and no degradation was noticed over periods of many weeks. Within experimental resolution, the crystal structure of isolated layers remained the same as for stacked layers within 3D crystals. Note that 2D $Bi_2Sr_2CaCu_2O_x$ showed a superstructure with a unidirectional modulation period of ~28 Å, which is similar to the superstructure observed in thinned samples of bulk $Bi_2Sr_2CaCu_2O_x$ prepared for HRTEM (17).

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Abbreviations: AFM, atomic force microscopy; HRTEM, high-resolution transmission electron microscopy.

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¶In the case of HRTEM studies [we used an FEI (Eindhoven, The Netherlands) Tecnai F30], the cleaved material was deposited directly on holey carbon films, which made the described route of preliminary identification of 2D crystallites in an optical microscope impossible. To find them on top of holey carbon among thicker flakes, a different procedure was developed. First, we used scanning electron microscopy imaging at low acceleration voltages (FEI Sirion at 500 V). Then, the flakes that were found most transparent in scanning electron microscopy were studied by AFM (i.e., directly on top of holey carbon) to define their thickness and select single-layer crystals.

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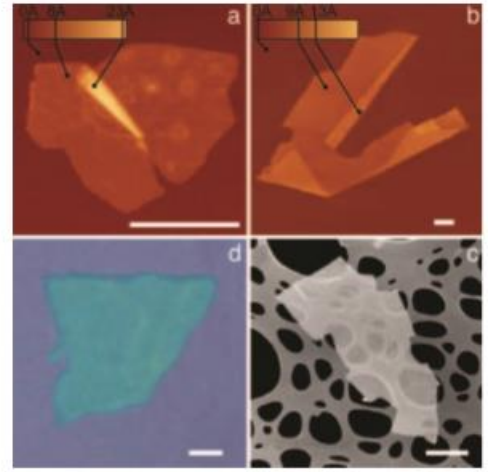

Fig. 1. 2D crystal matter. Single-layer crystallites of $NbSe_2$ (*a*), graphite (*b*), $Bi_2Sr_2CaCu_2O_x$ (*c*), and MoS_2 (*d*) visualized by AFM (*a* and *b*), by scanning electron microscopy (*c*), and in an optical microscope (*d*). (All scale bars: 1 μm.) The 2D crystallites are on top of an oxidized Si wafer (300 nm of thermal SiO_2) (*a*, *b*, and *d*) and on top of a holey carbon film (*c*). Note that 2D crystallites were often raised by an extra few angstroms above the supporting surface, probably because of a layer of absorbed water. In such cases, the pleated and folded regions seen on many AFM images and having the differential height matching the interlayer distance in the corresponding 3D crystals help to distinguish between double-layer crystals and true single sheets such as those shown here.

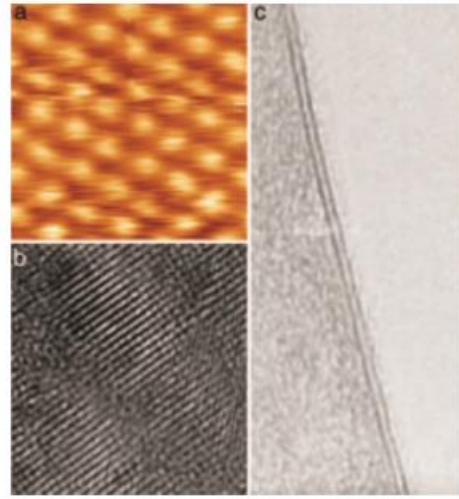

Fig. 2. Atomic-resolution images of 2D materials. (*a*) Unfiltered scanning tunneling microscopy image of the crystal lattice in the $NbSe_2$ monolayer on top of an oxidized Si wafer. Note that for the scanning tunneling microscopy measurements, an Au film was deposited around 2D crystallites to provide an electrical contact. (*b*) HRTEM images of the 2D $Bi_2Sr_2CaCu_2O_x$ crystal shown in Fig. 1*c*. (*c*) HRTEM image of a double-layer MoS_2. This image is shown to make a connection between our approach based on AFM identification of 2D crystals and the traditional HRTEM approach used for quasi-1D crystals (all nanotubes were first found by using HRTEM, where dark lines indicating the nanotube's walls parallel to the electron beam are easily visible). No similar signature exists for 2D crystals (see refs. 6–8), and we also found it difficult to align 2D samples exactly parallel to the electron beam. However, for two-layer crystals, their thickness is easily identifiable not only in AFM but also in HRTEM because of folded regions seen as two dark lines (in the case of *c*, the separation is ~6.5 Å, in agreement with the interlayer distance in bulk MoS_2). We occasionally observed short dark lines (compare with ref. 8) that might be folded monolayers, but no independent proof for this (e.g., by simultaneous AFM studies) has been obtained yet.

Results and Discussion

We also investigated electrical conductivity of the selected five 2D materials to assess their microscopic quality and macroscopic continuity. This was done by using field-effect-transistor-like devices such as the one shown in Fig. 3 *Inset* (devices were prepared by electron-beam lithography). 2D $Bi_2Sr_2CaCu_2O_x$ and BN were found to be highly insulating, and no induced conductivity was detected even at gate electric fields as high as 0.3 V/nm (i.e., close to the electrical breakdown of SiO_2), which probably indicates that band gaps in these 2D materials are larger than in SiO_2. We also tried annealing single-layer $Bi_2Sr_2CaCu_2O_x$ in oxygen, but the crystals always remained insulating.

On the contrary, 2D graphite (graphene) and both 2D dichalcogenides were found to be metallic and exhibited a pronounced electric field effect (Fig. 3). Their carrier mobilities were determined as $\mu = \sigma(V_g)/en(V_g)$, where e is the electron charge and $n \propto V_g$ is the carrier concentration induced by gate voltage V_g ($n \sim 7.2 \times 10^{10}$ cm^{-2}/V for 300-nm SiO_2). As seen in Fig. 3, σ was proportional to V_g over large intervals of n, showing that μ is independent of carrier concentration. Furthermore, by extrapolating the experimental dependences $\sigma(V_g)$ to zero σ, we could determine initial ($V_g = 0$) concentrations of charge carriers and their type. Graphene behaved rather similarly to few-layer graphitic samples reported in ref. 12 and is either a shallow-gap semiconductor or a small-overlap semimetal, in which positive and negative gate voltages induce 2D electrons and holes, respectively, in concentrations up to ~10^{13} cm^{-2}. Graphene exhibited typical values of μ between 2,000 and 5,000 cm^2/Vs. For 2D $NbSe_2$ and MoS_2, we measured mobilities between 0.5 and 3 cm^2/Vs for different samples, in agreement with mobilities for the corresponding 3D crystals at room temperature. Both 2D dichalcogenides were found to be electron

结果与讨论

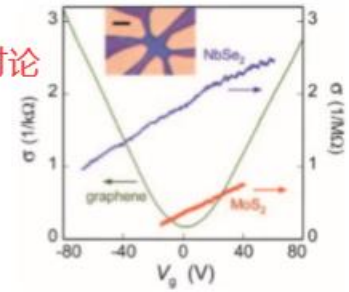

Fig. 3. Electric field effect in single-atomic-sheet crystals. Changes in electrical conductivity σ of 2D $NbSe_2$, 2D MoS_2, and graphene as a function of gate voltage are shown (300 K). (*Inset*) Our typical devices used for such measurements: It is an optical image (in white light) of 2D $NbSe_2$ on top of an oxidized Si wafer (used as a gate electrode) with a set of Au contacts. The crystal is seen as a bluer region in the center. (Scale bar: 5 μm.)

结论

conductors with $n \approx 10^{12}$ to 10^{13} cm^{-2}. Detailed studies of their conductivities as a function of temperature and V_g revealed that 2D MoS_2 was a heavily doped semiconductor with an activation gap of $\geq$0.6 eV, whereas $NbSe_2$ was a semimetal. The found electron concentration in 2D $NbSe_2$ is two orders of magnitude smaller than carrier concentrations per monolayer in 3D $NbSe_2$, which indicates significant changes in the energy spectrum of $NbSe_2$ from a normal metal in 3D to a semimetal in 2D.

In conclusion, we have demonstrated the existence of 2D atomic crystals that can be prepared by cleavage from most strongly layered materials. It is most unexpected, if not counterintuitive, that isolated 2D crystals can be stable at room temperature and in air, leaving aside the fact that they maintain macroscopic continuity and such high quality that their carrier mobilities remain almost unaffected. The found class of 2D crystals offers a wide choice of new materials parameters for possible applications and promises a wealth of new phenomena usually abundant in 2D systems. We believe that, once investigated and understood, 2D crystals can also be grown in large sizes required for industrial applications, matching the progress achieved recently for the case of single-wall nanotubes (18).

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致谢

1. Kroto, H. W., Fischer, J. E. & Cox, D. E., eds. (1993) *The Fullerenes* (Pergamon, Oxford).
2. Iijima, S. (1991) *Nature* **354,** 56–58.
3. Chopra, N. G., Luyken, R. J., Cherrey, K., Crespi, V. H., Cohen, M. L., Louie, S. G. & Zettl, A. (1995) *Science* **269,** 966–967.
4. Tenne, R., Margulis, L., Genut, M. & Hodes, G. (1992) *Nature* **360,** 444–446.
5. Dresselhaus, M. S. & Dresselhaus, G. (2002) *Adv. Phys.* **51,** 1–186.
6. Shioyama, H. (2001) *J. Mater. Sci. Lett.* **20,** 499–500.
7. Viculis, L. M., Mack, J. J. & Kaner, R. B. (2003) *Science* **299,** 1361.
8. Horiuchi, S., Gotou, T., Fujiwara, M., Asaka, T., Yokosawa, T. & Matsui, Y. (2004) *Appl. Phys. Lett.* **84,** 2403–2405.
9. Ebbesen, T. W. & Hiura, H. (1995) *Adv. Mater.* **7,** 582–586.
10. Ohashi, Y., Hironaka, T., Kubo, T. & Shiiki, K. (1997) *Tanso* **180,** 235–238.
11. Lu, X., Huang, H., Nemchuk, N. & Ruoff, R. S. (1999) *Appl. Phys. Lett.* **75,** 193–195.
12. Novoselov, K. S., Geim, A. K., Morozov, S. V., Jiang, D., Zhang, Y., Dubonos, S. V., Grigorieva, I. V. & Firsov, A. A. (2004) *Science* **306,** 666–669.
13. Zhang, Y., Small, J. P., Amori, M. E. S. & Kim, P. (2005) *Appl. Phys. Lett.* **86,** 073104.
14. Bunch, J. S., Yaish, Y., Brink, M., Bolotin, K. & McEuen, P. L. (2005) *Nano Lett.* **5,** 287–290.
15. Berger, C., Song, Z., Li, T., Li, X., Ogbazghi, A. Y., Feng, R., Dai, Z., Marchenkov, A. N., Conrad, E. H., First P. N. & de Meer, W. A. (2004) *J. Phys. Chem. B* **108,** 19912–19916.
16. Slot, E., Holst, M. A., van der Zant, H. S. J. & Zaitzev-Zotov, S. V. (2004) *Phys. Rev. Lett.* **93,** 176602.
17. Shaw, T. M., Shivashankar, S. A., La Placa, S. J., Cuomo, J. J., McGuire, T. R., Roy, R. A., Kelleher, K. H. & Yee, D. S. (1988) *Phys. Rev. B Condens. Matter.* **37,** 9856–9859.
18. Zheng, L. X., O'Connell, M. J., Doorn, S. K., Liao, X. Z., Zhao, Y. H., Akhadov, E. A., Hoffbauer, M. A., Roop, B. J., Jia, Q. X., Dye, R. C., *et al.* (2004) *Nat. Mater.* **3,** 673–676.

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03

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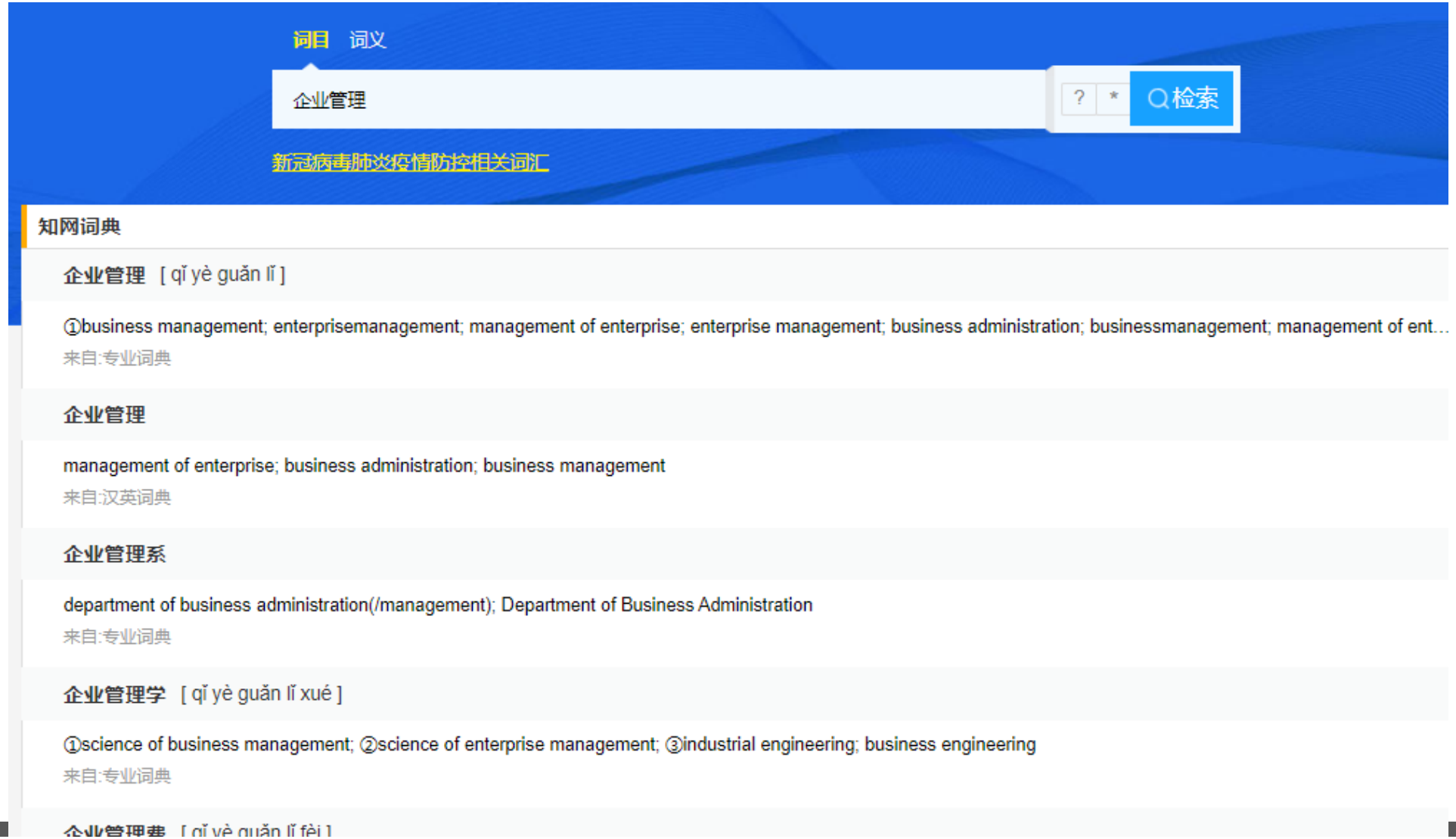
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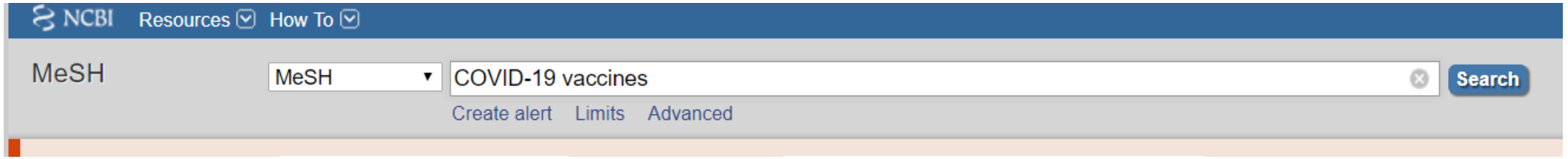

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