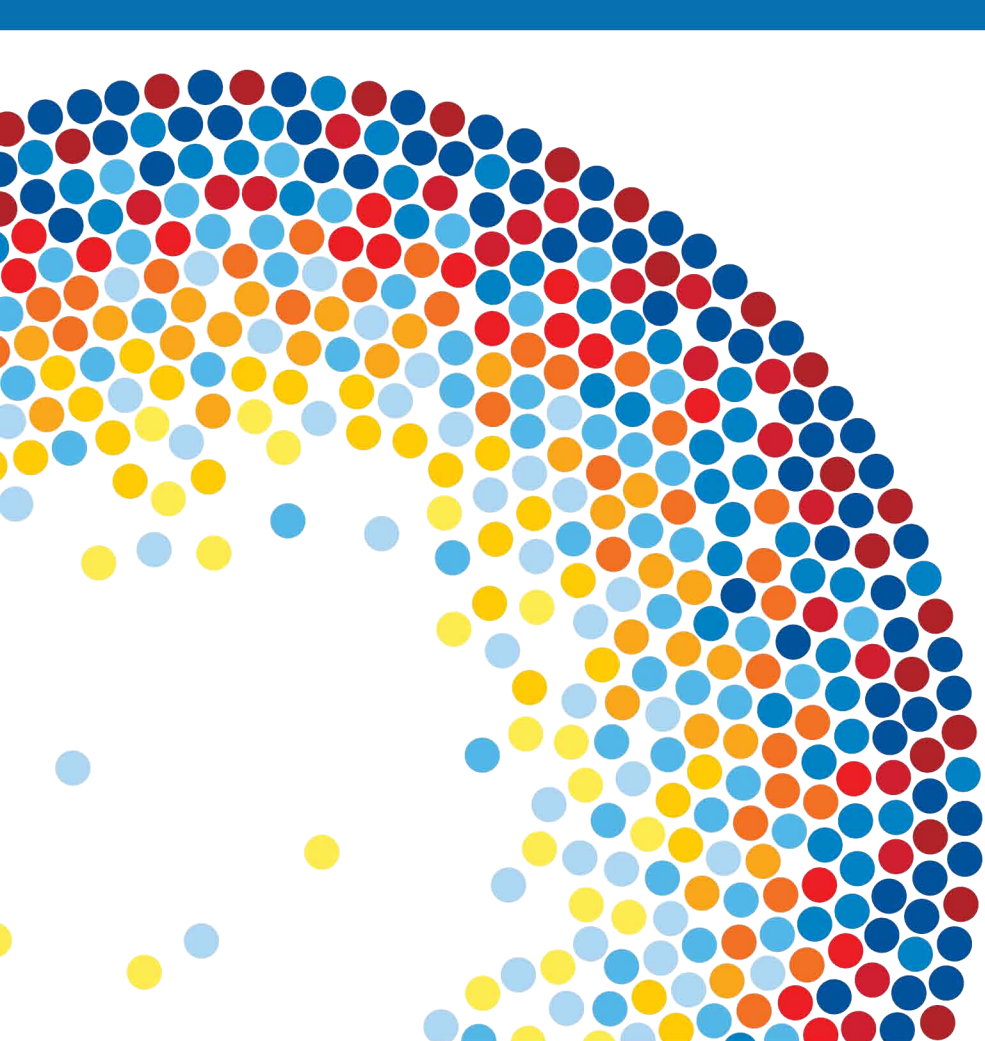




IOPscience

用户指南

iopscience.org

不断探索……

IOPscience 是一项网上服务，专门登载由 IOP 出版社出版的期刊内容。*IOPscience* 以先进的创新技术为研究者们提供科学、技术和医学方面的资料。

articleevolution™

Article evolution 是一项持续进行的新项目，为研究论文在 *IOPscience* 的网上登载提供更优化的渠道，并助您以各种新颖的方式开展研究互动。

该项目第一阶段实现的功能已经使您可以直接用网页浏览 *IOPscience* 上的新文章。

您还可以使用许多新的功能，例如，放大或缩小图像、观看摘要录像。MathJax 技术也已被采纳用于更优化地登载数学资料，同时，您也可以应用移动浏览来阅读摘要和文章各页。

若需了解更多信息，请访问 iopscience.org/article-evolution

有了 IOPscience，您就可以：

- 加快研究速度：强化的搜索过滤系统帮助您更快地找到相关资料
- 节省时间：重回之前搜索结果、为您钟爱的文章加标签
- 与时俱进：在新内容发表后，收取 RSS 即时信息和电邮提醒
- 互动与分享：可做社交书签以分享文章
- 个性化：为信息提醒设置个人化方式、保存感兴趣的文章，并可阅读专业领域新发表的论文/文章

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我的 IOPscience (iopscience.org/myiopscience)	第 10 页
IOPscience extra (iopscience.org/extra)	第 11 页

The screenshot shows the IOPscience homepage layout. Red lines connect the following elements to the text on the right:

- Quick search (快速搜索)**: Points to the search bar at the top right of the page.
- Latest articles (最新文章)**: Points to the 'Latest articles' tab in the 'Latest articles | Most read | Most cited | Latest news' section.
- Most read (最多阅读的)**: Points to the 'Most read' tab in the same section.
- Latest news (最新消息)**: Points to the 'Latest news' tab in the same section.
- Most cited (最多引述的)**: Points to the 'Most cited' tab in the same section.

Other visible elements on the page include:

- My IOPscience article tags**: A list of tags like 'photon', 'metal carbon spinors', 'high-energy', etc.
- Impact Factors**: A section for the 2012 Impact Factors published by Thomson Reuters.
- View by subject**: A dropdown menu for filtering articles by subject.
- Footer**: Copyright information and links to help, site map, privacy policy, terms & conditions, and disclaimer.

Quick search (快速搜索)

此栏为主页上或每一页右上方的专题搜索。其缺省值就是按题搜索，不过您也可以进行修改，使其可以根据作者、所在单位或所有领域和日期搜索。

Latest articles (最新文章)

阅读载于 IOPscience 上的最新文章。

Most read (最多阅读的)

此处登载 IOPscience 上被阅读次数最多的文章。

Latest news (最新消息)

与时俱进地从其他 IOP 出版社网站上了解最新的科技发展。

Most cited (最多引述的)

在此浏览过去两年中被引述最多的 IOPscience 各网页上的文章。

搜索——iopscience.org/search

点击Article Lookup栏中最下方的More Search Options

Search field (搜索领域)

您可以挑选文章名/摘要、作者、所在单位、所有领域、全文以及 PACS/ MSC 编码来过滤搜索。此外, 您也可以使用时间段、主题和期刊来过滤搜索。

Search results (搜索结果)

您会在此处立即看到有多少搜索结果。

Use the PACS or MSC code

(使用 PACS 或 MSC 编码)

在搜索框中键入 PACS 或 MSC 编码或打入您的搜索关键词以找到相关编码。

若想了解更多有关 PACS 和 MSC 编码方面的信息, 请访问 www.aip.org/pacs 和 www.ams.org/msc。

Filter by subject or journal

(按主题或期刊过滤)

在相关方框打勾, 可以使您快速过滤您需要的信息。

The screenshot shows the IOPscience search page. Red lines connect the text blocks to the following features:

- Search field (搜索领域):** Points to the search bar at the top and the 'Search' button.
- Search results (搜索结果):** Points to the 'Search' button on the right side of the page.
- Use the PACS or MSC code (使用 PACS 或 MSC 编码):** Points to the 'PACS/ MSC search' section on the right.
- Filter by subject or journal (按主题或期刊过滤):** Points to the 'Subjects' and 'Journals' filter sections at the bottom.

The interface includes a header with 'IOPscience', 'Journals', and 'iopscience.org'. The main search area has a text input, a dropdown for 'Title/Abstract', a date range selector, and a 'Search now' button. The right sidebar shows '0 IOPscience result(s)' and a 'PACS/ MSC search' section with a text input and a 'Search' button. The bottom section contains two columns of filters: 'Subjects' and 'Journals', each with a list of categories and checkboxes.

搜索——iopscience.org/search

您可以从搜索结果继续深入地查找您确切需要的资料。

IOPscience Journals iopscience.org

Search Results

Your search (109) Full text (738) e-prints (596) News and analysis (3) ProQuest (13) Physics World Archive (478)

(Field: Title/Abstract: antimatter)

Filter results by:

- PACS: 95.35.Cq (24), 95.35.+d (19), 11.30.Er (14)
- Dates: 2011 (9), 2010 (8), 2009 (10)
- Subjects: Particle physics and field theory (50), Astrophysics and astroparticles (43), Gravitation and cosmology (34)
- Journals: Journal of Physics: Conference Series (20), Physics Education (18), Journal of Cosmology and Astroparticle Physics (19)
- Authors: R. L. Golden (4), J. F. Ormes (4), R. E. Streitmatter (4)

Full text search within results: **Filter Now**

Export Results Ordered by: Publication Date Page: 1 of 11

☐ Propagation of Gaussian wave packets in left-handed media exhibits negative transmission times and optical antimatter behavior
P. Pommerehne
2011 EPL 95 17004 doi:10.1209/0295-5075/95/17004
[View extract](#)

☐ Baryon asymmetry resulting from a quantum phase transition in the early universe
V. R. Shugrin, G. S. Japaridze, M. Ya. Amusia, A. Z. Mousine and K. G. Popov
2011 EPL 94 09001 doi:10.1209/0295-5075/94/09001
[View extract](#)

☐ Antimatter Production in Supernova Remnants
M. Kachelrieß, S. Ostapchenko and R. Tomas
2011 ApJ 733 119 doi:10.1088/0004-637X/733/2/119
[View extract](#)

Tag this article Full text PDF (267 KB) View as HTML

Filter results (过滤结果)

您可以扩展每一个过滤类别（如，PACS 编码、日期、主题、期刊和作者）。

您也可以在最初结果中键入全文搜索词。从而细化您的搜索。

Search results (搜索结果)

您可以保存搜索结果，以便之后再重新直接进入。您也可以设置一个 RSS 即时信息收取和电邮提醒，以获知满足您搜索标准的新结果。

Authors (作者)

您可以点击作者名字以链接到该作者的其他文章和论文。

Export selected results (输出挑选结果)

您可以用自己喜欢的制式将部分或全部搜索结果输出。

Tag this article (为文章加贴标签)

您可以自己的用词来为文章加贴标签以备后用。

搜索——iopscience.org/search

在搜索功能中，您还可以扩大搜索范围，以查找更多内容。

一次性搜索

一次性搜索会给您四套结果：

- 您的搜索
- 全文：跨越所有文章领域的搜索
- 电子印刷版：由 eprintweb.org（建立在康奈尔大学 arXiv.org 网站上的一个免费电子印刷服务网站）提供。
- 新闻与分析：来自于其他 IOP 出版社的网站。

如果贵机构是 *IOPscience extra*，（IOPscience 增量版）的订户的话，您还可以在 ProQuest 功能栏和 Physics World（《物理世界》）资料栏中获得更多内容。

若需了解更多信息，请参阅第 11 页。

The screenshot displays the IOPscience search interface. At the top, there's a search bar with the text 'Search' and a dropdown menu for 'Article lookup'. Below this, the 'Search Results' section shows the search criteria: '(Field: Title/Abstract: black hole)'. The results are categorized into five tabs: 'Your search (5388)', 'Full text (14820)', 'e-prints (14820)', 'News and analysis (20)', 'ProQuest (400)', and 'Physics World Archive (471)'. A red box highlights the 'Your search' tab. The 'Filter results by:' section lists various filters: PACS (04.70, 1106), Dates (2011, 314), Subjects (Gravitation and cosmology, Astrophysics and astroparticles), Journals (The Astrophysical Journal, Classical and Quantum Gravity), and Authors (Luis C. Ho, Ramesh Narayan, Jeffrey E. McClintock). A red box highlights the 'Dates' filter. The 'Full text search within results:' field is also visible. The 'Export Results' section shows the search results ordered by 'Publication Date'. The results list includes articles like 'Far-infrared and Molecular CO Emission from the Host Galaxies of Faint Quasars at z ~ 6' and 'On the Constancy of the Photon Index of X-Ray Spectra of 4U 1728-34 through All Spectral States'. A red box highlights the 'Far-infrared and Molecular CO Emission from the Host Galaxies of Faint Quasars at z ~ 6' article. The 'Page: 1 of 539' is shown at the bottom right.

文章选集——iopscience.org/collections

点击期刊下拉菜单的第二个选项，您可以在此处即时地看到最新收集到的高质量文章。

IOPscience Journals **iopscience.org** Search Article lookup

IOPcollections

These special collections provide instant access to IOP articles chosen for their quality and recency. Use the filters to refine your results for each collection.

Collection type:

- IOPselect**
- this month's articles
- featured articles
- review articles

IOPselect (609) RSS this search

Articles from the last 12 months that have been chosen by our editor's for their novelty, significance and potential impact on future research. All select articles are first published in the source journals.

Select All Journals
Select All Subjects
All Dates
Go

Export results 1 of 61

- ☐ **Reference nano-dimensional metrology by scanning transmission electron microscopy**
Gaoliang Dai, Markus Heidelmann, Christian Kübel, Robby Prang, Jens Fluegge and Harald Bosse
2013 *Meas. Sci. Technol.* **24** 085001 doi:10.1088/0957-0233/24/8/085001
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[Enhanced article HTML](#)
- ☐ **Repeat scanning technology for laser ultrasonic propagation imaging**
Jung-Ryul Lee, See Yenn Chong, Ntarm Sunuwar and Chan Yik Park
2013 *Meas. Sci. Technol.* **24** 085201 doi:10.1088/0957-0233/24/8/085201
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- ☐ **Fermions in synthetic non-Abelian gauge potentials: rashbon condensates to novel Hamiltonians**
Vijay B Shenoy and Jayantha P Vyasankere
2013 *J. Phys. B: At. Mol. Opt. Phys.* **46** 134009 doi:10.1088/0953-4075/46/13/134009
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- ☐ **Realizing non-Abelian gauge potentials in optical square lattices: an application to atomic Chern insulators**
N Goldman, F Gerbier and M Lewenstein
2013 *J. Phys. B: At. Mol. Opt. Phys.* **46** 134010 doi:10.1088/0953-4075/46/13/134010
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[Enhanced article HTML](#)
- ☐ **Non-Abelian gauge potentials in Rydberg systems**
B Zygelman
2013 *J. Phys. B: At. Mol. Opt. Phys.* **46** 134011 doi:10.1088/0953-4075/46/13/134011
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[Enhanced article HTML](#)

1 of 61

- **IOPselect**——由本部编辑根据新颖性、深刻性以及对未来研究的潜在影响力选择的文集。
- **本月文章**——可免费阅读上月发表的文章。
- **专题文章**——受极大关注的新近文章。
- **评论文章**——所有发表在 *IOPscience* 上的评论文章。

期刊首页——iopscience.org/journals

点击页面上方Journals以进入期刊栏。您可以在此处找到一份列有 60 多种 IOP 出版社出版的期刊清单，而且您可以点击任一标题阅读其内容。

设置一个 RSS 即时信息收取或电邮提醒以收取最新内容。

使用 Volume listings（期刊清单）来查找特定内容或浏览期刊资料库。

直接链接进入完整的最新一期。

看看作者是怎么说的：

- “LabTalk”/“Insights”——作者们以简短新闻形式，展示其具突破意义的作品。
- Video abstracts（摘要录像）——使研究者们能利用免费观看的录像分享技术，来超越书面文章的局限。

这些服务项目现仅限于部分期刊。

The screenshot displays the IOPscience website for the Journal of Physics: Condensed Matter. The header includes the IOPscience logo, navigation links for Journals and iopscience.org, a search bar, and an Article lookup dropdown. The main content area is divided into several sections:

- Journal of Physics: Condensed Matter**: The journal title is prominently displayed at the top.
- Volume listings**: A section on the right side of the main content area, featuring a dropdown menu for the current volume (Number 30, 31 July 2013) and a Go button. Below this, there is a section for the Journal archive (Vol 25, 2013) and a section for Forthcoming articles.
- Submit an article**: A link to submit an article is provided.
- Latest issue (Complete)**: Information about the latest issue (Number 27, 10 July 2013) is shown.
- Open Issue**: Information about the open issue (Number 30, 31 July 2013) is shown.
- Open Issue**: Information about the open issue (Number 28, 17 July 2013) is shown.
- Editorial & news**: A section on the left side of the main content area, featuring a link to the Most cited papers and a link to the Highlights of 2012.
- LabTalk**: A section on the right side of the main content area, featuring a link to the Most recent and a link to the Most read.
- Most cited papers**: A section on the left side of the main content area, featuring a list of the top 10 most cited papers from 2011-2012.
- Highlights of 2012**: A section on the left side of the main content area, featuring a list of highlights from 2012.
- Multiferroics**: A section on the left side of the main content area, featuring a link to the collection of the most influential and noteworthy multiferroic papers.
- Graphene**: A section on the left side of the main content area, featuring a link to the latest developments in the exciting field of graphene.
- Topical Review Collection—free to read**: A section on the left side of the main content area, featuring a link to the collection of topical reviews.
- Authors | Referees**: A section on the right side of the main content area, featuring a link to the authors and referees.
- Journal links**: A section on the right side of the main content area, featuring a list of links to various journal resources.
- 2.355 2012 Impact Factor**: A section on the right side of the main content area, featuring the journal's impact factor.

摘要页

在期刊栏目中，您还能从任一期刊中选择某一篇文章详细阅读。

[Journals](#)
[|](#)
[iopsciencecentral](#)

Journal of Physics: Condensed Matter

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Journal of Physics: Condensed Matter > Volume 22 > Number 44

V Kanchana et al 2010 *J. Phys.: Condens. Matter* **22** 44502 doi:10.1088/0953-8984/22/44/44502

Density functional study of the electronic structure and lattice dynamics of SrCl₂

V Kanchana^{1,2,6}, G Vaitheeswaran^{1,3}, P Souvatzis⁴, O Eriksson⁴ and S Lebegue⁵

[Show affiliations](#)

Tag this article
 Full text PDF (257 KB)

Abstract

References

Cited By

Metrics

A theoretical study of the structural, electronic, optical and lattice dynamical properties of SrCl₂ in the cubic fluorite structure has been performed using first-principles calculations. The calculated ground state and elastic properties are in good agreement with the experiments. The calculated band gap is underestimated within the generalized gradient approximation for the exchange and correlation functional. GW calculations have been performed in order to improve the band gap and good agreement with the experiment is obtained. The phonon dispersion relations are discussed in detail in relation to the ground state and elastic properties. Also, the optical properties are computed with DFT corrected by the GW approximation.

PACS	71.20.Ps Other inorganic compounds 63.20.Dh. Phonon states and bands, normal modes, and phonon dispersion 81.40.-J Elasticity and anelasticity, stress-strain relations 78.20.Ci Optical constants (including refractive index, complex dielectric constant, absorption, reflection and transmission coefficients, emissivity) 62.20.Da Elasticity 71.15.Mb Density functional theory, local density approximation, gradient and other corrections
Subjects	Condensed matter: electrical, magnetic and optical Condensed matter: structural, mechanical & thermal
Dates	Issue 44 (10 October 2010) Received 16 August 2010, in final form 12 September 2010 Published 22 October 2010
Metrics	Total article downloads: 275 More metrics
Permissions	Get permission to re-use this article

Your last 10 viewed

- Density functional study of the electronic structure and lattice dynamics of SrCl₂
V Kanchana et al 2010 *J. Phys.: Condens. Matter* **22** 44502
- Interaction between single-particle and plasmonic excitations in the electronic response of thin Al films

Search

Article lookup

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- FP-APW-V to calculations of the electronic and optical properties of alkali metal sulfides under pressure
- Density-functional theory investigation of electronic structure, elastic properties, optical properties, and lattice dynamics of Ba₂NiWO₆

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- Synthesis and electronic properties of chemically functionalized graphene on metal surfaces
- 1D graphene-like silicon systems: silicene nano-ribbons

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All journals

☒ This journal only

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Export

BibTeX format (bib)

Abstract

Related articles (用户还阅读过的)

此功能还会列出一份其他读过这篇文章的用户“还阅读过的”内容清单。

More content (更多内容)

这些栏目使您可以了解更多有关这篇您正在阅读的文章的信息:

- **参考资料**——进入并阅读被引述的文章。
- **被引述**——链接进入那些引述过这篇文章的其他文章。
- **补充数据**——进入与这篇文章相关的录像、图像以及其他额外文档。

Related review articles (相关评论文章)

浏览与此研究相关的评论文章,以便深入了解该领域的重大发展趋势。相关的评论文章是基于 PACS/MSD 编码选择的,因此,均为近三年内发表的。

Bookmark (书签)

通过社交书签加以储存、分类、分享和搜索链接，是一种极为受欢迎的方式。

我的 IOPscience — iopscience.org/myiopscience

创建一个我的 IOPscience (My IOPscience) 账户便可将您的搜索个性化。登录 iopscience.org 后, 您会在左上方选项中 找到想要的此类方案。

Tagged articles (加标签的文章)

您可在两个地方为有兴趣的文章加标签。
tag-cloud (标签-云) 提供清晰的视觉效果。

My searches (我的搜索)

保存您之前的搜索结果并设置提醒功能, 以便在出现新结果时通知您。

My alerts (我的提醒)

设置电邮提醒, 以便在出版新文章时通知您。

Downloads (下载内容)

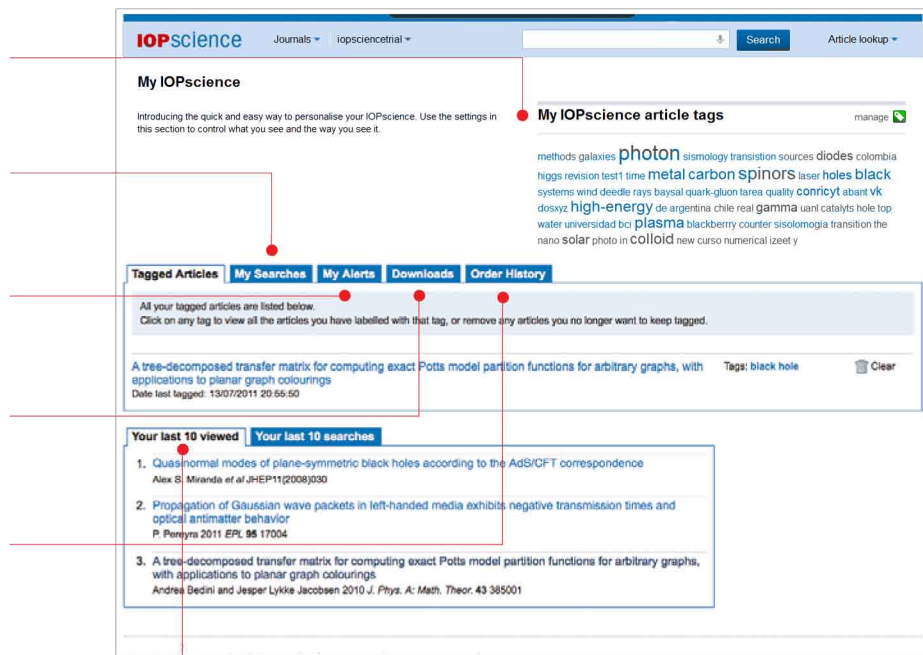
浏览过去三个月中您下载的文章。

Order history (订单历史)

显示您所购的所有文章的清单。

Keep track (保持记录)

参阅您最后浏览过的 10 篇文章摘要, 以及您最后 10 次搜索内容。





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On average around 2200 full-text articles are added every month via technical reports, review articles, conference proceedings and special issues as well as regular papers.

Our complete archive - every article published since 1874

Comprising more than 215,000 articles, this provides an indispensable resource for the physics community, enabling researchers to track the progression of important research.

IOPscience extra 是我们仅为电子版的白金级订户提供的服务项目，您可以由此得到最广泛的 IOP 出版社特别出版的内容，包括：

- 60 多种富享盛名的期刊杂志
- 可追溯 130 多年的完整资料库
- 每月添加的 2,200 多篇全文文章

IOPscience extra 还专门提供独享的如下特权：

- 14 年来出版的 *ProQuest* 论文和学术文章，并附有 IOP 出版社的同行评论期刊内容。
- *Physics World*（《物理世界》）资料库，收有自该杂志首次于 1998 年创办以来每一期《物理世界》中的 11,000 多条\篇新闻、专题文章、注释和评论文章。

举个例子，快速搜索“optics”（“光学”），得到以下结果：

- 4,200 多篇 *ProQuest* 论文和学术文章——
仅向 *IOPscience extra* 顾客提供
- 2,200 多篇 *Physics World*（《物理世界》）资料库文章——
仅向 *IOPscience extra* 顾客提供
- 6,800 多篇同行评论期刊文章
- 3,000 多篇由 arXiv.org 网站提供的电子印刷版文章
- 超过 42 条\篇新闻和分析文章

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联系信息

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封面图片: 环形系统中成模的自动交互作用溶剂的即时快照。总体溶剂显示导致涡状动态的共同性状。

D Grossman, **IS Aranson** 和 **E BenJacob** 2008 年 *New Journal of Physics* (《新物理期刊》) **10** 023036。

由 Frédérique Swist 美术展示。

