



纳米科技自然科研解决新方案

- 一站式检索获取纳米科技相关文献
- 快速洞悉与输入检索词高度相关的内容
- 提供基于权威期刊, 经筛选整理的纳米材料汇总

纳米材料汇总包括



纳米结构类型



尺寸



成分



性质



应用



制备



表征



毒性



专利声明/文献

nano.nature.com 帮助科研人员：

无需查看全文即可精准找到
纳米科技相关信息

不同信息来源中类似的纳米
材料的有关数据经归纳汇总

纳米材料的多种制备步骤可
轻松获取并实现视觉化呈现

快速获取具有特定性质和
应用的纳米材料

智能检索

Nano通过纳米专有功能，整合了数据库和A&I检索工具的主要功能和双重优势

The screenshot shows the Nano search interface. On the left, there are several filter panels: 'Nanostructure' (e.g., Nanostructured materials: 78,508), 'Publisher' (Elsevier: 146,299), 'Journal' (RSC Advances: 31,309), 'Size' (0 - 100,000 nm), 'Property' (e.g., Current density: 11,851), 'Application' (Power generation: 18,889), and 'Publication Year' (2015: 85,365). In the center, a search bar contains 'multilayer'. Below it, a list of suggestions includes 'multilayer', 'multilayer graphene', 'multilayered graphene', 'multilayer graphene sheets', 'multilayered mos2', 'multilayer mos2 flakes', 'multilayer molybdenum sulfide', 'multilayered mos2 flakes', 'multilayer graphene film', and 'multilayer ceramic capacitors'. To the right, a sidebar shows 'materials' (1,786 patents) and a featured article: 'disk resonator integrated with p-n junctions' by Linjie Zhou, Jingya Xie, Jianping Chen in Chinese Science Bulletin (2014). An orange arrow labeled '精检过滤' (Refined Filtering) points to the filters on the left, and another arrow labeled '自动建议' (Automatic Suggestions) points to the suggestions list.

快速洞悉与输入检索词高度相关的内容：即使是相同文章，文章下方显示的相关信息将随搜索关键词改变而改变

The screenshot shows a search result for 'zno nanoparticles' and 'mgo nanoparticles'. The results are for 'O2 adsorption dependent photoluminescence emission from metal oxide nanoparticles' by Amir R. Gheisi, Chris Neygandhi, Andreas K. Sternig... in Physical Chemistry Chemical Physics (2014). The abstract states: 'Optical properties of metal oxide nanoparticles are subject to synthesis related defects and impurities. Using photoluminescence spectroscopy and UV diffuse reflectance in conjunction with Auger electron... more'. A callout box highlights: 'This article discusses: ZnO Nanoparticles with Photoluminescence, MgO Nanoparticles, ZnO Nanoparticle Powder, Chemical Vapor Synthesis, Auger Electron Spectroscopy and MgO Nanoparticles with Photoluminescence, ZnO Nanoparticles, Nanoparticle Powder, Surface, Annealing'. It also mentions 'Citations: 6'.

The screenshot shows a search result for 'metal oxide' and 'mgo nanoparticles'. The results are for 'O2 adsorption dependent photoluminescence emission from metal oxide nanoparticles' by Amir R. Gheisi, Chris Neygandhi, Andreas K. Sternig... in Physical Chemistry Chemical Physics (2014). The abstract states: 'Optical properties of metal oxide nanoparticles are subject to synthesis related defects and impurities. Using photoluminescence spectroscopy and UV diffuse reflectance in conjunction with Auger electron... more'. A callout box highlights: 'This article discusses: Metal Oxide with Photoluminescence, Metal Oxide Nanoparticles, Prototypical Metal Oxide, Oxide Nanoparticle System, Surrounding Continuous Phase and MgO Nanoparticles with Photoluminescence, ZnO Nanoparticles, Nanoparticle Powder, Surface, Annealing'. It also mentions 'Citations: 6'.

人工归纳整理的纳米材料汇总——由纳米技术专家持续更新

针对类似纳米材料, 提供基于权威期刊和专利的结构清晰的综合性汇总

纳米材料汇总可快速洞悉其相关信息

gold nanoparticles

Composition: gold

Nanostructure: nanoparticles | Diameter: 0 - 30 nm

Based on 1668 articles and 23 patents (most recent: 2017)

Other information: Characterization (1588) | Preparation (1094) | Property (684) | Toxicity (401) | Application (365)

性质

Property	Value	Source
electrical conductivity	~ 0.012 S/cm [~ 1.2 S/m]	Glen DeLoid <i>et al.</i> 2014
electrical resistance	1,470 Ω	Yilmaz, Cihan <i>et al.</i> 2014
electrical resistance	11.9 Ω	Yilmaz, Cihan <i>et al.</i> 2014
electrical resistivity	0.000006 Ω·m	Yilmaz, Cihan <i>et al.</i> 2014

表征方法

Method	Dependent on	Source
Raman spectroscopy	-	Zhao, Min <i>et al.</i> 2015 Marioara Avram <i>et al.</i> 2012 S. L. Smitha <i>et al.</i> 2012
UV-Vis-NIR optical spectroscopy	doping charge density	A. Manjavacas and F.J. García de Abajo 2014
UV-Vis-NIR optical spectroscopy	media aging time	A. Stojiljković <i>et al.</i> 2016

毒性和生物效应

Test outcome	Biological system	Source
acceleration of cell migration	Rat Glioma 2 cell	Rahman, Wan <i>et al.</i> 2011
acceleration of cell migration	bovine aortic endothelial cell	Rahman, Wan <i>et al.</i> 2011
accumulate at the plasma membrane	HeLa cells	Li Shang <i>et al.</i> 2014
accumulation in gut	Daphnia magna	Kyle D. Gilroy <i>et al.</i> 2014

制备

Method 16			
Type:	Physical formation	Source:	Collins, Sean S. E. <i>et al.</i> 2015 (ACS Nano)
Starting materials	Spin coating	Drying	Product
fused silica quartz glass + gold nanorods	1 solution in water	2 heating	gold nanoparticles

应用

Application	Area	Source
bisphenol A detection	sensors (excluding biosensors)	Mei, Zhanlong <i>et al.</i> 2013
blood clotting	medicine/veterinary	Hee Kyeong Kim <i>et al.</i> 2013
cancer cell detection	diagnostics	Xiangyan Zhou <i>et al.</i> 2014

专利申明

Patent	Claims
PCT patent WO/2014/045055, 27 Mar 2014	The nanomaterial is claimed together with its method of preparation A specific method of preparation is claimed for the described nanomaterial
PCT patent WO/2014/039821, 13 Mar 2014	A specific method of preparation is claimed for the described nanomaterial
U.S. patent US20120244322, 27 Sep 2012	The nanomaterial is claimed

标注: 所选择的数据以适合页宽显示

其全部数据可参照: <https://nano.nature.com/nano/GR-M21079>.

Nano 顾问委员会推荐意见

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Nano是一个崭新的、极其强大的检索工具。它能让科研人员获取和比较几乎所有的纳米材料的特征，以及其器件的构成和制备方法。它将使纳米科学家对其领域有前所未有的清晰的、深入的了解，堪比化学元素周期表之于化学家。

—Dr. Jens Kroeger Raymor industries and NanoIntegris
首席技术官

纳米技术研究飞跃发展，对几乎所有学科和行业产生深远影响。与此同时，研究成果产生海量信息，而且这些信息分布广泛让人难以快速准确全面的理解和获取。因此，科研者需要通过多学科的数据库来获取这些广泛的信息，然后自行分析总结，费时费力。而此次参与开发的Nano，根本上改善了这一搜索困境，因此，我肯定Nano必将带给纳米科研领域巨大价值和深远的影响。



—Dr. Omid Farokhzad, 哈佛大学医学院副教授

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主要优势

- 专门针对纳米技术的独特科研解决方案
- 有关纳米材料的人工归纳汇总，信息来源顶级同行评审期刊，并经由纳米技术专家评估整合
- 链接原始数据
- 快速洞悉本学科和交叉学科领域最新的研究成果和进展
- 定期更新最新内容
- 精准检索工具及筛选器选项带来高效检索结果

可访问内容及权限

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