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## SciFinder Web使用介绍

刘盈盈

SciFinder客户顾问

2014.9

# 提纲

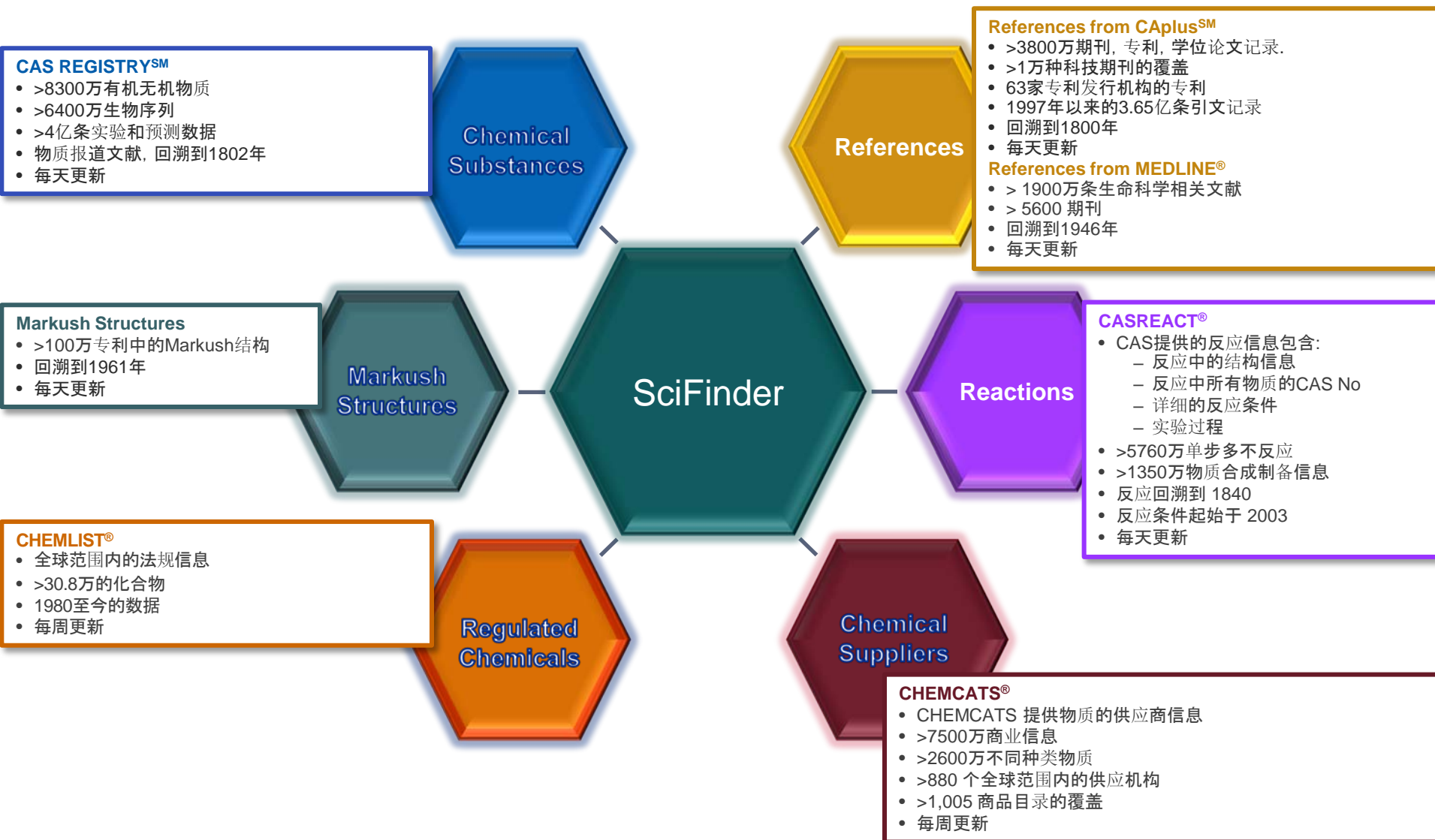
- 介绍
  - SciFinder Web中的内容
- **SciFinder Web中的检索和后处理**
  - SciFinder Web中的文献记录及主题检索
  - SciFinder Web中的物质结果及物质检索方法
  - SciFinder Web中的反应记录及反应检索
- **SciFinder Web使用常见问题**

# 美国化学文摘社—Chemical Abstracts Service

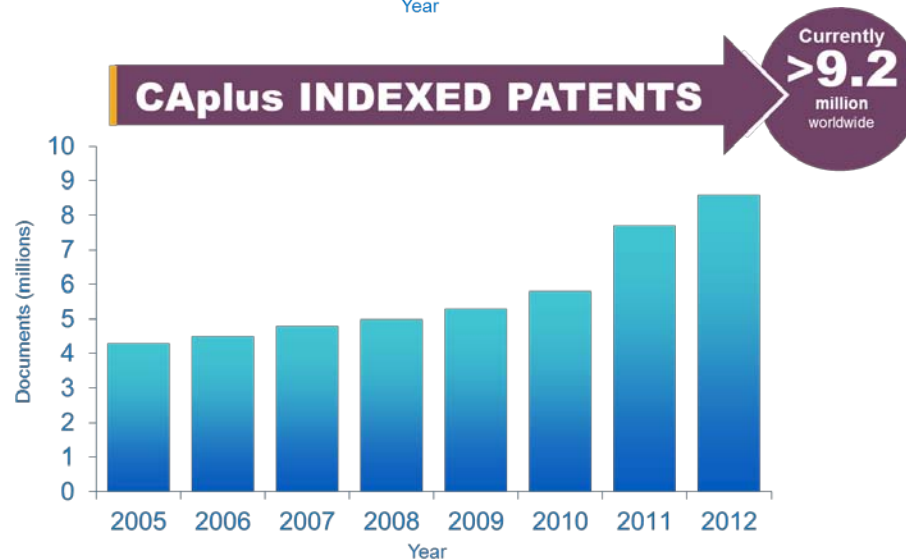
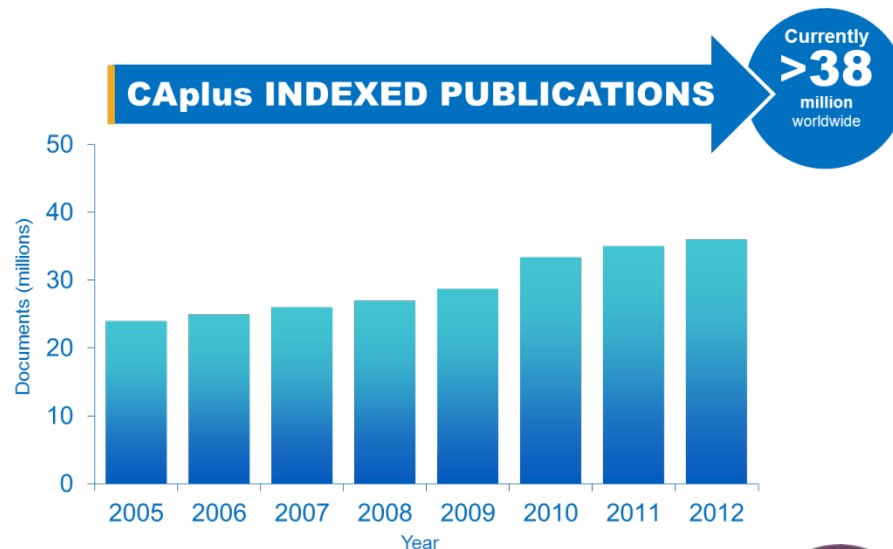
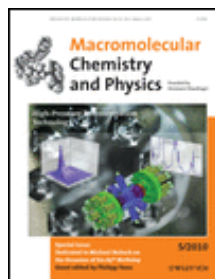
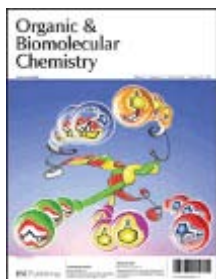
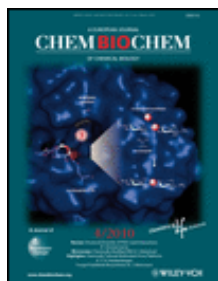
- 创建于1907年
- ACS的分支机构
- 密切关注，索引和提炼着全球化学相关的文献和专利
- 最早创立了《化学文摘》
- 总部坐落于俄亥俄州的哥伦布市



# SciFinder的覆盖内容



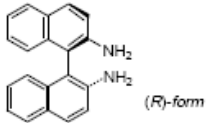
# CAPLUS<sup>SM</sup> 涵盖上万种期刊及63个专利发行机构专利





# CAS REGISTRY<sup>SM</sup> 是化学物质信息的“黄金标准”

Entry name → **2,2'-Diamino-1,1'-binaphthyl**

Structural formula and stereochemical description →  (R)-form

Alternative names → [1,1'-Binaphthalene]-2,2'-diamine, 9CI, 2,2'-Diamino-1,1'-dinaphthyl, 1,1'-Bi[2-naphthylamine]

CAS Registry Number → **50677-2**

Molecular Formula → **C<sub>20</sub>H<sub>16</sub>N<sub>2</sub>** Molecular weight → **M 284.360** RTECS® Number → **DU3090000**

Use → Intermediate for chiral auxiliaries.

Hazard alert symbol and description of hazards → **Exp. numourigen by skin contact. Dec. with emission of toxic fumes. DU3090000**

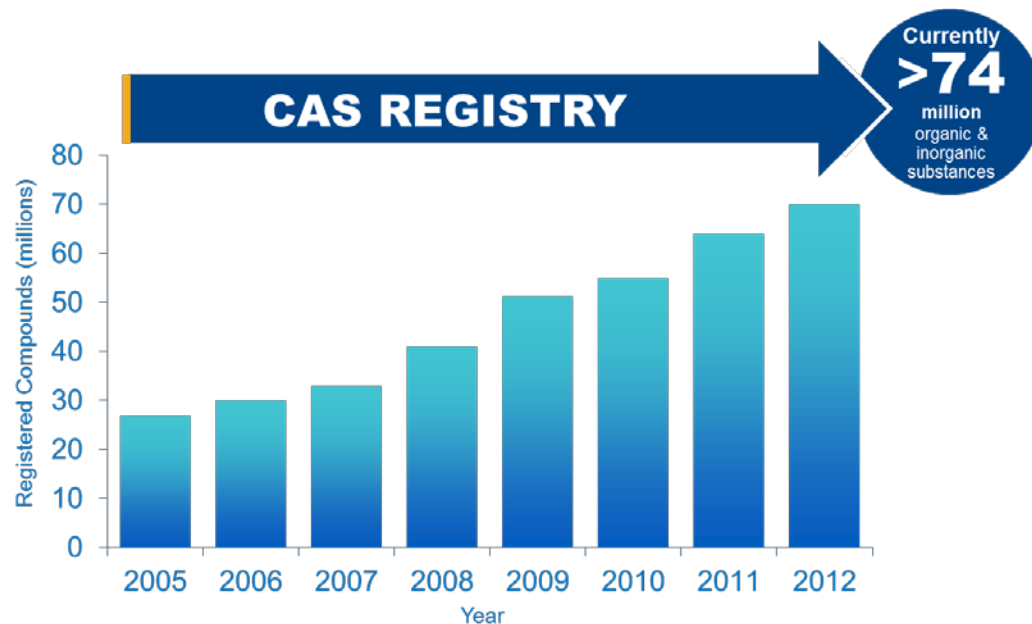
Supplier Information → (R)-form: 50677-2 [18741-85-0] Mp 242.5-243°, [α]<sub>D</sub><sup>25</sup> + 155.5° (c. 1 in Py), [α]<sub>D</sub><sup>25</sup> + 46.8° (2M HCl). Supplier: Aldrich 38242-6; Fluka 32787.  
N,N'-Di-Me: 50677-3 [93713-30-5] Cryst. (EtOH). Mp 143-144° [α]<sub>D</sub><sup>25</sup> + 182° (c. 1.09 in C<sub>6</sub>H<sub>6</sub>).  
N,N,N',N'-Tetra-Me: 50677-4 [135029-77-5] Cryst. (EtOH/C<sub>6</sub>H<sub>6</sub>). Mp 216-218°.  
(S)-form: 50677-1 [18531-95-8] Cryst. Mp 243° (235-239°), [α]<sub>D</sub><sup>25</sup> - 149° (Py), [α]<sub>D</sub><sup>25</sup> - 46° (2M HCl). Supplier: Aldrich 38243-4; Fluka 32788.  
N,N'-Di-Ac: 50677-5 C<sub>24</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub> M 368.434. Prisms (C<sub>6</sub>H<sub>6</sub>). Mp 226-227°.  
(R)-form: 50677-6 [79082-81-8] Silvery plates (EtOH). Mp 193.2-194.5° (191°).  
Picrate: 50677-7 Brownish-yellow plates (C<sub>6</sub>H<sub>6</sub>). Mp 185° (dec.).  
N,N'-Di-Ac: 50677-8 Cubes (EtOH). Mp 235-236°.  
N,N'-Dibenzoyl: 50677-9 C<sub>28</sub>H<sub>20</sub>N<sub>2</sub>O<sub>2</sub> M 492.576. Prisms (PhNO<sub>2</sub>). Mp 235°.

Stereoisomer heading →

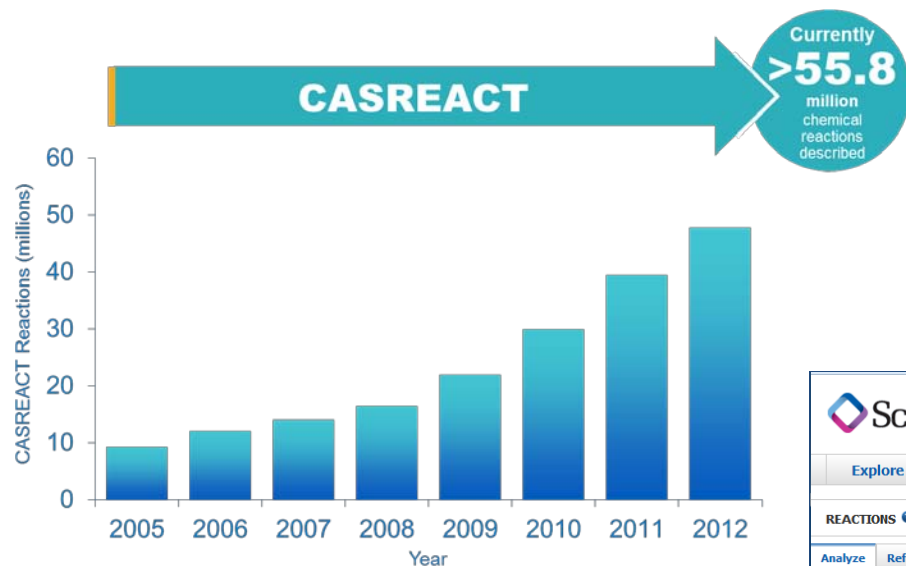
Derivative Subheading →

Additional CAS Registry Numbers → [93621-61-1] [97644-73-0]

Bibliographic references → Kuhn, R. et al., *Annalen*, 1929, 470, 183 (*synth, resoln*)  
Cumming, WM et al., *J.C.S.*, 1932, 528 (*synth*)  
Clemo, GR et al., *J.C.S.*, 1939, 1114 (*synth*)  
Mitsunobu, K et al., *J.C.S.*, 1962, 84, 1455 (*syn, anal*)  
Akimoto, H et al., *Tetrahedron*, 1971, 27, 5999 (*resoln, abs config*)  
Miyano, S et al., *Bull. Chem. Soc. Jpn.*, 1984, 57, 2171 (*pmr, ir, deriv*)  
Brown, KI et al., *J.O.C.*, 1985, 50, 4345 (*synth, resoln*)  
Benson, SC et al., *J.O.C.*, 1988, 53, 5335 (*synth, N-tetramethyl*)  
Fieser and Fieser's *Reagents for Organic Synthesis*, Wiley, 1989, 14, 32 (*use*)  
Frazzini, L et al., *Acta Cryst. C*, 1991, 47, 1259 (*cryst struct, N-tetra-Me*)  
Suzuki, M et al., *J.O.C.*, 1992, 57, 1917 (*synth, resoln, bibl*)  
Lewis, RJ et al., *Sax's Dangerous Properties of Industrial Materials*, 8th edn., Van Nostrand Reinhold, 1992, BGS750



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1. [View Reaction Detail](#) | [Link](#) | [Similar Reactions](#)

**Single Step** *Hover over any structure for more options.*

OCC(O)CO >> OCC(O)CO

**Overview**

Steps/Stages	Notes
1.1 C:9077-68-3, S:H <sub>2</sub> O, 48 h, rt	regioselective, fermentation, enzymic, biotransformation, whole cells of <i>Lactobacillus</i> sp. cultured from thin stillage expressing glycerol dehydratase used, 90% conversion, Reactants: 1, Catalysts: 1, Solvents: 1, Steps: 1, Stages: 1, Most stages in any one step: 1

**References**

Process for the conversion of glycerol to 1,3-propanediol by novel *Lactobacillus* strains isolated from stillage [Full Text](#)  
By Reaney, Martin J. T. et al  
From PCT Int. Appl., 2012045179, 12 Apr 2012

# 提纲

- 介绍
  - SciFinder Web中的内容
- **SciFinder Web中的检索和后处理**
  - SciFinder Web中的文献记录及主题检索
  - SciFinder Web中的物质结果及物质检索方法
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- **SciFinder Web使用常见问题**



# SciFinder中的文献记录

REFERENCE DETAIL ?	Get Substances	Get Related Citations	Get Full Text	Send to SciPlanner
<a href="#">Return</a> <span style="float: right;">Previous   Next</span>				
<b>1. Selective oxidation of light alkanes: interaction between the catalyst and the gas phase on different classes of catalytic materials</b> By: Cavani, F.; Trifiro, F. A review, with 202 refs., on the selective oxidn. of light (C <sub>2-6</sub> ) alkanes to bulk and industrial chems., with emphasis on catalyst-gas phase interactions. Attention was given mainly to: (1) the role of the redox properties of transition metal oxide-based systems, and (2) the contribution of radical-type, homogeneous and heterogeneously-initiated homogeneous reactions over nonreducible metal oxide and noble metal catalysts. Other topics included: (1) key factors in selective oxidn. of light alkanes, (2) bulk and surface properties of catalysts, (3) oxidative dehydrogenation, (4) control of oxygen supply to the catalyst, (5) non-redox-type metal oxides (e.g., alk. earth oxides, rare earth oxides, boron oxides, tin oxides, and silica). Some research examples are: (1) oxidn. of propane to acrylic acid and isobutane to methacrylic acid over Keggin-type heteropolymolybdates, (2) oxidative dehydrogenation of alkanes to alkenes over vanadium oxide-based catalysts, and (3) oxidn. of butane and pentane over vanadyl pyrophosphate.				
<b>Indexing</b> Fossil Fuels, Derivatives, and Related Products (Section51-0) Section cross-reference(s): 35, 45				
<b>Concepts</b> Redox reaction catalysts catalyst-gas phase interactions in selective oxidn. of light alkanes to bulk and industrial chems. Alkaline earth oxides      Rare earth oxides catalysts contg.; catalyst-gas phase interactions in selective oxidn. of light alkanes to bulk and industrial chems. Catalyst use; Properties; Uses				
<b>Substances</b> 12026-66-3 58834-75-6 catalyst-gas phase interactions in selective oxidn. of light alkanes to bulk and industrial chems. Catalyst use; Uses 1303-86-2 Boron oxide, uses 1332-29-2 Tin oxide 7631-86-9 Silica, uses				
<b>QUICK LINKS</b> 0 Tags, 0 Comments <b>SOURCE</b> <i>Catalysis Today</i> Volume51 Issue3-4 Pages561-580 Journal; General Review 1999 CODEN:CATTEA ISSN:0920-5861 DOI:10.1016/S0920-5861(99)00041-3 <b>COMPANY/ORGANIZATION</b> Dipartimento di Chimica Industriale e dei Materiali Bologna, Italy 40136 <b>ACCESSION NUMBER</b> 1999:340014 CAN131:159478 CAPLUS <b>PUBLISHER</b> Elsevier Science B.V.				

## Citations

Bielanski, A; Oxygen in Catalysis 1991  
 Haber, J; ACS Symp Series 1996, 638, 20  
 Oyama, S; ACS Symp Series 1996, 638, 2  
 Lee, J; Catal Rev-Sci Eng 1988, 30, 249  
 Kung, H; Adv Catal 1994, 40, 1  
 Vedrine, J; Catal Today 1997, 33, 3  
 Vedrine, J; Catal Today 1996, 32, 115  
 Busca, G; Catal Today 1996, 32, 133  
 Cavani, F; Catalysis 1994, 11, 246  
 Albonetti, S; Catal Rev-Sci Eng 1996, 38, 413  
 Sokolovskii, V; Catal Rev-Sci Eng 1990, 32, 1  
 Delmon, B; Catalysts in Petroleum Refining and Petrochemical Industries 1995 1996  
 Burch, R; J Mol Catal A 1995, 100, 13  
 Schmidt, L; Chem Eng Sci 1994, 49, 3981  
 Kung, H; ACS Symp Series 1993, 523, 387  
 Trifiro, F; Selective Partial Oxidation of Hydrocarbons and Related Oxidations 1994  
 Trifiro, F; Oxidative dehydrogenation and alternative dehydrogenation processes 1993  
 Cavani, F; Catal Today 1995, 24, 307

一篇完整的文献界面包括:

1. 题录信息
2. 摘要信息
3. 文献中重要的概念
4. 文献中重要的物质
5. 书目信息
6. 获得文献中的物质, 反应, 引文等
7. 文献中的引文信息

# SciFinder中的文献检索方法

- 功能方面

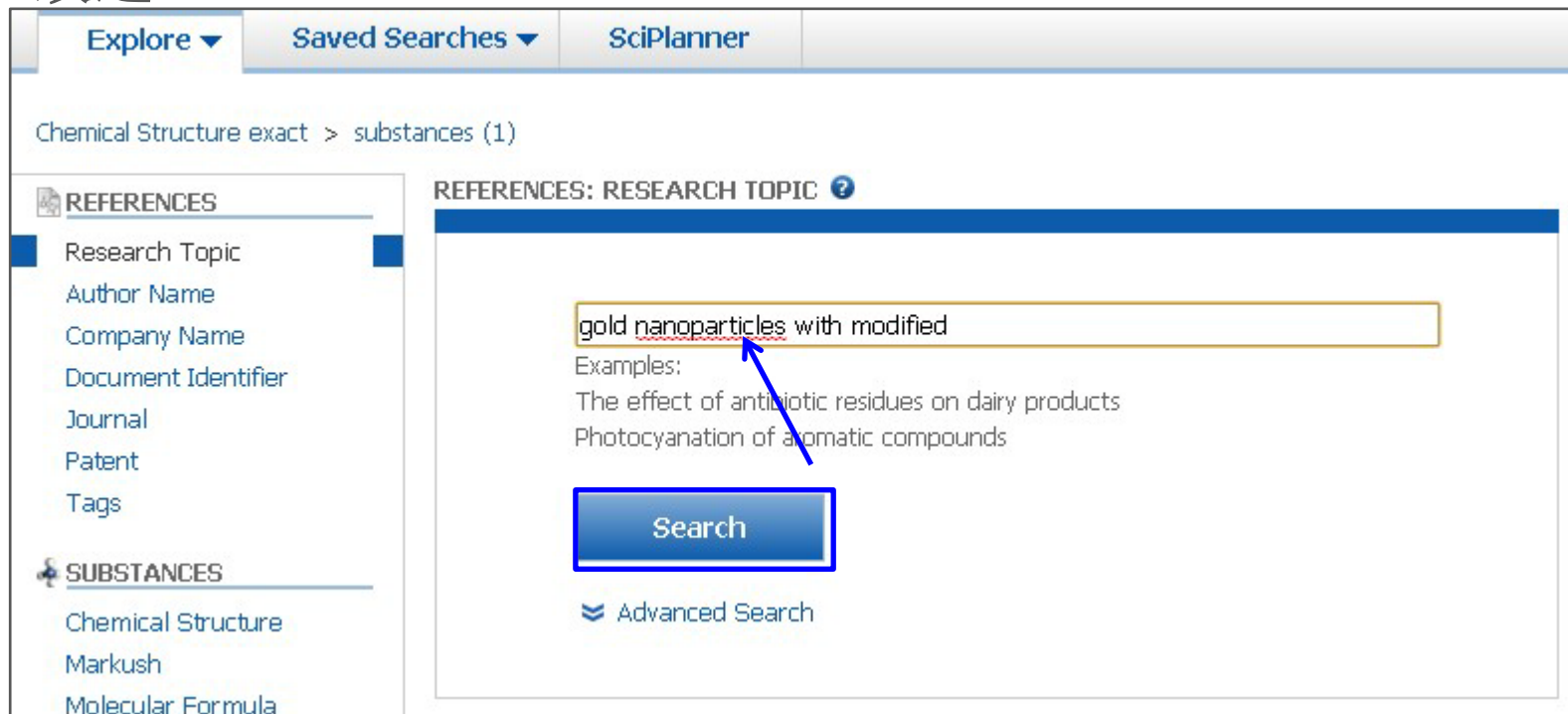
- 主题检索
- 作者名检索
- 机构名检索
- 文献标示符检索
- 从物质，反应获得文献

- 检索方法推荐

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- 关注物质有关的文献——先获得物质，再获得文献
- 关注某科研人员的文献——作者名检索

# SciFinder Web中的主题检索

主题: gold nanoparticles with modified (金纳米颗粒的改进)



The screenshot shows the SciFinder web interface. At the top, there are tabs for 'Explore', 'Saved Searches', and 'SciPlanner'. Below the tabs, the breadcrumb 'Chemical Structure exact > substances (1)' is visible. On the left side, there is a sidebar with two main sections: 'REFERENCES' and 'SUBSTANCES'. Under 'REFERENCES', there are links for 'Research Topic', 'Author Name', 'Company Name', 'Document Identifier', 'Journal', 'Patent', and 'Tags'. Under 'SUBSTANCES', there are links for 'Chemical Structure', 'Markush', and 'Molecular Formula'. The 'Research Topic' link is highlighted. The main content area is titled 'REFERENCES: RESEARCH TOPIC ?'. It contains a search input field with the text 'gold nanoparticles with modified'. Below the input field, there are examples: 'The effect of antibiotic residues on dairy products' and 'Photocyanation of aromatic compounds'. A blue arrow points from the input field to the examples. Below the examples is a blue 'Search' button. At the bottom of the main content area, there is a link for 'Advanced Search'.

# 主题检索的候选项

Select All Deselect All

1 of 5 Research Topic Candidates Selected

		References
<input type="checkbox"/>	583 references were found containing "gold nanoparticles with modified " as entered.	583
<input checked="" type="checkbox"/>	5792 references were found containing the two concepts "gold nanoparticles" and "modified" closely associated with one another.	5792
<input type="checkbox"/>	10890 references were found where the two concepts "gold nanoparticles" and "modified" were present anywhere in the reference.	10890
<input type="checkbox"/>	52478 references were found containing the concept "gold nanoparticles".	52478
<input type="checkbox"/>	2295690 references were found containing the concept "modified".	2295690

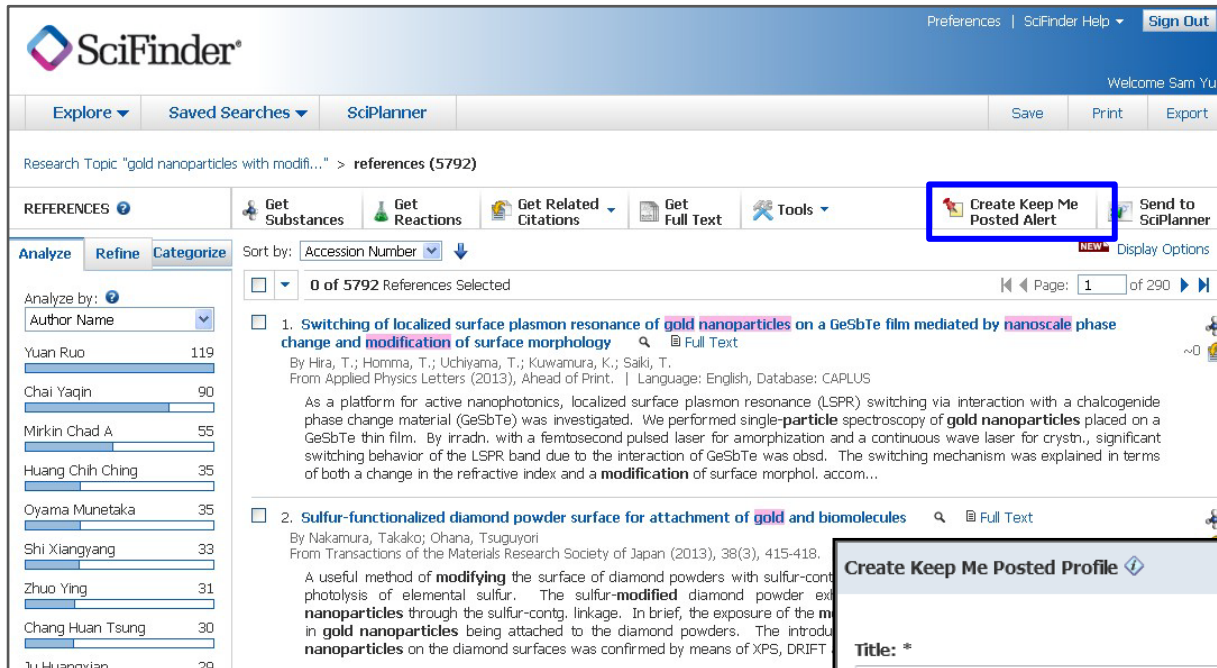
Get References

“Concept” 表示做了同意词的扩展

“Closely associated with one another” 表示同时出现在一个句子中

“present anywhere in the reference” 表示同时出现在一段话中

# SciFinder中的KMP



Research Topic "gold nanoparticles with modified surface morphology" > references (5792)

REFERENCES **Create Keep Me Posted Alert**

Analyze Refine Categorize Sort by: Accession Number

Analyze by: 119 90 55 35 35 33 31 30 29

1. **Switching of localized surface plasmon resonance of gold nanoparticles on a GeSbTe film mediated by nanoscale phase change and modification of surface morphology**   
 By Hira, T.; Homma, T.; Uchiyama, T.; Kuwamura, K.; Saki, T.  
 From Applied Physics Letters (2013), Ahead of Print. | Language: English, Database: CAPLUS  
 As a platform for active nanophotonics, localized surface plasmon resonance (LSPR) switching via interaction with a chalcogenide phase change material (GeSbTe) was investigated. We performed single-particle spectroscopy of gold nanoparticles placed on a GeSbTe thin film. By irradiation with a femtosecond pulsed laser for amorphization and a continuous wave laser for crystallization, significant switching behavior of the LSPR band due to the interaction of GeSbTe was observed. The switching mechanism was explained in terms of both a change in the refractive index and a modification of surface morphology. accom...

2. **Sulfur-functionalized diamond powder surface for attachment of gold and biomolecules**   
 By Nakamura, Takako; Ohana, Tsuguyori  
 From Transactions of the Materials Research Society of Japan (2013), 38(3), 415-418.  
 A useful method of modifying the surface of diamond powders with sulfur-containing functional groups by the sulfur-contg. diamond powder exposed to the photolysis of elemental sulfur. The sulfur-modified diamond powder exposed to the sulfur-contg. linkage. In brief, the exposure of the modified diamond powder to the sulfur-contg. linkage. The introduction of gold nanoparticles being attached to the diamond powders. The introduction of gold nanoparticles on the diamond surfaces was confirmed by means of XPS, DRIFT.

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**Title: \*** \* Required  
 GNPs with modified

**Description:**  
  
 Characters Remaining: 1024

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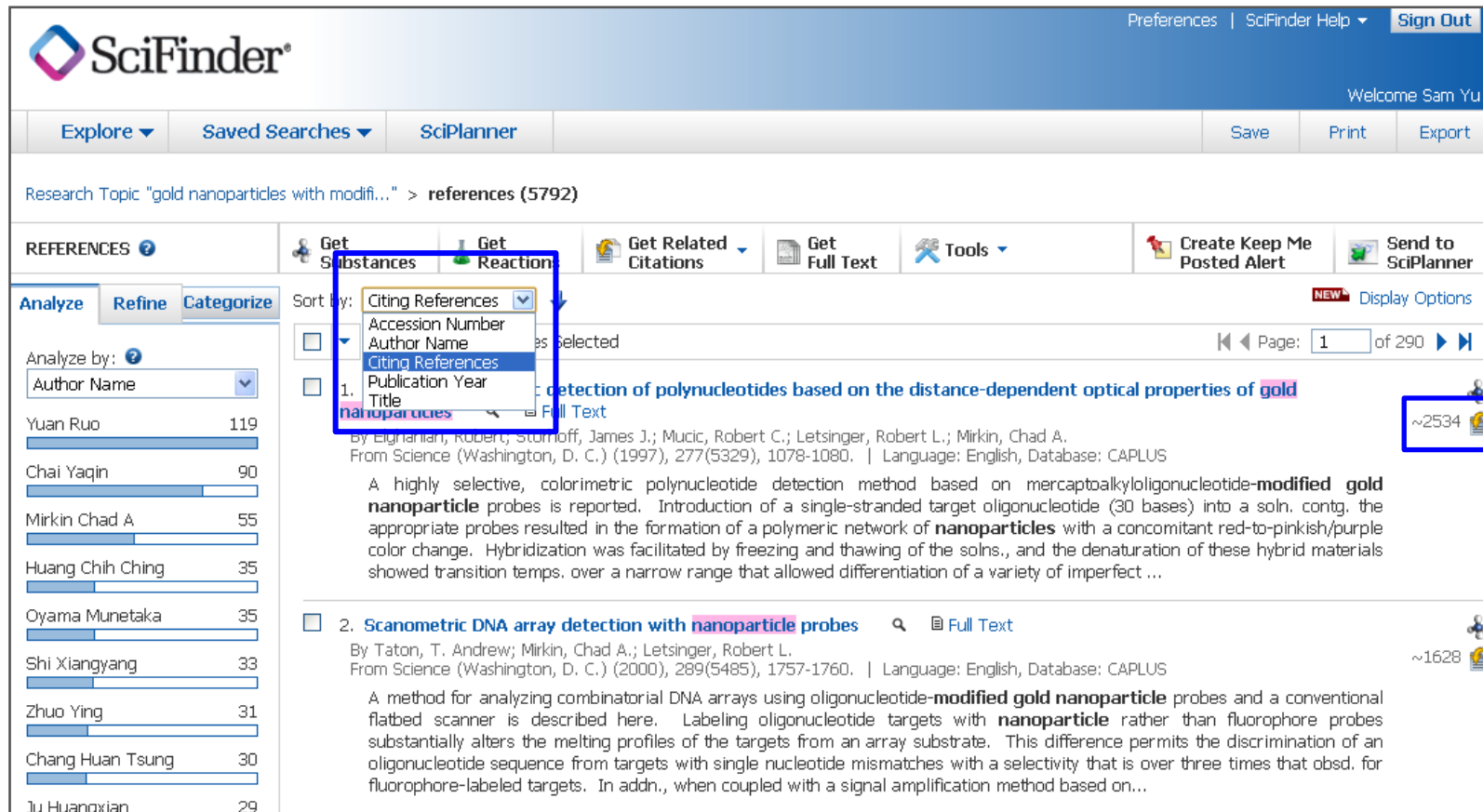
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 Explore references by research topic: **gold nanoparticles with modified**  
**Candidates Selected:**  
 References which contain the two concepts "gold nanoparticles" and "modified" closely associated with one another

# SciFinder提供的引文排序— Citing Reference



Research Topic "gold nanoparticles with modifi..." > **references (5792)**

REFERENCES ?

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Analyze | Refine | Categorize

Analyze by: Author Name

Author	Citations
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Chai Yaqin	90
Mirkin Chad A	55
Huang Chih Ching	35
Oyama Munetaka	35
Shi Xiangyang	33
Zhuo Ying	31
Chang Huan Tsung	30
Ju Huanqian	29

Sort by: Citing References (selected)

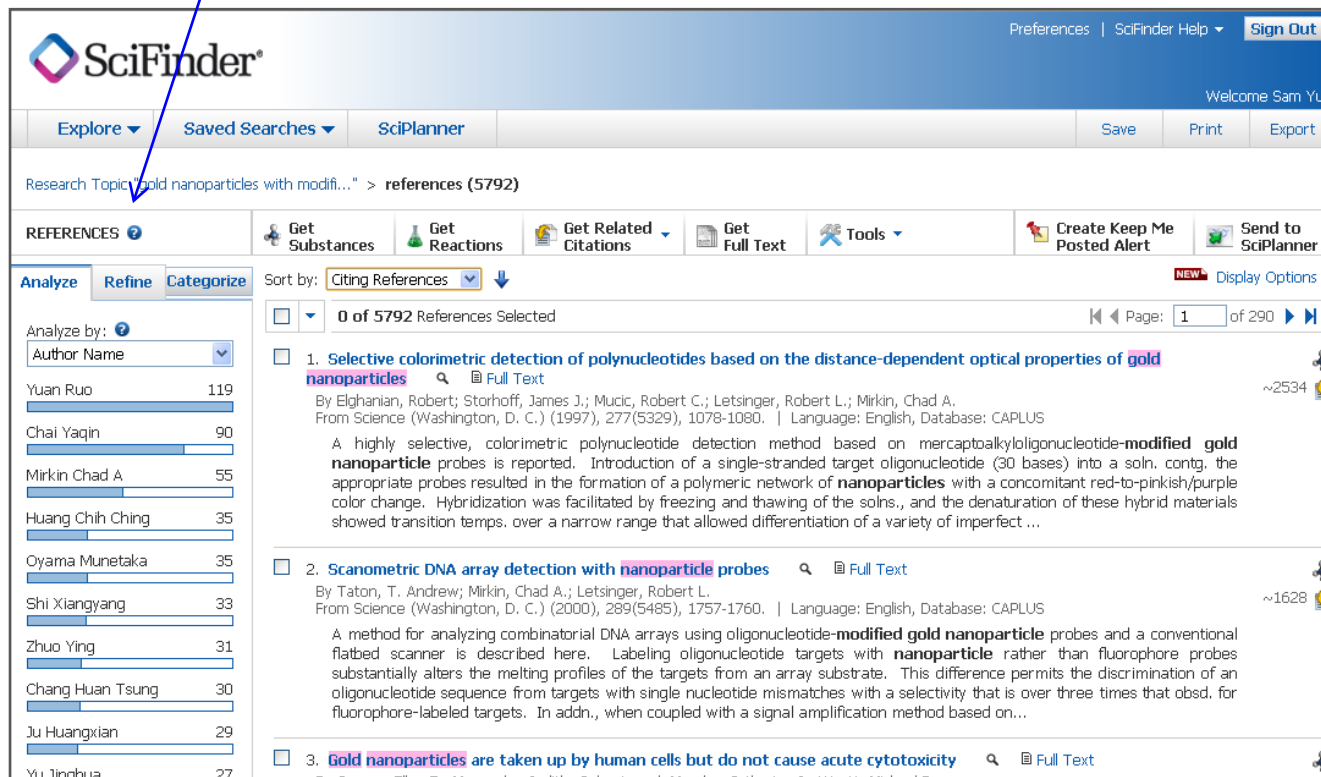
1. **... detection of polynucleotides based on the distance-dependent optical properties of gold nanoparticles**  
 By Eghnarian, Robert; Stormoff, James J.; Mucic, Robert C.; Letsinger, Robert L.; Mirkin, Chad A.  
 From Science (Washington, D. C.) (1997), 277(5329), 1078-1080. | Language: English, Database: CAPLUS  
 A highly selective, colorimetric polynucleotide detection method based on mercaptoalkyloligonucleotide-modified gold nanoparticle probes is reported. Introduction of a single-stranded target oligonucleotide (30 bases) into a soln. contg. the appropriate probes resulted in the formation of a polymeric network of nanoparticles with a concomitant red-to-pinkish/purple color change. Hybridization was facilitated by freezing and thawing of the solns., and the denaturation of these hybrid materials showed transition temps. over a narrow range that allowed differentiation of a variety of imperfect ...

2. **Scanometric DNA array detection with nanoparticle probes**  
 By Taton, T. Andrew; Mirkin, Chad A.; Letsinger, Robert L.  
 From Science (Washington, D. C.) (2000), 289(5485), 1757-1760. | Language: English, Database: CAPLUS  
 A method for analyzing combinatorial DNA arrays using oligonucleotide-modified gold nanoparticle probes and a conventional flatbed scanner is described here. Labeling oligonucleotide targets with nanoparticle rather than fluorophore probes substantially alters the melting profiles of the targets from an array substrate. This difference permits the discrimination of an oligonucleotide sequence from targets with single nucleotide mismatches with a selectivity that is over three times that obsd. for fluorophore-labeled targets. In addn., when coupled with a signal amplification method based on...



# SciFinder 中的文献检索结果

## 文献分析工具



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Analyze by: Author Name

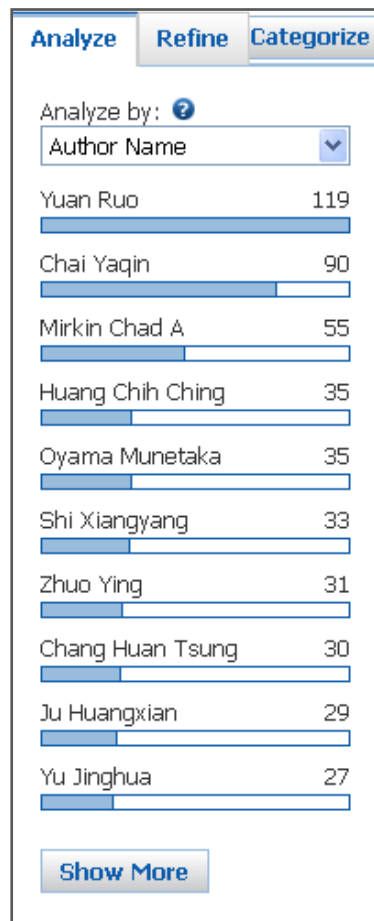
Author Name	Count
Yuan Ruo	119
Chai Yaqin	90
Mirkin Chad A	55
Huang Chih Ching	35
Oyama Munetaka	35
Shi Xiangyang	33
Zhuo Ying	31
Chang Huan Tsung	30
Ju Huangxian	29
Yu Jinqhua	27

- Selective colorimetric detection of polynucleotides based on the distance-dependent optical properties of gold nanoparticles** Full Text  
 By Elgharian, Robert; Storhoff, James J.; Mucic, Robert C.; Letsinger, Robert L.; Mirkin, Chad A.  
 From Science (Washington, D. C.) (1997), 277(5329), 1078-1080. | Language: English, Database: CAPLUS  
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 From Science (Washington, D. C.) (2000), 289(5485), 1757-1760. | Language: English, Database: CAPLUS  
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- Gold nanoparticles are taken up by human cells but do not cause acute cytotoxicity** Full Text

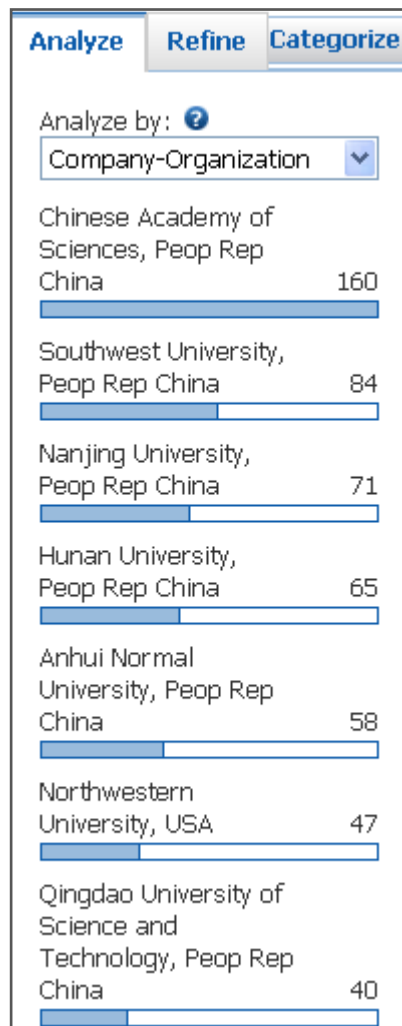
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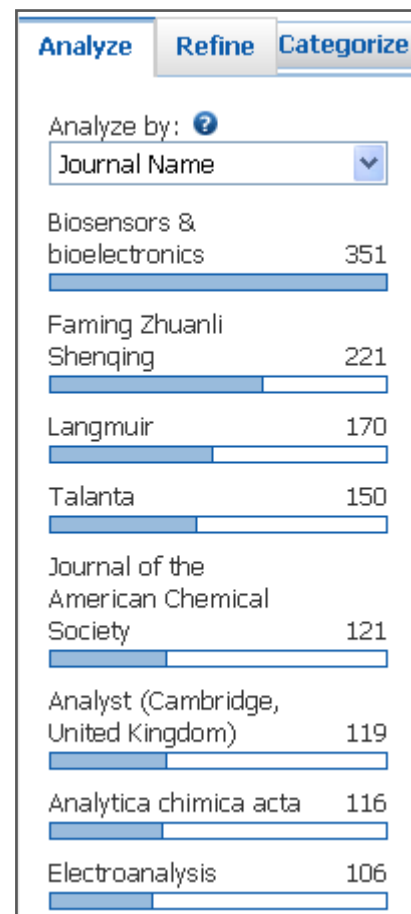
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Chemically modified electrodes	1015
Electrodes	959
Biosensors	887
Cyclic voltammetry	795
Nanofabrication	741
chemistry	709
Gold	672
Human	664

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<input type="checkbox"/> Surface treatment	1031
<input checked="" type="checkbox"/> Chemically modified electrodes	1015
<input type="checkbox"/> Electrodes	959
<input type="checkbox"/> Biosensors	887
<input type="checkbox"/> Cyclic voltammetry	795
<input type="checkbox"/> Nanofabrication	741
<input type="checkbox"/> chemistry	709
<input type="checkbox"/> Gold	672
<input type="checkbox"/> References not containing information for this analysis	665

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☐ Author  
☒ Company Name  
☐ Document Type  
☐ Publication Year  
☐ Language  
☐ Database

Company Name

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Examples:

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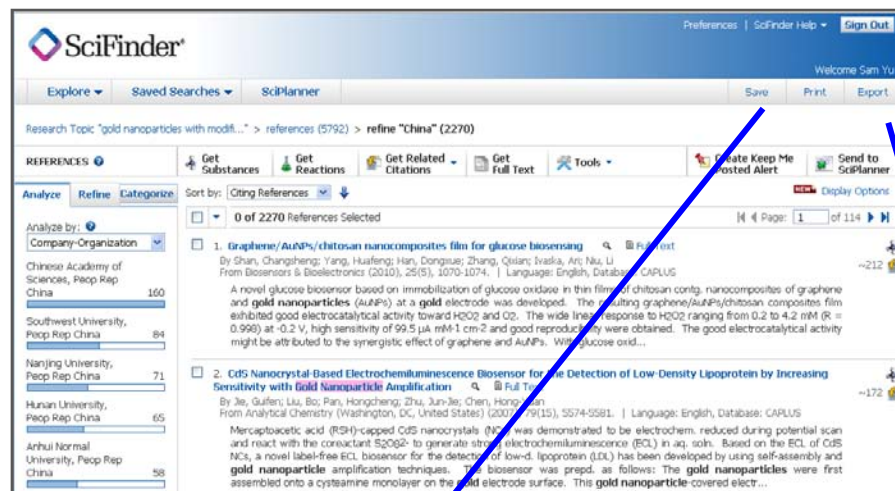
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1. **Graphene/AuNPs/chitosan nanocomposites film for glucose biosensing** Full Text  
 By Shan, Changsheng; Yang, Huafeng; Han, Dongxue; Zhang, Qixian; Ivaska, Ari; Niu, Li  
 From Biosensors & Bioelectronics (2010), 25(5), 1070-1074. | Language: English, Database: CAPLUS  
 A novel glucose biosensor based on immobilization of glucose oxidase in thin films of chitosan contg. nanocomposites of graphene and **gold nanoparticles** (AuNPs) at a **gold** electrode was developed. The resulting graphene/AuNPs/chitosan composites film exhibited good electrocatalytical activity toward H<sub>2</sub>O<sub>2</sub> and O<sub>2</sub>. The wide linear response to H<sub>2</sub>O<sub>2</sub> ranging from 0.2 to 4.2 mM (R = 0.998) at -0.2 V, high sensitivity of 99.5 μA mM<sup>-1</sup> cm<sup>-2</sup> and good reproducibility were obtained. The good electrocatalytical activity might be attributed to the synergistic effect of graphene and AuNPs. With glucose oxid...

2. **CdS Nanocrystal-Based Electrochemiluminescence Biosensor for the Detection of Low-Density Lipoprotein by Increasing Sensitivity with Gold Nanoparticle Amplification** Full Text  
 By Jie, Guifen; Liu, Bo; Pan, Hongcheng; Zhu, Jun-Jie; Chen, Hong-Yuan  
 From Analytical Chemistry (Washington, DC, United States) (2007), 79(15), 5574-5581. | Language: English, Database: CAPLUS  
 Mercaptoacetic acid (RSH)-capped CdS nanocrystals (NCs) was demonstrated to be electrochem. reduced during potential scan and react with the coreactant S<sub>2</sub>O<sub>8</sub><sup>2-</sup> to generate strong electrochemiluminescence (ECL) in aq. soln. Based on the ECL of CdS NCs, a novel label-free ECL biosensor for the detection of low-d. lipoprotein (LDL) has been developed by using self-assembly and **gold nanoparticle** amplification techniques. The biosensor was prepd. as follows: The **gold nanoparticles** were first assembled onto a cysteamine monolayer on the **gold** electrode surface. This **gold nanoparticle**-covered electr...

Company-Organization	Count
Chinese Academy of Sciences, Peop Rep China	160
Southwest University, Peop Rep China	84
Nanjing University, Peop Rep China	71
Hunan University, Peop Rep China	65
Anhui Normal University, Peop Rep China	58

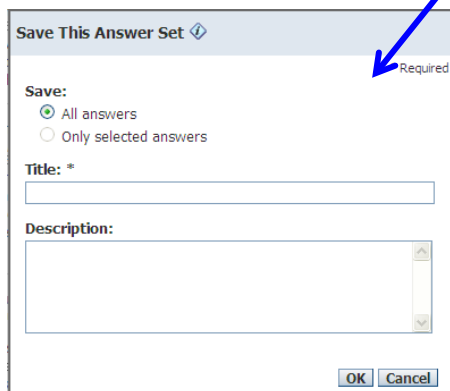
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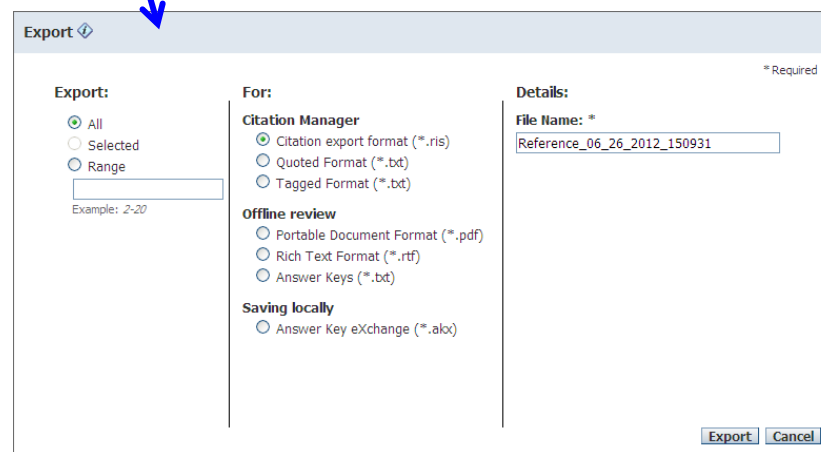
Citation manager: 保存成RIS格式，  
用于导入EndNote等文献管理工具

Offline Review:保存成PDF，RTF格式，  
用于脱机浏览



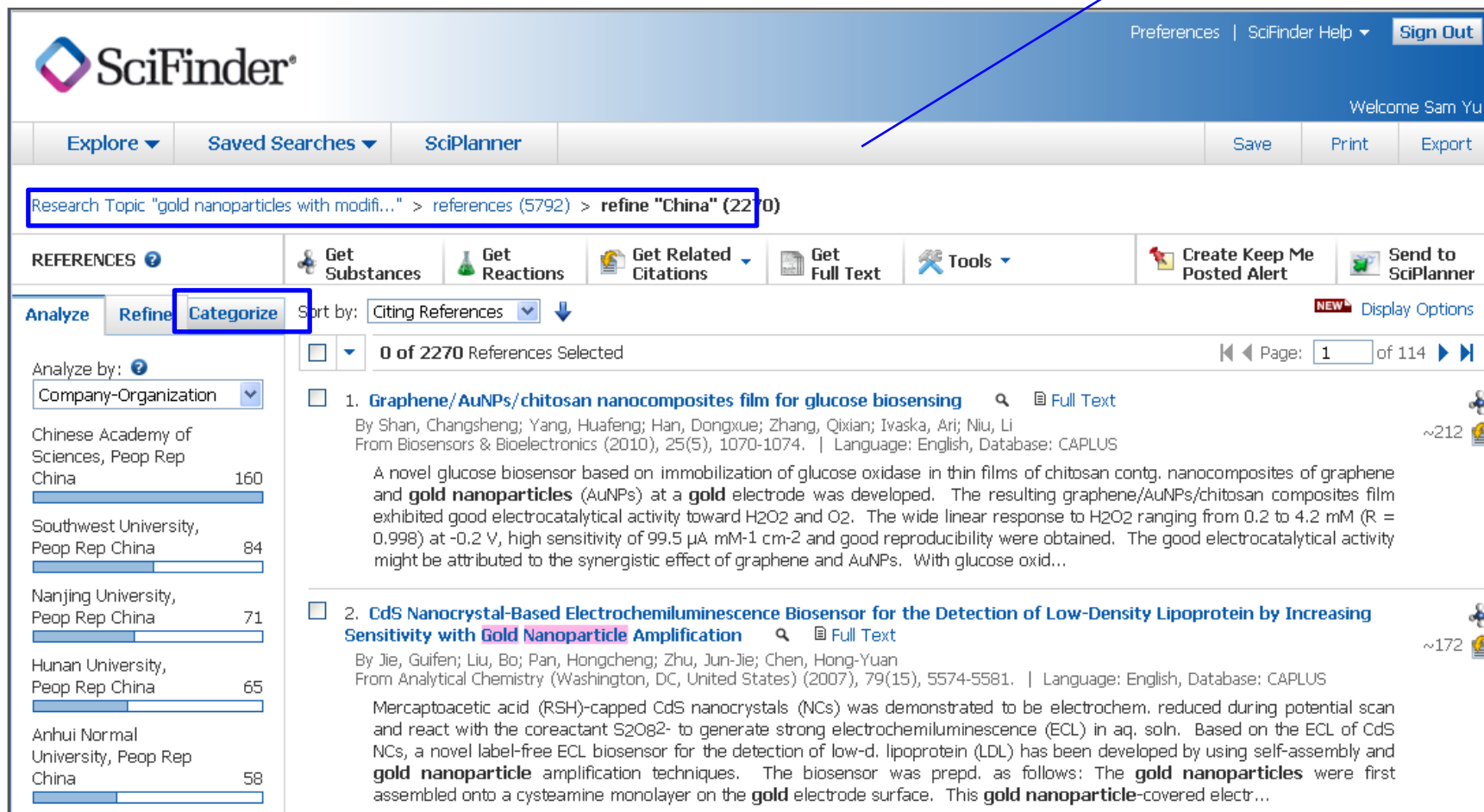
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Company-Organization	Count
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Southwest University, Peop Rep China	84
Nanjing University, Peop Rep China	71
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Anhui Normal University, Peop Rep China	58

1. **Graphene/AuNPs/chitosan nanocomposites film for glucose biosensing** ⓘ Full Text  
 By Shan, Changsheng; Yang, Huafeng; Han, Dongxue; Zhang, Qixian; Ivaska, Ari; Niu, Li  
 From Biosensors & Bioelectronics (2010), 25(5), 1070-1074. | Language: English, Database: CAPLUS  
 ~212 ⓘ  
 A novel glucose biosensor based on immobilization of glucose oxidase in thin films of chitosan contg. nanocomposites of graphene and **gold nanoparticles** (AuNPs) at a **gold** electrode was developed. The resulting graphene/AuNPs/chitosan composites film exhibited good electrocatalytical activity toward H<sub>2</sub>O<sub>2</sub> and O<sub>2</sub>. The wide linear response to H<sub>2</sub>O<sub>2</sub> ranging from 0.2 to 4.2 mM (R = 0.998) at -0.2 V, high sensitivity of 99.5 μA mM<sup>-1</sup> cm<sup>-2</sup> and good reproducibility were obtained. The good electrocatalytical activity might be attributed to the synergistic effect of graphene and AuNPs. With glucose oxid...
2. **CdS Nanocrystal-Based Electrochemiluminescence Biosensor for the Detection of Low-Density Lipoprotein by Increasing Sensitivity with Gold Nanoparticle Amplification** ⓘ Full Text  
 By Jie, Guilfen; Liu, Bo; Pan, Hongcheng; Zhu, Jun-Jie; Chen, Hong-Yuan  
 From Analytical Chemistry (Washington, DC, United States) (2007), 79(15), 5574-5581. | Language: English, Database: CAPLUS  
 ~172 ⓘ  
 Mercaptoacetic acid (RSH)-capped CdS nanocrystals (NCs) was demonstrated to be electrochem. reduced during potential scan and react with the coreactant S<sub>2</sub>O<sub>8</sub><sup>2-</sup> to generate strong electrochemiluminescence (ECL) in aq. soln. Based on the ECL of CdS NCs, a novel label-free ECL biosensor for the detection of low-d. lipoprotein (LDL) has been developed by using self-assembly and **gold nanoparticle** amplification techniques. The biosensor was prepd. as follows: The **gold nanoparticles** were first assembled onto a cysteamine monolayer on the **gold** electrode surface. This **gold nanoparticle**-covered electr...

Categorize系统分类功能，基于Index Term，对文献依学科方向进行分类



# SciFinder中的Categorize

一级目录

二级目录

和二级目录相关的  
Index Term

选中的Index Term

**Categorize ?**

1. Select a heading and category.

Category Heading	Category
All	Particle phenomena (34)
Technology	Gas, liquid, & solid phenomena (145)
General chemistry	Electric & magnetic phenomena (72)
Analytical chemistry	Atomic & molecular phenomena (99)
<b>Physical chemistry</b>	Spectra & spectroscopy (108)
Biotechnology	Surface phenomena (55)
Genetics & protein chemistry	Mechanics (53)
Synthetic chemistry	<b>Thermodynamics (31)</b>
Biology	Quantum mechanics (29)
Polymer chemistry	Miscellaneous substances (39)
Catalysis	
Environmental chemistry	

2. Select index terms of interest.

Index Terms	
Select All	Deselect All
<input type="checkbox"/> Stability	144
<input type="checkbox"/> Temperature	58
<input type="checkbox"/> Affinity	32
<input type="checkbox"/> Ionic strength	9
<input type="checkbox"/> Annealing	8
<input type="checkbox"/> Crystallization	7
<input checked="" type="checkbox"/> Thermal stability	7
<input type="checkbox"/> Formal potential	6
<input type="checkbox"/> Dissociation constant	3
<input type="checkbox"/> Electrostatic potential	3
<input type="checkbox"/> Energy transfer	3
<input type="checkbox"/> Evaporation	3
<input type="checkbox"/> Formation constant	3
<input type="checkbox"/> Free energy	3
<input type="checkbox"/> Volume	3
<input type="checkbox"/> Adsorption energy	2

Selected Terms

Click 'x' to remove the category from 'Selected Terms'

✕ Physical chemistry > Thermodynamics (1 Terms)

选择和热稳定有关的词条

Physical chemistry > Thermodynamics > 1 Index Term(s) Selected

**OK** Cancel

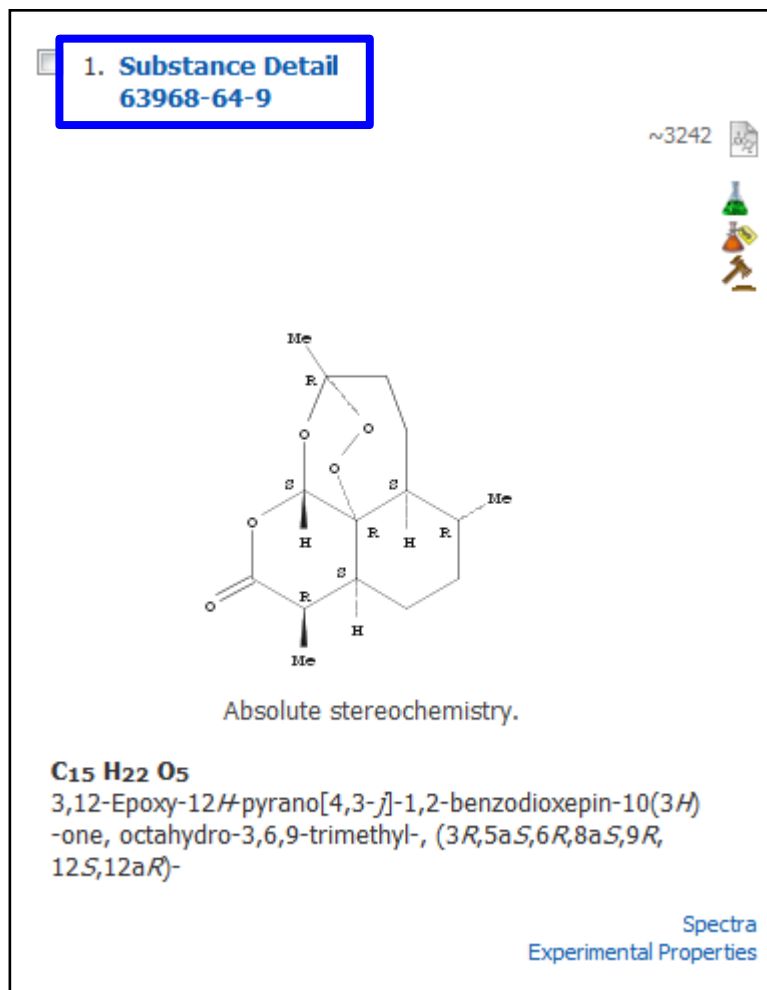
# 练习

- 检索和转基因食品安全评估的文献，获得近5年的综述文献
- 检索策略：
  - Topic Search: Genetically Modified Food with safety
  - Refine publish year: 2008–
  - Refine document type: Review

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- **SciFinder Web中的检索和后处理**
  - SciFinder Web中的文献记录及主题检索
  - SciFinder Web中的物质结果及物质检索方法
  - SciFinder Web中的反应记录及反应检索
- **SciFinder Web使用常见问题**

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- 文献连接
- 反应连接
- 商品信息连接
- 管制品信息连接
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- 实验性质连接

# Substance Detail—查看物质详细信息

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Substance Identifier "qinghaosu" > substances (1) > 63968-64-9

SUBSTANCE DETAIL ⓘ Get References Get Reactions Get Commercial Sources Get Regulatory Information

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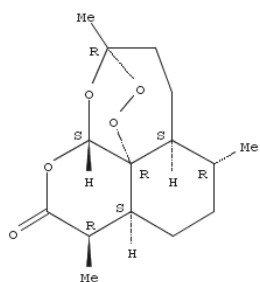
**CAS Registry Number:** 63968-64-9

C<sub>15</sub> H<sub>22</sub> O<sub>5</sub>

3,12-Epoxy-12H-pyrano[4,3-j]-1,2-benzodioxepin-10(3H)-one, octahydro-3,6,9-trimethyl-, (3R,5aS,6R,8aS,9R,12S,12aR)-

3,12-Epoxy-12H-pyrano[4,3-j]-1,2-benzodioxepin-10(3H)-one, octahydro-3,6,9-trimethyl-, [3R-(3α,5αβ,6β,8αβ,9α,12β,12aR\*)]-; (+)-Arteannuin; (+)-Artemisinin; (+)-Qinghaosu; Arteannuin; Artemef; Artemisine; Artemisinin; Artemisinine; Huanghuahaosu; NSC 369397; QHS; Qing Hau Sau; Qing Hau Su; Qinghaosu; Qinghosu

**Deleted CAS Registry Numbers:** 91487-93-3



Absolute stereochemistry.

物质的CAS号、分子式、结构式、化学名、别名

按照CAS Role分类的专利、非专利文献列表。对某类文献感兴趣，仅需点击交叉处的即可方便快捷地获取。

**Document Types:** Book, Conference, Dissertation, Journal, Patent, Report

CAS Role	Patents	Nonpatents	Nonspecific Derivatives from Patents	Nonspecific Derivatives from Nonpatents
Analytical Study	✓	✓	✓	✓
Biological Study	✓	✓	✓	✓
Formation, Nonpreparative		✓	✓	✓
Miscellaneous	✓	✓		
Occurrence	✓	✓		✓
Preparation	✓	✓	✓	✓
Process	✓	✓	✓	✓
Properties	✓	✓	✓	✓
Prophetic in Patents	✓			
Reactant or Reagent	✓	✓	✓	✓
Uses	✓	✓	✓	✓

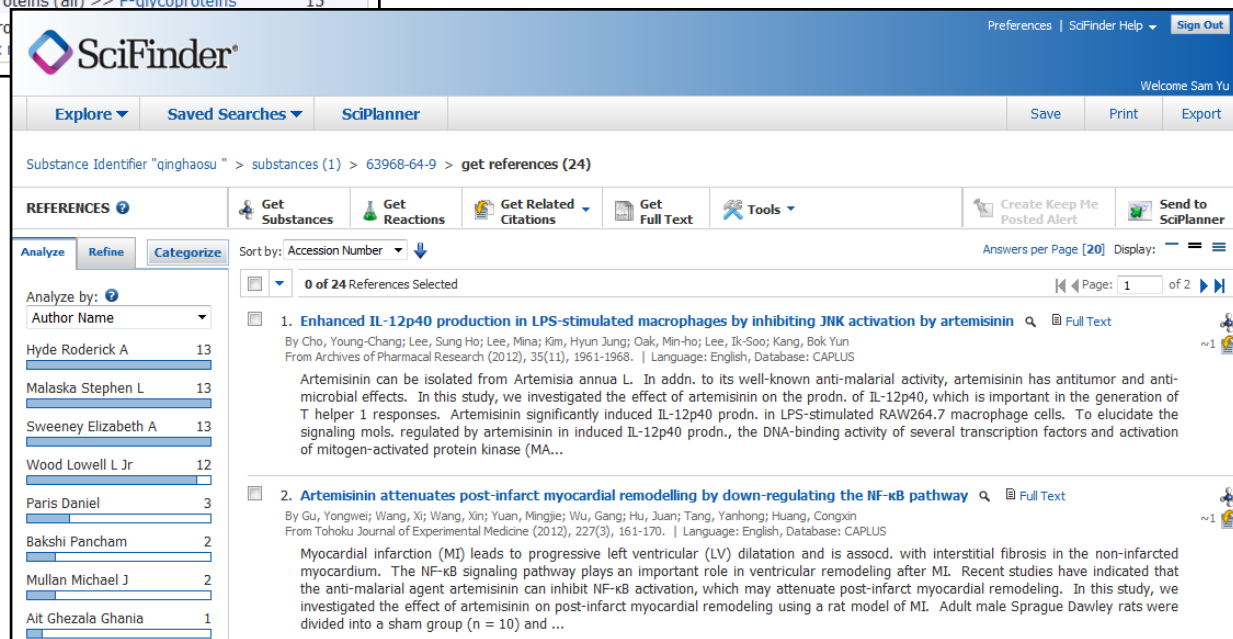
# Substance Detail—查看物质详细信息

物质的生物活性和靶点信息，直接点击，获得相关文献

▼ Bioactivity Indicators <small>NEW</small>		References
Anti-infective agents (all) >>> Antimalarials		805
Anti-infective agents (all) >>> Antiviral agents		34
Anti-infective agents (all) >> Parasiticides		43
Anti-inflammatory agents (all) > Anti-inflammatory agents		41
Antitumor agents (all) > Antitumor agents		169
Natural products MD pharmaceutical		108

▼ Target Indicators <small>NEW</small>		References
Cytokines (all) >> Chemokines		13
Cytokines (all) >> Tumor necrosis factors		11
DNA-binding proteins (all) >>> Transcription factor NF-κB		21
Enzymes (all) >>>> Adenosine triphosphatase		15
Enzymes (all) >>> 26S proteasome		15
Enzymes (all) >>>>> Src kinase		13
Glycoproteins (all) >> P-glycoproteins		15
Hemoproteins (all) >>> Cytochrome P 450		12
Hemoproteins (all) >>> Cytochrome P 450 3A4		12
Phosphoproteins (all) >> P-glycoproteins		15
Proteins		19
Receptors (all) > Toll-like receptors		13
RNA formation factors (all) >>> Transcription factor NF-κB		21
Transport proteins (all) >> P-glycoproteins		15
Transport proteins (all) >> P-glycoproteins		15



Substance Identifier "qinghaosu" > substances (1) > 63968-64-9 > get references (24)

REFERENCES

Analyze by: Author Name

Author	Count
Hyde Roderick A	13
Malaska Stephen L	13
Sweeney Elizabeth A	13
Wood Lowell L Jr	12
Paris Daniel	3
Bakshi Panoram	2
Mullan Michael J	2
Ait Ghezala Ghania	1

Sort by: Accession Number

0 of 24 References Selected

- Enhanced IL-12p40 production in LPS-stimulated macrophages by inhibiting JNK activation by artemisinin** [Full Text](#)  
 By Cho, Young-Chang; Lee, Sung Ho; Lee, Mina; Kim, Hyun Jung; Oak, Min-ho; Lee, Ik-Soo; Kang, Bok Yun  
 From Archives of Pharmacol Research (2012), 35(11), 1961-1968. | Language: English, Database: CAPLUS  
 Artemisinin can be isolated from *Artemisia annua* L. In addn. to its well-known anti-malarial activity, artemisinin has antitumor and anti-microbial effects. In this study, we investigated the effect of artemisinin on the prodn. of IL-12p40, which is important in the generation of T helper 1 responses. Artemisinin significantly induced IL-12p40 prodn. in LPS-stimulated RAW264.7 macrophage cells. To elucidate the signaling mols. regulated by artemisinin in induced IL-12p40 prodn., the DNA-binding activity of several transcription factors and activation of mitogen-activated protein kinase (MA...
- Artemisinin attenuates post-infarct myocardial remodelling by down-regulating the NF-κB pathway** [Full Text](#)  
 By Gu, Yongwei; Wang, Xi; Wang, Xin; Yuan, Mingjie; Wu, Gang; Hu, Juan; Tang, Yanhong; Huang, Congxin  
 From Tohoku Journal of Experimental Medicine (2012), 227(3), 161-170. | Language: English, Database: CAPLUS  
 Myocardial infarction (MI) leads to progressive left ventricular (LV) dilatation and is assoc. with interstitial fibrosis in the non-infarcted myocardium. The NF-κB signaling pathway plays an important role in ventricular remodeling after MI. Recent studies have indicated that the anti-malarial agent artemisinin can inhibit NF-κB activation, which may attenuate post-infarct myocardial remodeling. In this study, we investigated the effect of artemisinin on post-infarct myocardial remodeling using a rat model of MI. Adult male Sprague Dawley rats were divided into a sham group (n = 10) and ...



# Substance Detail—查看物质详细信息

**Predicted Properties:** Biological Chemical Density **Lipinski** and Related Spectra Structure-related Thermal

Biological Properties	Value	Condition	Note	Top
Bioconcentration Factor	31.2	pH 1 Temp: 25 °C	(26)	
Bioconcentration Factor	31.2	pH 2 Temp: 25 °C	(26)	
Bioconcentration Factor	31.2	pH 3 Temp: 25 °C	(26)	
Bioconcentration Factor	31.2	pH 4 Temp: 25 °C	(26)	
Bioconcentration Factor	31.2	pH 5 Temp: 25 °C	(26)	
Bioconcentration Factor	31.2	pH 6 Temp: 25 °C	(26)	
Bioconcentration Factor	31.2	pH 7 Temp: 25 °C	(26)	
Bioconcentration Factor	31.2	pH 8 Temp: 25 °C	(26)	
Bioconcentration Factor	31.2	pH 9 Temp: 25 °C	(26)	
Bioconcentration Factor	31.2	pH 10 Temp: 25 °C	(26)	

Lipinski and Related Properties	Value	Condition	Note	Top
Freely Rotatable Bonds	0		(26)	
H Acceptors	5		(26)	
H Donors	0		(26)	
H Donor/Acceptor Sum	5		(26)	
logP	2.269±0.680	Temp: 25 °C	(26)	
Molecular Weight	282.33		(26)	
Spectra Properties	Value	Condition	Note	Top
Carbon-13 NMR Spectrum	See spectrum		(27)	
Proton NMR Spectrum	See spectrum		(27)	

# Substance Detail—查看物质详细信息

## Experimental Properties: Biological Chemical Density Flow and Diffusion Lipinski and Related Optical and Scattering Spectra Structure-related Thermal

Biological Properties	Value	Condition	Note	Top
ADME (Absorption, Distribution, Metabolism, Excretion)	See full text		(1)CAS	
Half-Life (Biological)	See full text	1 of 2	(9)CAS	
Median Lethal Dose(LD50)	5576 mg/kg	Organism: rat Route: oral	(14)APC	
Median Lethal Dose(LD50)	5105 mg/kg	Organism: mouse Route: oral	(14)APC	
Median Lethal Dose(LD50)	2800 mg/kg	Organism: mouse Route: intramuscular	(14)APC	
Median Lethal Dose(LD50)	2571 mg/kg	Organism: rat Route: intramuscular	(14)APC	
Median Lethal Dose(LD50)	1558 mg/kg	Organism: mouse Route: intraperitoneal	(14)APC	
Minimum Inhibitory Concentration	See full text	1 of 2	(18)CAS	

Lipinski and Related Properties	Value	Condition	Note	Top
logP	See full text	1 of 2	(12)CAS	
Optical and Scattering Properties	Value	Condition	Note	Top
Optical Rotatory Power	+87.9 °	Solv: 1,4-dioxane (123-91-1); Wavlen: 589.3 nm	(20)CAS	
Optical Rotatory Power	+75-+78 °	Conc: 1.0 g/100mL; Solv: ethanol (64-17-5); Wavlen: 589.3 nm; Temp: 20 °C	(12)CAS	
Optical Rotatory Power	+68.2 °	Conc: 0.97 g/100mL; Solv: chloroform (67-66-3); Temp: 25 °C	(16)IC	

# Substance Detail—查看物质详细信息

Spectra Properties	Value	Condition	Note	Top
Carbon-13 NMR Spectrum	See full text	1 of 8	(3)CAS	
Circular Dichroism Spectrum	See full text	1 of 2	(4)IC	
IR Absorption Spectrum	See full text	1 of 11	(11)CAS	
Mass Spectrum	<a href="#">See spectrum</a>		(13)WSS	
Mass Spectrum	<a href="#">See spectrum</a>		(13)WSS	
Mass Spectrum	See full text	1 of 10	(1)CAS	
Proton NMR Spectrum	See full text	1 of 10	(15)CAS	
Raman Spectrum	See full text	1 of 2	(5)CAS	
Two-Dimensional NMR Spectrum	See full text	1 of 2	(24)CAS	
UV and Visible Absorption Spectrum	See full text		(22)CAS	
UV and Visible Emission/Luminescence Spectrum	See full text		(25)CAS	

## 物质的实验谱图

