



SciFinder[®]

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SciFinder Web使用介绍

李虹

SciFinder培训专员

2014.11

提纲

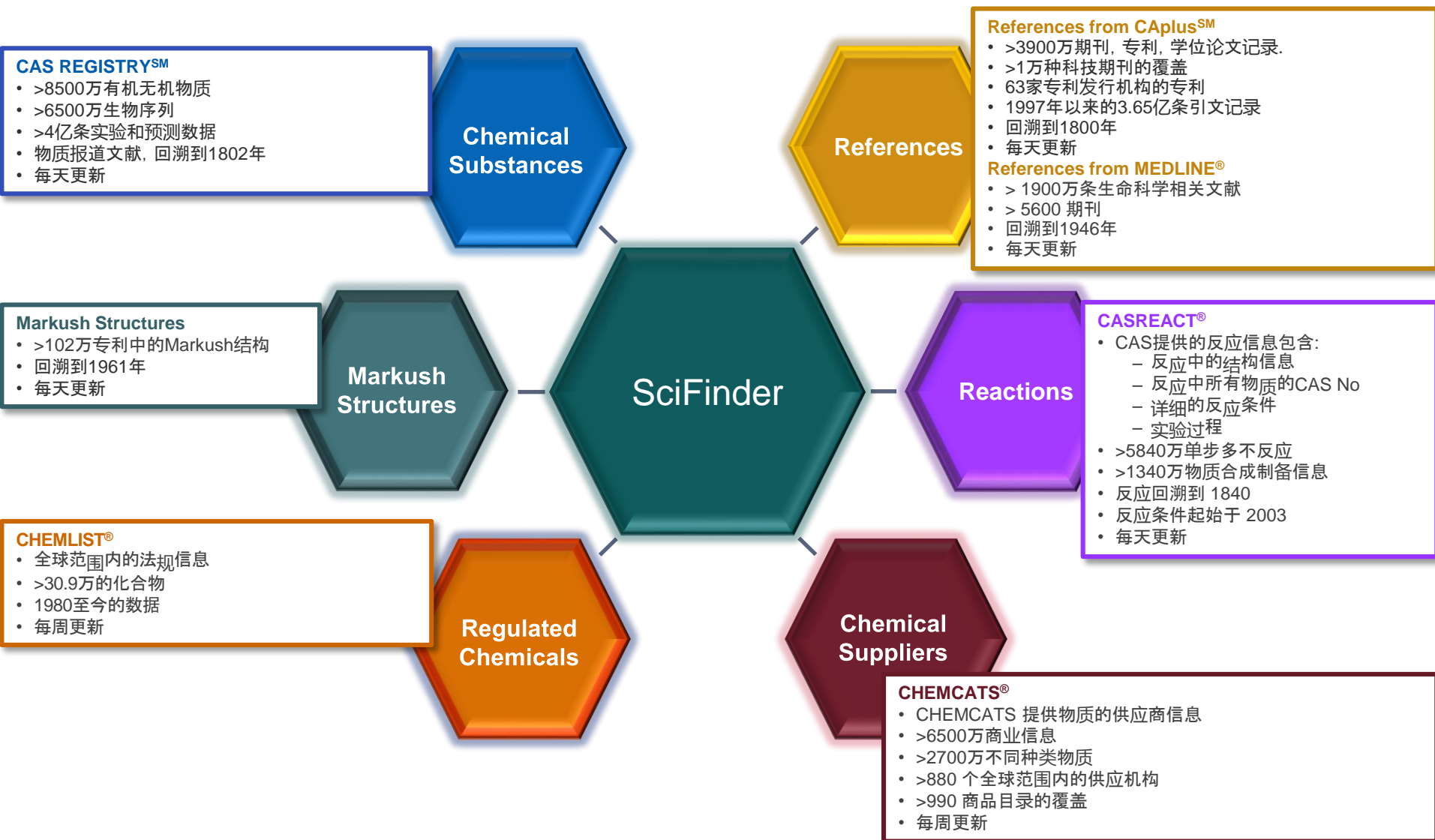
- 介绍
 - SciFinder Web中的内容
- **SciFinder Web中的检索和后处理**
 - SciFinder Web中的文献记录及主题检索
 - SciFinder Web中的物质结果及物质检索方法
 - SciFinder Web中的反应记录及反应检索
- **SciFinder Web的注册**

美国化学文摘社—Chemical Abstracts Service

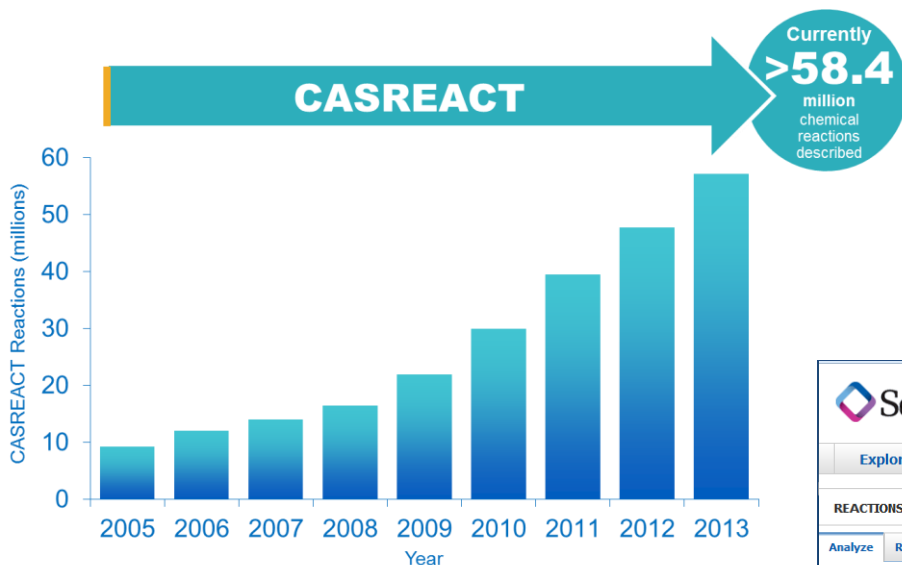
- 创建于1907年
- ACS的分支机构
- 密切关注，索引和提炼着全球化学相关的文献和专利
- 最早创立了《化学文摘》
- 总部坐落于俄亥俄州的哥伦布市



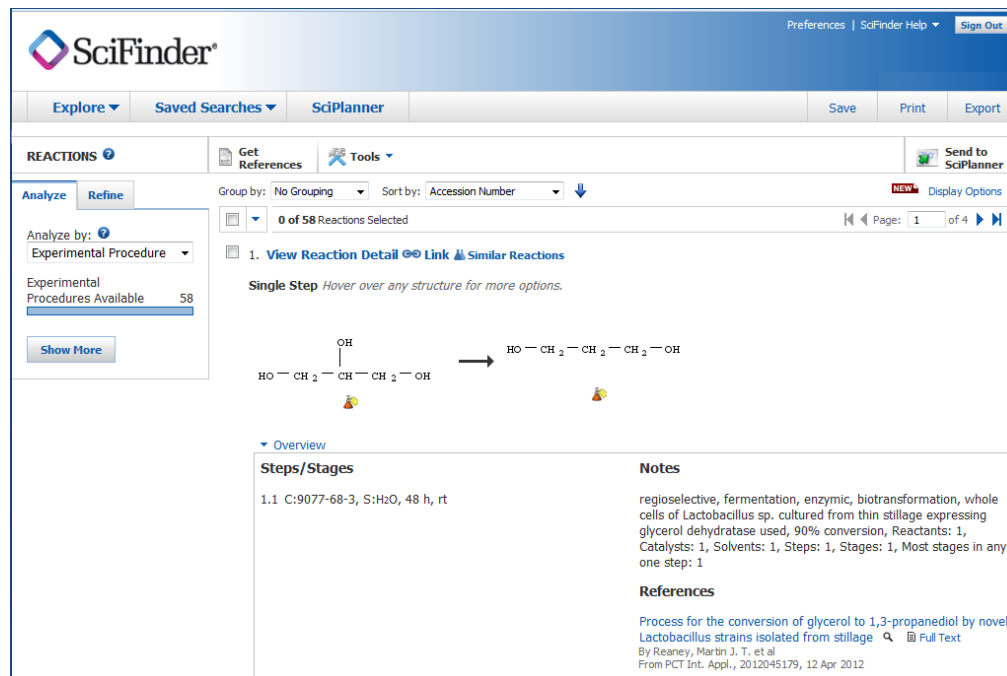
SciFinder的覆盖内容



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CASREACT是世界上最大的，更新速度最快的反应数据库



SciFinder interface showing a reaction detail page. The reaction is the conversion of glycerol to 1,3-propanediol. The interface includes navigation tabs (Explore, Saved Searches, SciPlanner), search filters (Group by: No Grouping, Sort by: Accession Number), and a list of reactions. The selected reaction is displayed with its chemical structure and associated experimental details.

REACTIONS | Get References | Tools | Send to SciPlanner

Analyze | Refine | Group by: No Grouping | Sort by: Accession Number | NEW Display Options

0 of 58 Reactions Selected | Page: 1 of 4

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

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

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

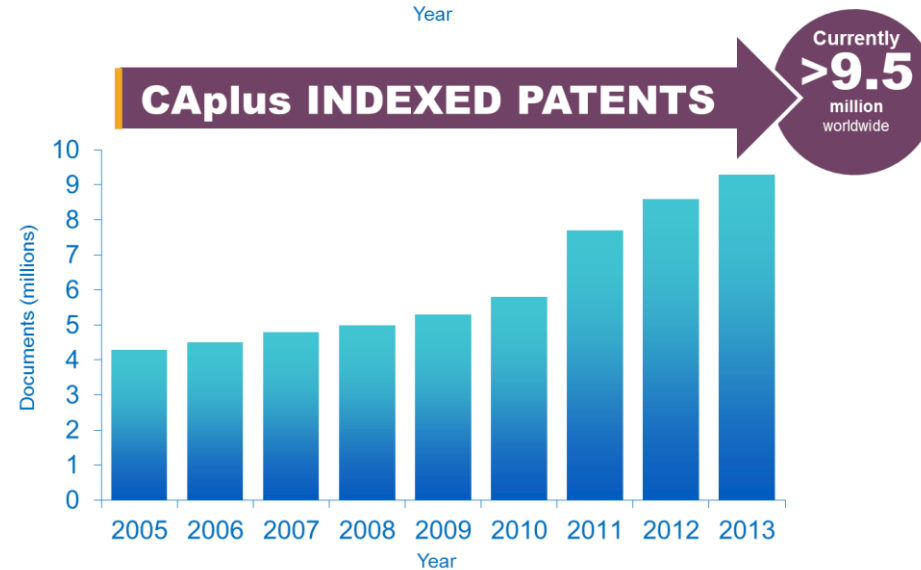
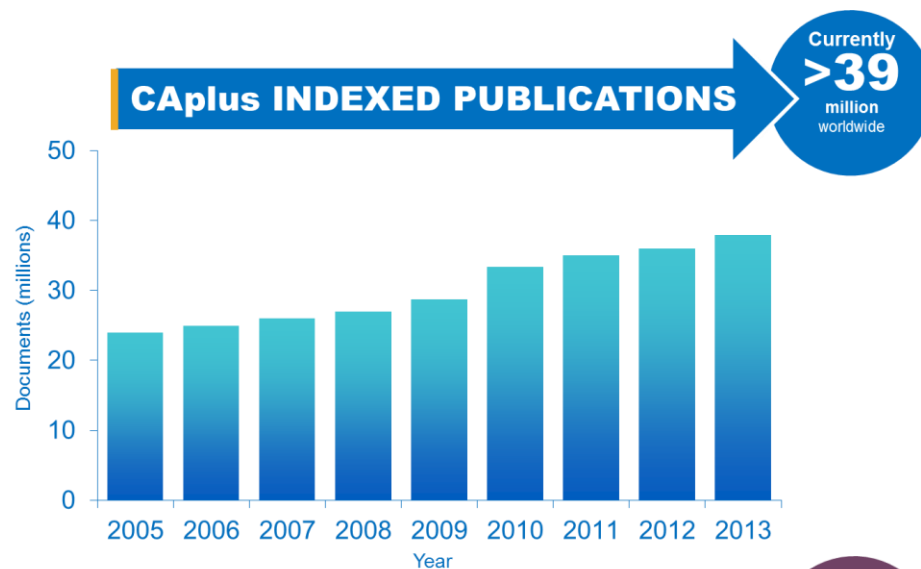
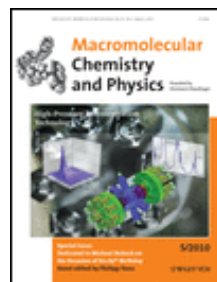
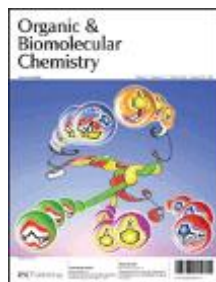
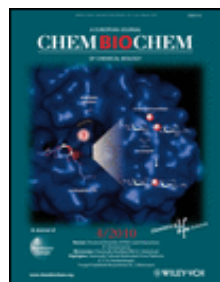
Overview

Steps/Stages	Notes
1.1 C:9077-68-3, S:H ₂ O, 48 h, rt	regioselective, fermentation, enzymic, biotransformation, whole cells of Lactobacillus 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

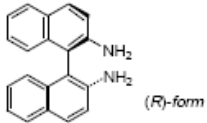
Process for the conversion of glycerol to 1,3-propanediol by novel Lactobacillus strains isolated from stillage [Full Text](#)
 By Reaney, Martin J. T. et al
 From PCT Int. Appl., 2012045179, 12 Apr 2012

CAplusSM 涵盖上万种期刊及63个专利发行机构专利



CAS REGISTRYSM 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 → **FNCT6-Y [4488-22-6]**

Molecular Formula → **C₂₀H₁₆N₂** Molecular weight → **M 284.360** RTECS® Number → **DU3090000**

Use → Intermediate for chiral auxiliaries.

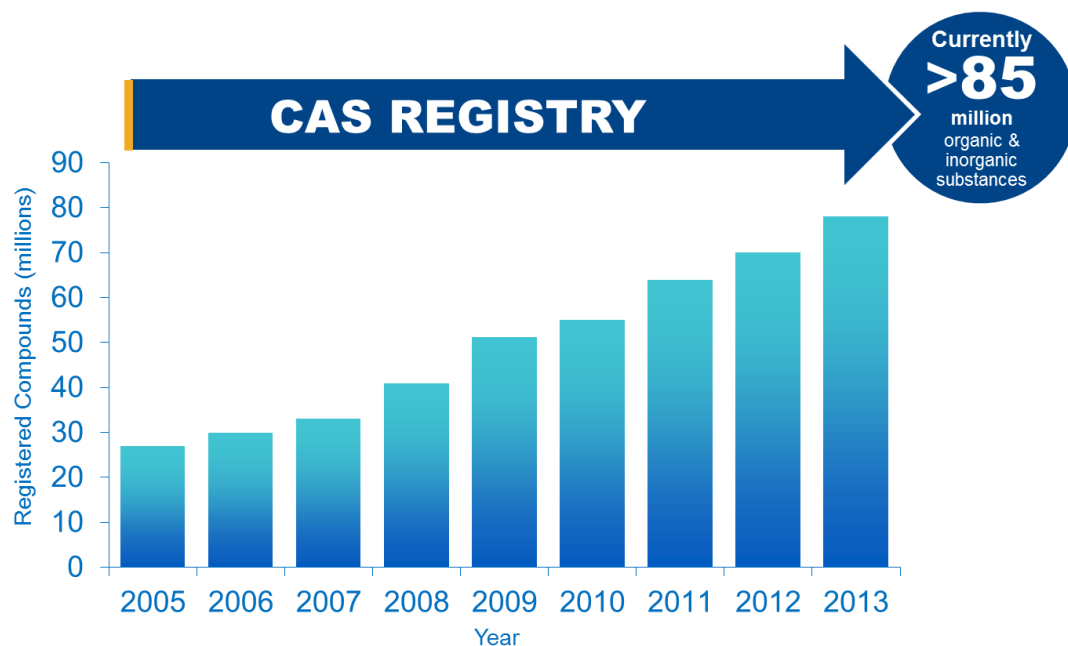
Hazard alert symbol and description of hazards → **Exp. numourigen by skin contact. Dec. with emission of toxic fumes. DU3090000**

Supplier Information → (R)-form: FNCT7-Z [18741-85-0] Mp 242.5-243°, [α]_D²⁵ + 155.5° (c. 1 in Py), [α]_D²⁵ + 46.8° (2M HCl). Supplier: Aldrich 38242-6; Fluka 32787.
N,N'-Di-Me: MMX33-Z [93713-30-5] Cryst. (EtOH). Mp 143-144° [α]_D²⁵ + 182° (c. 1.09 in C₆H₆).
N,N,N',N'-Tetra-Me: MMX33-A [135029-77-5] Cryst. (EtOH/C₆H₆). Mp 216-218°.
 (S)-form: FNCT8-A [18531-95-8] Cryst. Mp 243° (235-239°), [α]_D²⁵ - 149° (Py), [α]_D²⁵ - 46° (2M HCl). Supplier: Aldrich 38243-4; Fluka 32788.
N,N'-Di-Ac: FNCT9-V C₂₄H₂₀N₂O₂ M 368.434. Prisms (C₆H₆). Mp 226-227°.
 (Z)-form: FNCT1-W [79082-81-8] Silvery plates (EtOH), Mp 193.2-194.5° (191°).
 Picrate: FNCT4-Z Brownish-yellow plates (C₆H₆). Mp 185° (dec.).
N,N'-Di-Ac: FNCT8-X Cubes (EtOH), Mp 235-236°.
N,N'-Dibenzoyl: FNCT8-Y C₂₄H₁₈N₂O₂ M 492.576. Prisms (PhNO₂). Mp 235°.

Additional CAS Registry Numbers → [93621-61-5] [97644-73-0]

Bibliographic references → **Reference contents**

- 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*)
- Mislow, K. *et al.*, *J.A.C.S.*, 1962, 84, 1455 (*rev, ord*)
- 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, KJ *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*)
- Franzini, L. *et al.*, *Acta Cryst. C*, 1991, 47, 1259 (*cryst struct, N-tetra-Me*)
- Smrcina, 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, B6B750



提纲

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 - 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中的文献记录

[Return](#)

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1. Selective oxidation of **light** alkanes: interaction between the catalyst and the gas phase on different classes of catalytic materials

By: Cavani, F.; Trifiro, F.

A review, with 202 refs., on the selective oxidn. of **light** (C_{≤6}) 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.

Indexing

Fossil Fuels, Derivatives, and Related Products (Section51-0)

Section cross-reference(s): 35, 45

Concepts

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

Substances

12026-66-3 [a](#)
58834-75-6 [a](#)

catalyst-gas phase interactions in selective oxidn. of **light** alkanes to bulk and **industrial chems.**

Catalyst use; Uses

QUICK LINKS

0 Tags, 0 Comments

SOURCE

Catalysis Today
 Volume51
 Issue3-4
 Pages561-580
 Journal; General Review
 1999
 CODEN:CATTEA
 ISSN:0920-5861
 DOI:10.1016/S0920-5861(99)00041-3

COMPANY/ORGANIZATION

Dipartimento di Chimica Industriale e dei Materiali
 Bologna, Italy 40136

ACCESSION NUMBER

1999:340014
 CAN131:159478
 CAPLUS

PUBLISHER

Elsevier Science B.V.

Citations

Bielanski, A; Oxygen in Catalysis 1991
 Haber, J; ACS Symp Series 1996, 638, 20 [a](#)
[Oyama, S; ACS Symp Series 1996, 638, 2](#) [a](#) [a](#)
 Lee, J; Catal Rev-Sci Eng 1988, 30, 249 [a](#)
 Kung, H; Adv Catal 1994, 40, 1 [a](#)
 Vedrine, J; Catal Today 1997, 33, 3 [a](#)
 Vedrine, J; Catal Today 1996, 32, 115 [a](#)
 Busca, G; Catal Today 1996, 32, 133 [a](#)
 Cavani, F; Catalysis 1994, 11, 246 [a](#)
 Albonetti, S; Catal Rev-Sci Eng 1996, 38, 413 [a](#)
 Sokolovskii, V; Catal Rev-Sci Eng 1990, 32, 1 [a](#) [a](#)
 Delmon, B; Catalysts in Petroleum Refining and Petrochemical Industries 1995 1996
 Burch, R; J Mol Catal A 1995, 100, 13 [a](#)
 Schmidt, L; Chem Eng Sci 1994, 49, 3981 [a](#)
 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](#) [a](#)

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

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9

SciFinder中的文献检索方法

- 功能方面

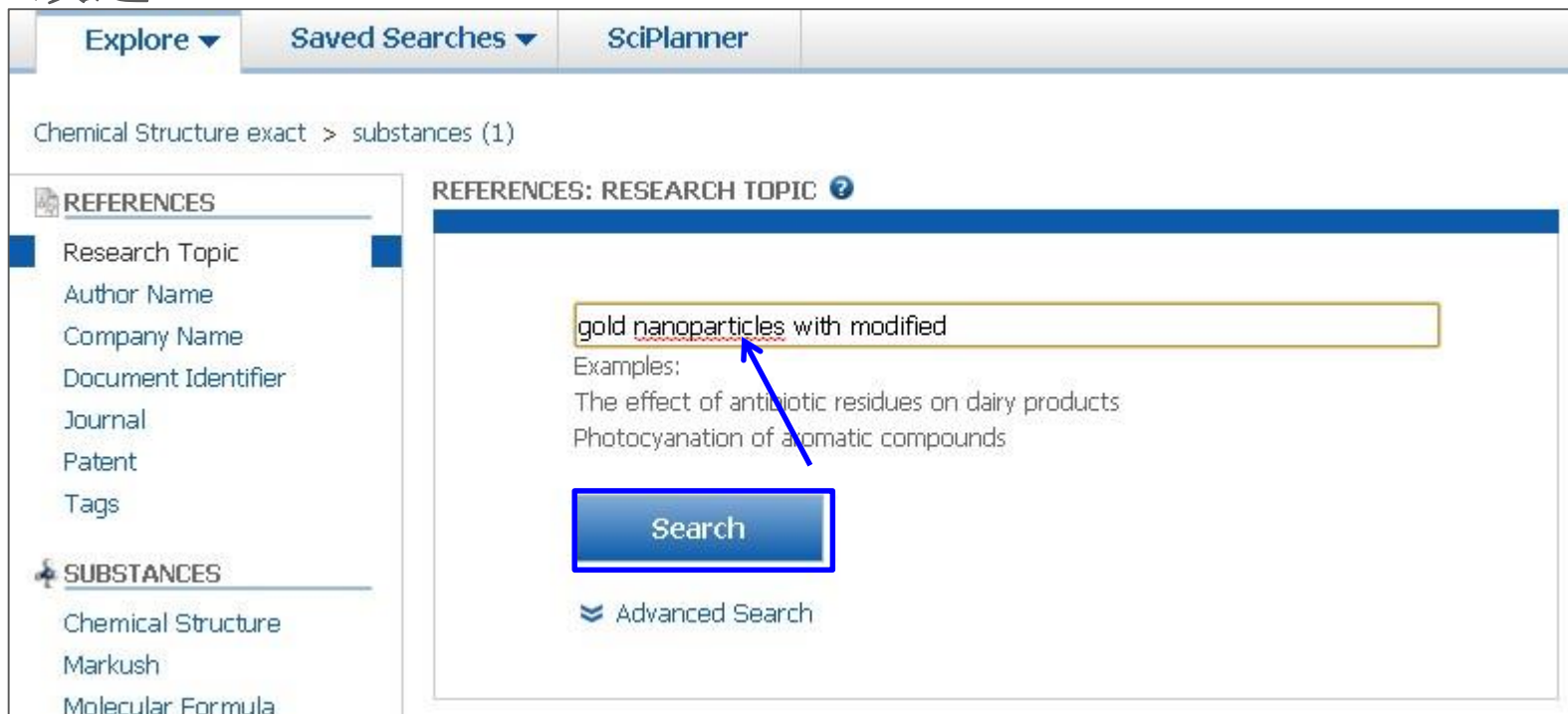
- 主题检索
- 作者名检索
- 机构名检索
- 文献标示符检索
- 从物质，反应获得文献

- 检索方法推荐

- 关注某特定领域的文献——主题检索
- 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 navigation tabs: 'Explore', 'Saved Searches', and 'SciPlanner'. Below the tabs, the breadcrumb path reads 'Chemical Structure exact > substances (1)'. On the left side, there are two main sections: 'REFERENCES' and 'SUBSTANCES'. Under 'REFERENCES', there is a list of search criteria: Research Topic, Author Name, Company Name, Document Identifier, Journal, Patent, and Tags. Under 'SUBSTANCES', there is a list: Chemical Structure, Markush, and Molecular Formula. The main content area is titled 'REFERENCES: RESEARCH TOPIC'. It features a search input field containing the text 'gold nanoparticles with modified'. Below the input field, there are two example search results: 'The effect of antibiotic residues on dairy products' and 'Photocyanation of aromatic compounds'. A blue arrow points from the text 'gold nanoparticles with modified' to the search input field. Below the input field 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

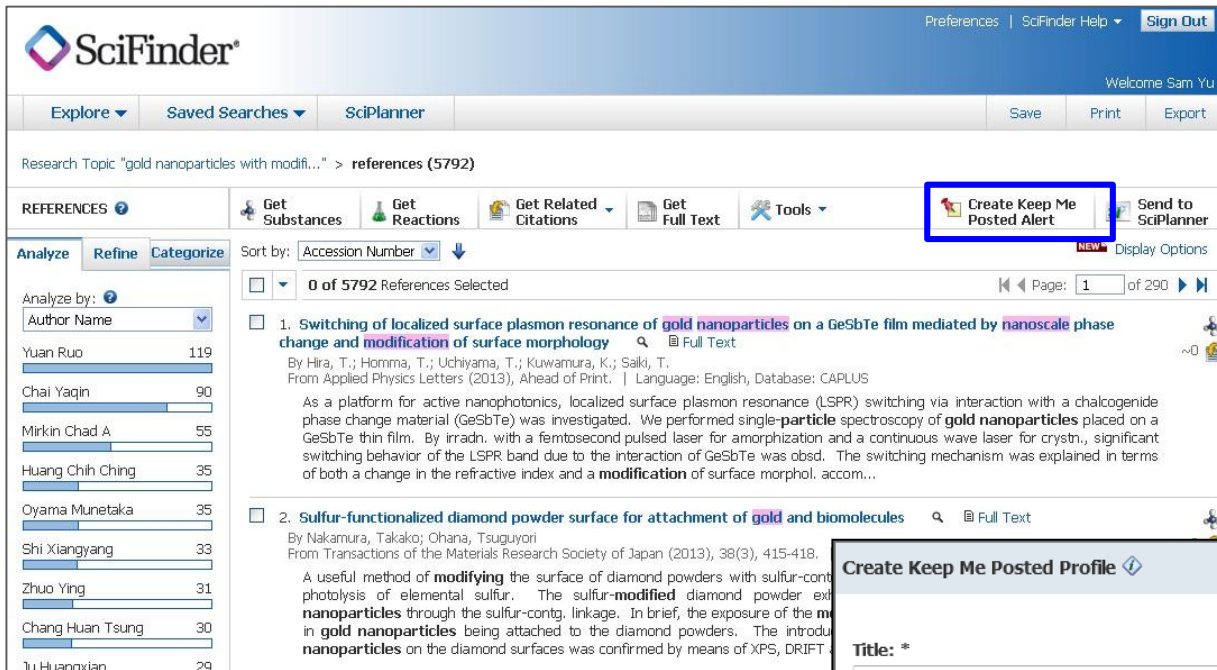
		References
<input type="checkbox"/>	583 references were found containing "gold nanoparticles with modified " as entered.	583
<input checked="" type="checkbox"/>	5792 references were found containing the two concepts "gold nanoparticles" and "modified" closely associated with one another.	5792
<input 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

“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..." > **references (5792)**

REFERENCES Get Substances Get Reactions Get Related Citations Get Full Text Tools Create Keep Me Posted Alert Send to SciPlanner

Analyze Refine Categorize Sort by: Accession Number NEW Display Options

Analyze by: Author Name

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 Huanxian	29

0 of 5792 References Selected Page: 1 of 290

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.

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 groups was developed by the photocatalytic photolysis of elemental sulfur. The sulfur-modified diamond powder exhibited a high affinity for gold nanoparticles through the sulfur-containing linkage. In brief, the exposure of the modified diamond powder to gold nanoparticles resulted in the gold nanoparticles being attached to the diamond powders. The introduction of gold nanoparticles on the diamond surfaces was confirmed by means of XPS, DRIFT, and TEM.

KMP是SciFinder提供的自动提醒功能，能及时将最新资讯，推送到用户的邮箱中

Create Keep Me Posted Profile

Title: *
 GNPs with modified

Description:
 Characters Remaining: 1024

Duration
 Expires On: Nov 20, 2013 [Change](#)

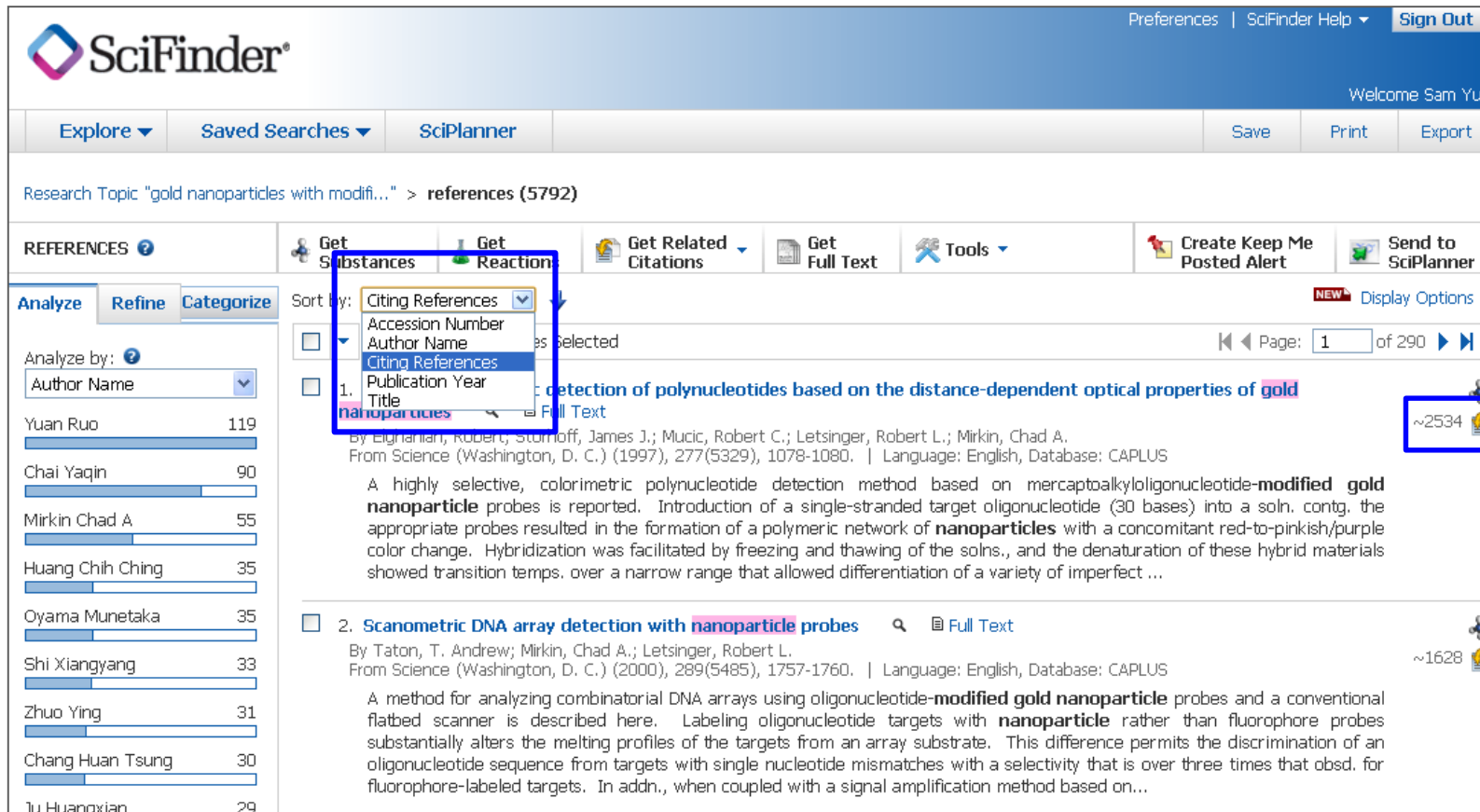
Frequency
 Send updates once every Week

Exclude previously retrieved references.

[Create](#) [Cancel](#)

Search:
 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

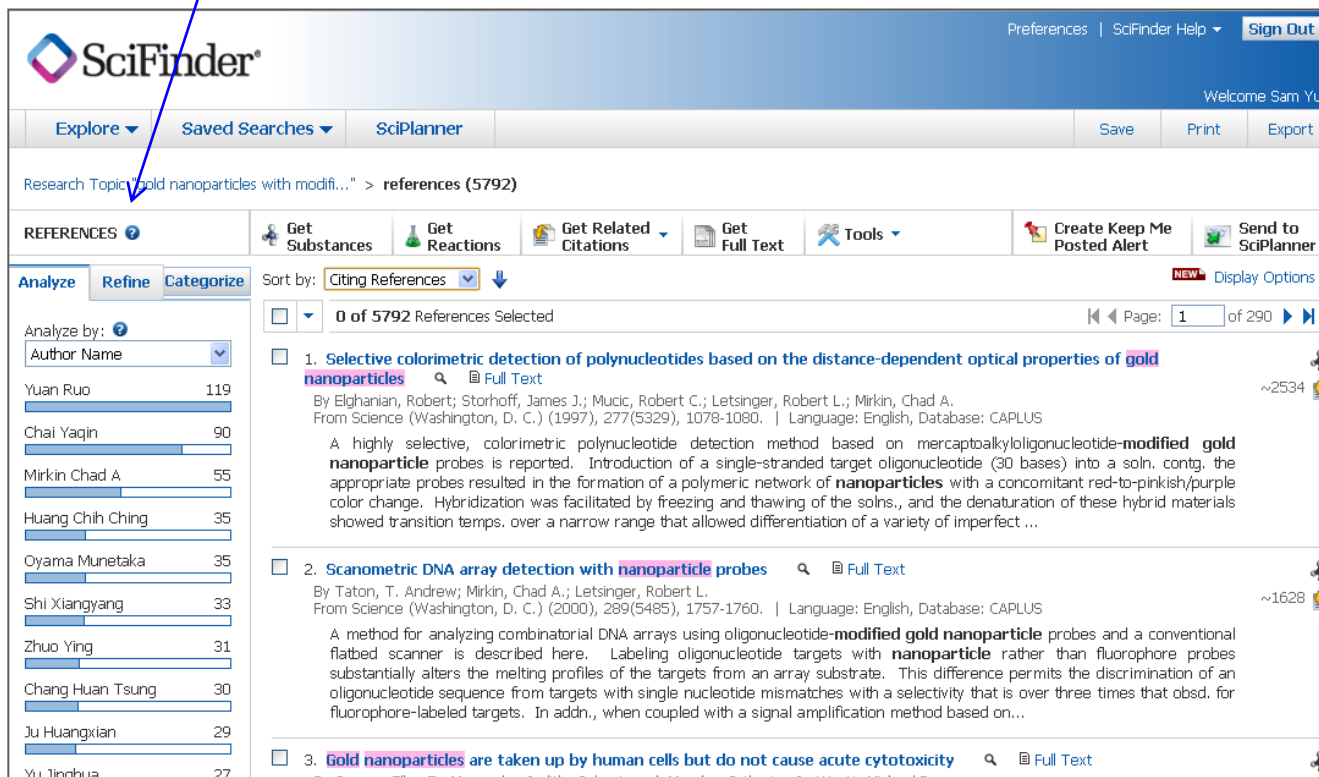


The screenshot shows the SciFinder interface with the following elements:








- Header:** SciFinder logo, Preferences | SciFinder Help, Sign Out, and Welcome Sam Yu.
- Navigation:** Explore, Saved Searches, SciPlanner, Save, Print, Export.
- Search Topic:** "gold nanoparticles with modifi..." > references (5792).
- Tools:** Get Substances, Get Reaction, Get Related Citations, Get Full Text, Tools, Create Keep Me Posted Alert, Send to SciPlanner.
- Sort by:** A dropdown menu is open, showing options: Citing References (selected), Accession Number, Author Name, Citing References, Publication Year, and Title.
- Results List:**
 - 1. **... detection of polynucleotides based on the distance-dependent optical properties of gold nanoparticles** (highlighted). By Eghrianian, 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. ~2534.
 - 2. **Scanometric DNA array detection with nanoparticle probes** (highlighted). By Taton, T. Andrew; Mirkin, Chad A.; Letsinger, Robert L. From Science (Washington, D. C.) (2000), 289(5485), 1757-1760. | Language: English, Database: CAPLUS. ~1628.
- Left Panel:** Analyze by: Author Name. A list of authors with their citation counts: 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 Huanxian (29).

SciFinder 中的文献检索结果

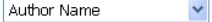
文献分析工具





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

REFERENCES       










Analyze **Refine** Categorize

Analyze by: 

Author Name	Citation 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 Jinhua	27

Sort by: Citing References  

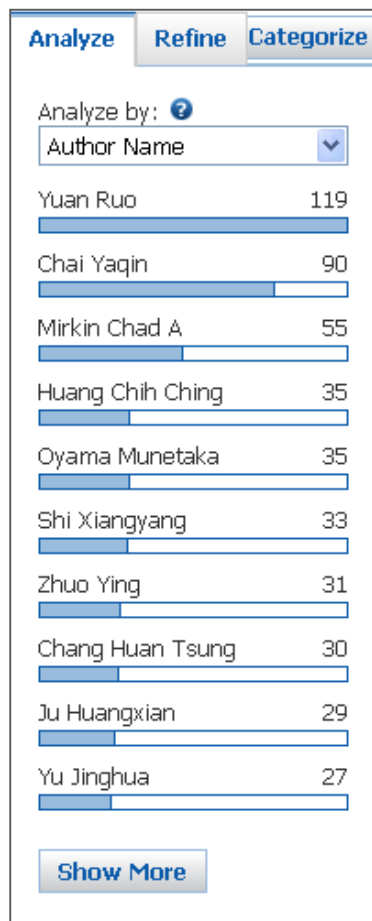
0 of 5792 References Selected Page: 1 of 290

- Selective colorimetric detection of polynucleotides based on the distance-dependent optical properties of gold nanoparticles**   ~2534 
 By Elghanian, 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
 A highly selective, colorimetric polynucleotide detection method based on mercaptobalkyloligonucleotide-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 ...
- Scanometric DNA array detection with nanoparticle probes**   ~1628 
 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...
- Gold nanoparticles are taken up by human cells but do not cause acute cytotoxicity**   

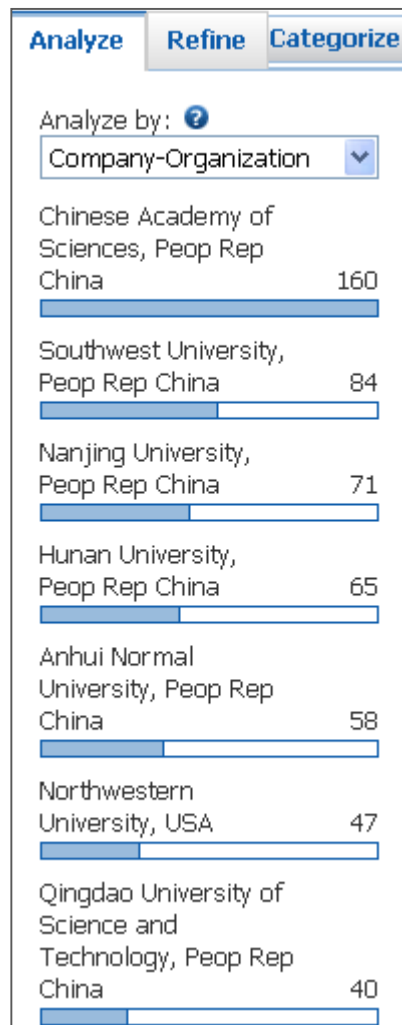
SciFinder提供强大的文献处理工具，帮助处理文献

SciFinder中的Analysis

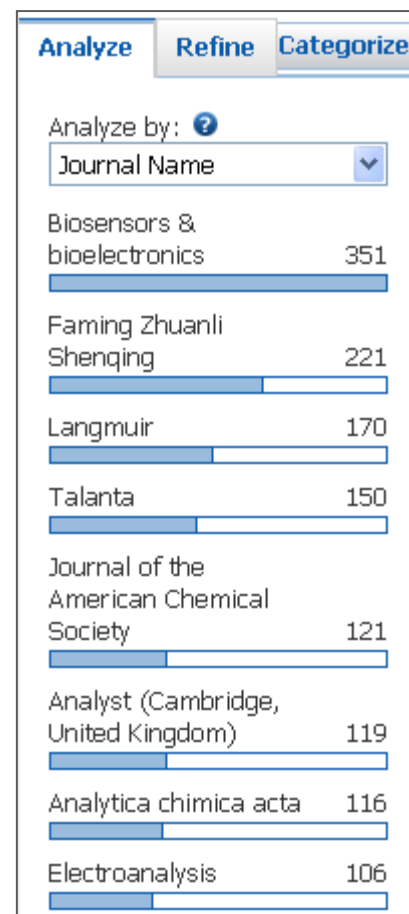
领域内主要研究人员，专家



主要研究机构，合作伙伴，竞争对手





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SciFinder中的Analysis By Index Term

Analyze **Refine** **Categorize**


Analyze by: 
 Index Term 

Nanoparticles	3758
Surface treatment	1031
Chemically modified electrodes	1015
Electrodes	959
Biosensors	887
Cyclic voltammetry	795
Nanofabrication	741
chemistry	709
Gold	672
Human	664




Show More

索引词 (Index Term)：可以帮助我们对文献的内容进行大致的了解

Analyze - Index Term

 Only 1,000 Terms are displayed. [close](#)

8425 Items 1 Selected [Export](#)

Sort by: **Frequency**  Page: **1** of 20  

Select bars to view only those references within the current answer set.

<input type="checkbox"/> Nanoparticles	3758
<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

Apply **Cancel**

选择感兴趣的内容，点击Apply

SciFinder中的Refine

Analyze Refine Categorize

Refine by: ?

- Research Topic
- Author
- Company Name
- Document Type
- Publication Year
- Language
- Database

Company Name

China

Examples:

3M

DuPont

Refine

Refine : 帮助用户迅速获得需要的文献

中科院

REFERENCES

Get Substances Get Reactions Get Related Citations Get Full Text Tools

Create Keep Me Posted Alert Send to SciPlanner

Analyze Refine Categorize

Sort by: Citing References

0 of 2270 References Selected

Page: 1 of 114

Analyze by: Company-Organization

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

- Graphene/AuNPs/chitosan nanocomposites film for glucose biosensing**

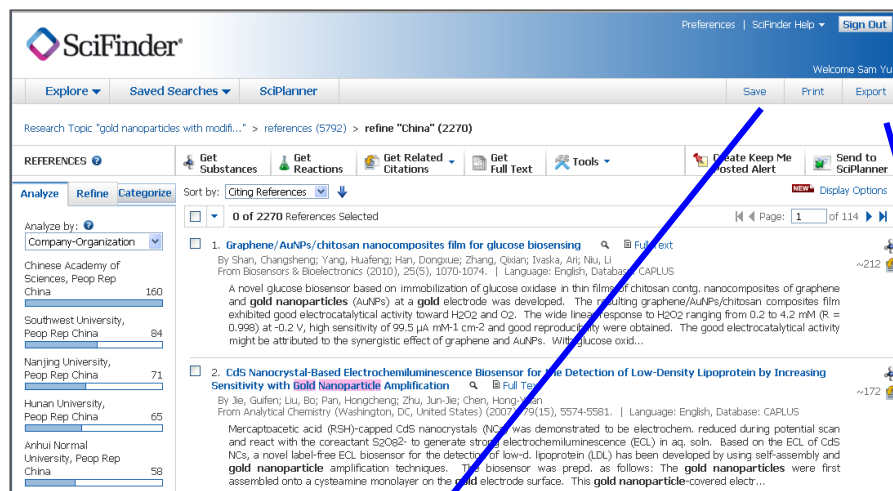
By Shan, Changsheng; Yang, Huafeng; Han, Dongxue; Zhang, Qixian; Ivaska, Ari; Niu, Li
 From Biosensors & Bioelectronics (2010), 25(5), 1070-1074. | Language: English, Database: CAPLUS

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 H₂O₂ and O₂. The wide linear response to H₂O₂ ranging from 0.2 to 4.2 mM (R = 0.998) at -0.2 V, high sensitivity of 99.5 μA mM⁻¹ cm⁻² and good reproducibility were obtained. The good electrocatalytical activity might be attributed to the synergistic effect of graphene and AuNPs. With glucose oxid...
- CdS Nanocrystal-Based Electrochemiluminescence Biosensor for the Detection of Low-Density Lipoprotein by Increasing Sensitivity with Gold Nanoparticle Amplification**

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 S₂O₈²⁻ 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...

结果集的保存



Export:

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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All answers

Only selected answers

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Description:

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保存在服务器上，可登陆后查看

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Export:

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Selected

Range

Example: 2-20

For:

Citation Manager

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Quoted Format (*.bt)

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Offline review

Portable Document Format (*.pdf)

Rich Text Format (*.rtf)

Answer Keys (*.bt)

Saving locally

Answer Key eXchange (*.akx)

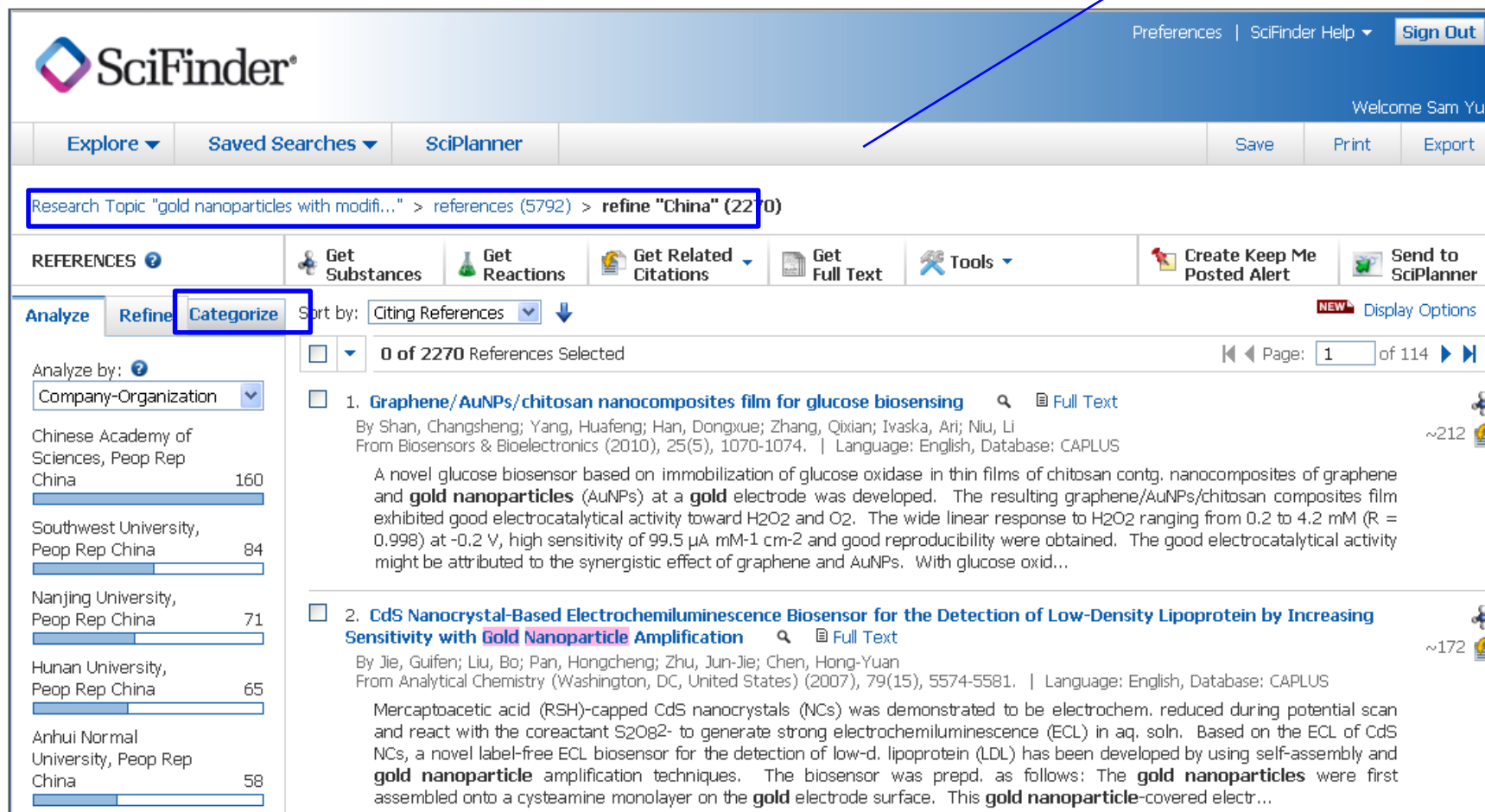
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File Name: *

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Analyze Refine **Categorize** Sort by: Citing References ▾ Display Options

0 of 2270 References Selected Page: 1 of 114

Analyze by: Company-Organization ▾

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

- Graphene/AuNPs/chitosan nanocomposites film for glucose biosensing** Full Text ~212
 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 H₂O₂ and O₂. The wide linear response to H₂O₂ ranging from 0.2 to 4.2 mM (R = 0.998) at -0.2 V, high sensitivity of 99.5 μA mM⁻¹ cm⁻² and good reproducibility were obtained. The good electrocatalytical activity might be attributed to the synergistic effect of graphene and AuNPs. With glucose oxid...
- CdS Nanocrystal-Based Electrochemiluminescence Biosensor for the Detection of Low-Density Lipoprotein by Increasing Sensitivity with Gold Nanoparticle Amplification** Full Text ~172
 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 S₂O₈²⁻ 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. 2. Select index terms of interest.

Category Heading	Category	Index Terms	Selected Terms
All	Particle phenomena (34)	Select All Deselect All	Click 'x' to remove the category from 'Selected Terms'
Technology	Gas, liquid, & solid phenomena (145)	<input type="checkbox"/> Stability 144	<input checked="" type="checkbox"/> Physical chemistry > Thermodynamics (1 Terms)
General chemistry	Electric & magnetic phenomena (72)	<input type="checkbox"/> Temperature 58	
Analytical chemistry	Atomic & molecular phenomena (99)	<input type="checkbox"/> Affinity 32	
Physical chemistry	Spectra & spectroscopy (108)	<input type="checkbox"/> Ionic strength 9	
Biotechnology	Surface phenomena (55)	<input type="checkbox"/> Annealing 8	
Genetics & protein chemistry	Mechanics (53)	<input type="checkbox"/> Crystallization 7	
Synthetic chemistry	Thermodynamics (31)	<input checked="" type="checkbox"/> Thermal stability 7	
Biology	Quantum mechanics (29)	<input type="checkbox"/> Formal potential 6	
Polymer chemistry	Miscellaneous substances (39)	<input type="checkbox"/> Dissociation constant 3	
Catalysis		<input type="checkbox"/> Electrostatic potential 3	
Environmental chemistry		<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	

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

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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

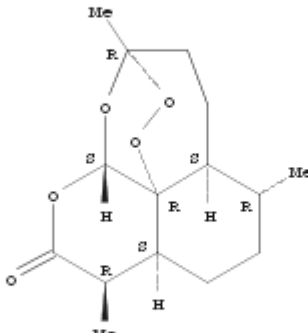
提纲

- 介绍
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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的注册**

SciFinder中的物质结果界面

1. Substance Detail
63968-64-9

~3242



A complex polycyclic chemical structure with absolute stereochemistry. It features a benzodioxepin core fused to a pyranone ring, with three methyl groups (Me) and specific stereochemical configurations (R and S) indicated at various chiral centers.

Absolute stereochemistry.

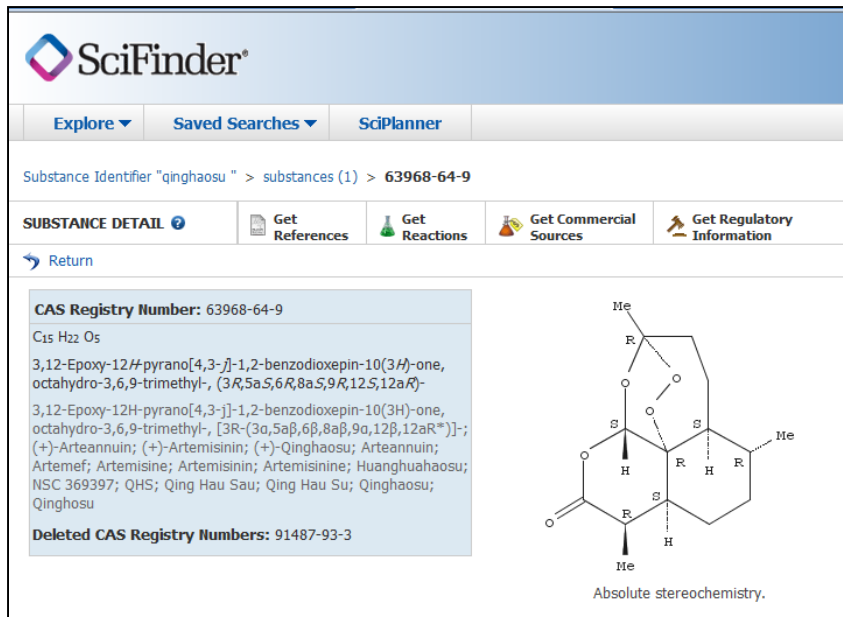
C₁₅ H₂₂ O₅
 3,12-Epoxy-12*H*-pyrano[4,3-*j*]-1,2-benzodioxepin-10(3*H*)-one, octahydro-3,6,9-trimethyl-, (3*R*,5*aS*,6*R*,8*aS*,9*R*,12*S*,12*aR*)-





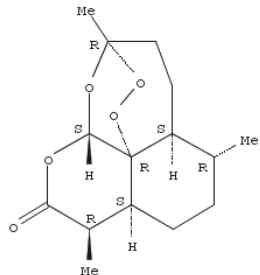
[Spectra](#)
[Experimental Properties](#)

一个完整的物质结果界面包含：


- 物质详情连接
- 文献连接
- 反应连接
- 商品信息连接
- 管制品信息连接
- 谱图连接
- 实验性质连接

Substance Detail—查看物质详细信息



SciFinder®
 Explore ▾ Saved Searches ▾ SciPlanner
 Substance Identifier "qinghaosu" > substances (1) > 63968-64-9
SUBSTANCE DETAIL ⓘ  Get References  Get Reactions  Get Commercial Sources  Get Regulatory Information
 Return
CAS Registry Number: 63968-64-9
 C₁₅ H₂₂ O₅
 3,12-Epoxy-12H-pyrano[4,3-*j*]-1,2-benzodioxepin-10(3*H*)-one, octahydro-3,6,9-trimethyl-, (3*R*,5*a**S*,6*R*,8*a**S*,9*R*,12*S*,12*a**R*)-
 3,12-Epoxy-12H-pyrano[4,3-*j*]-1,2-benzodioxepin-10(3*H*)-one, octahydro-3,6,9-trimethyl-, [3*R*-(3*α*,5*α*β,6β,8*α*β,9*α*,12β,12*a**R*⁺)]-; (+)-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。

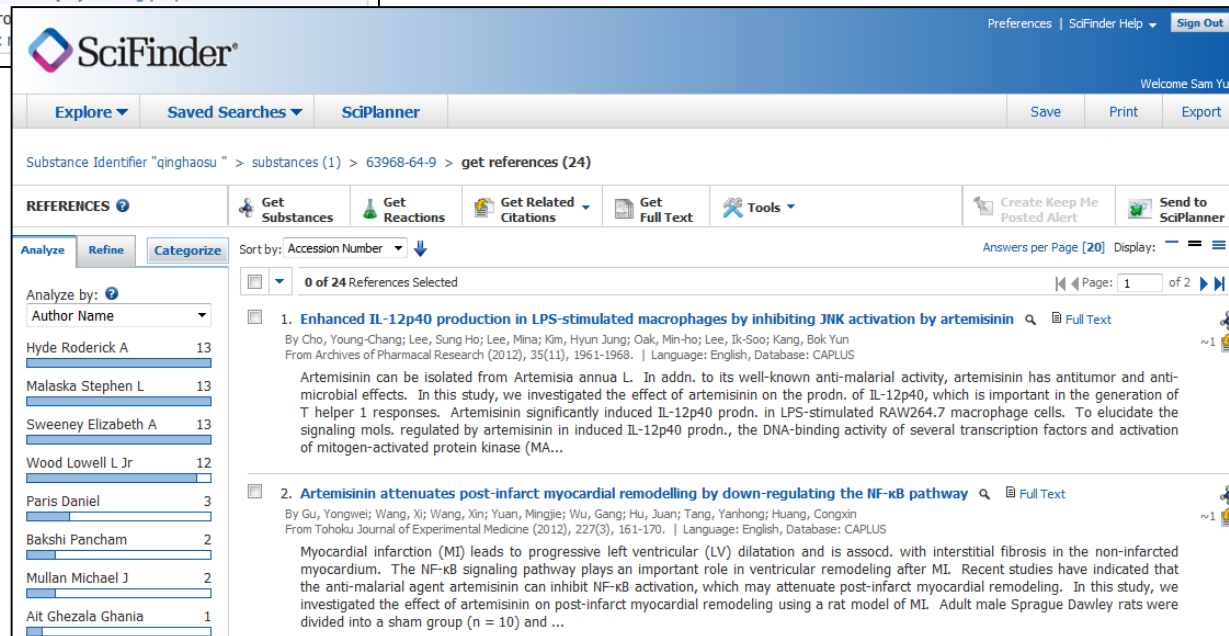
Document Types: Book, Conference, Dissertation, Journal, Patent, Report

CAS Role	Document Types			
	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

▼ Bioactivity Indicators <small>NEW</small>		▼ Target Indicators <small>NEW</small>	
	References		References
Anti-infective agents (all) >>> Antimalarials	805	Cytokines (all) >> Chemokines	13
Anti-infective agents (all) >>> Antiviral agents	34	Cytokines (all) >> Tumor necrosis factors	11
Anti-infective agents (all) >> Parasiticides	43	DNA-binding proteins (all) >>> Transcription factor NF-κB	21
Anti-inflammatory agents (all) > Anti-inflammatory agents	41	Enzymes (all) >>>> Adenosine triphosphatase	15
Antitumor agents (all) > Antitumor agents	169	Enzymes (all) >>>> 26S proteasome	15
Natural products MD pharmaceutical	108	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) >>>>	21
		Transcription factor NF-κB	
		Transport proteins (all) >> P-glycoproteins	15
		Transport proteins (all) >> P-glycoproteins	15

物质的生物活性和靶点信息，
直接点击，获得相关文献



The screenshot shows the SciFinder web interface. At the top, there are navigation links for 'Explore', 'Saved Searches', 'SciPlanner', 'Save', 'Print', and 'Export'. The main content area displays search results for 'Substance Identifier "qinghaosu" > substances (1) > 63968-64-9 > get references (24)'. The results are sorted by 'Accession Number' and show 0 of 24 references selected. Two references are visible:

- 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; Km, Hyun Jung; Oak, Min-ho; Lee, Ik-Soo; Kang, Bok Yun
From Archives of Pharmacal 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	

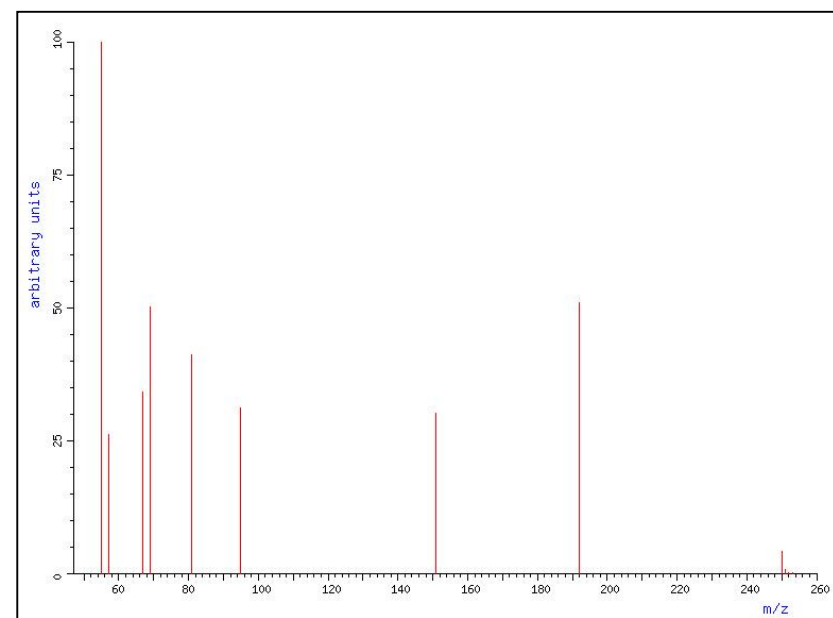
Lipinski and Related Properties	Value	Condition	Note	Top
logP	See full text	1 of 2	(12)CAS	

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	See spectrum		(13)WSS	
Mass Spectrum	See spectrum		(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	

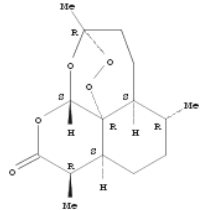
物质的实验谱图



物质有关的反应

1. **Substance Detail**
63968-64-9

~3242 



Absolute stereochemistry.

C₁₅H₂₂O₅
 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)-



Get Reactions

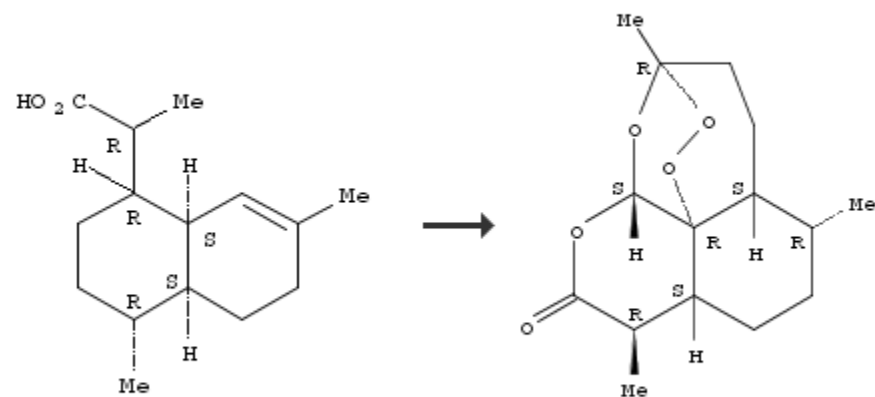
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Product

- Reactant
- Reagent
- Reactant or reagent
- Catalyst
- Solvent
- Any role

Get **Cancel**

1. **View Reaction Detail**  [Link](#)  **Similar Reactions**
Single Step *Hover over any structure for more options.*




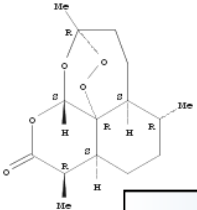
[Overview](#)

物质有关的商业来源

可以直接Export到Excel中，又或者使用分析工具，对商业信息进行处理

1. Substance Detail
63968-64-9

~3242 



Absolute stereochemistry

C₁₅H₂₂O₅
 3,12-Epoxy-12H-pyrano[4,3-f]-one, octahydro-3,6,9-trimethyl-12S,12aR-


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Substance Identifier "qinghaosu" > substances (1) > 63968-64-9 > **commercial sources (91)**

COMMERCIAL SOURCES 

Analyze by:  [Catalog Name](#)

Sort by: [Catalog Name](#) 


0 of 91 Commercial Sources Selected Page: 1 of 5

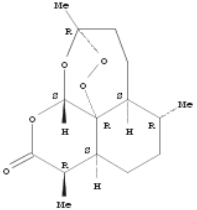
Supplier	Product List	Quantity	Order Number	Catalog Publication Date
1. 3B Scientific Corporation Product List	Supplier Name: 3B Scientific Corporation, Catalog Publication Date: 12 Jul 2012 Order Number: 382-3802 Quantity: 1g 63968-64-9 Artemisinin Link			
2. A Chemtek Product List	Supplier Name: A Chemtek, Catalog Publication Date: 13 Mar 2013 Order Number: 031-18967 Quantity: N/A 63968-64-9 Artemisinin Link			

Accel Pharmtech Product List 2
 AK Scientific Product Catalog 2
 Chemieliva Pharmaceutical Product List 2
 ChemPacific Product

物质有关的文献信息

1. Substance Detail
63968-64-9

~3242 




Absolute stereochemistry.

C₁₅ H₂₂ O₅
 3,12-Epoxy-12H-pyrano[4,3-j]-1,2-benzodioxepin-10(3H)-one, octahydro-3,6,9-trimethyl-, (3R,5aS,6R,8a,S,9R,12S,12aR)-

[Spectra](#)
[Experimental Properties](#)

一键获得文献，可以获得全部，也可以勾选特别感兴趣的内容，不勾选，默认获得全部

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Limit results to:

<input checked="" type="checkbox"/> Adverse Effect, including toxicity	<input type="checkbox"/> Prophetics in Patents
<input type="checkbox"/> Analytical Study	<input type="checkbox"/> Preparation
<input type="checkbox"/> Biological Study	<input type="checkbox"/> Process
<input type="checkbox"/> Combinatorial Study	<input type="checkbox"/> Properties
<input type="checkbox"/> Crystal Structure	<input type="checkbox"/> Reactant or Reagent
<input type="checkbox"/> Formation, nonpreparative	<input type="checkbox"/> Spectral Properties
<input type="checkbox"/> Miscellaneous	<input type="checkbox"/> Uses
<input type="checkbox"/> Occurrence	

For each sequence, retrieve:

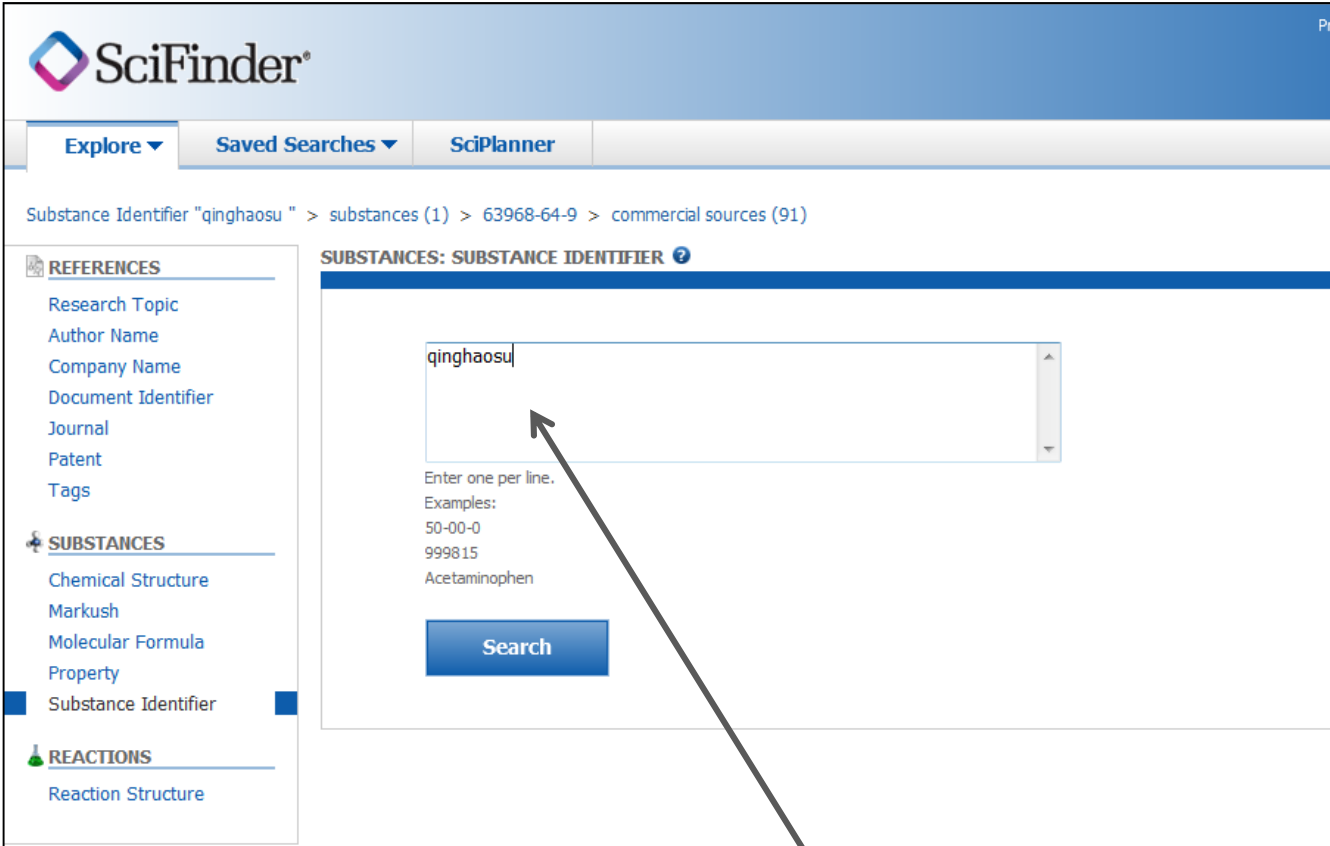
Additional related references, e.g., activity studies, disease studies.

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SciFinder中的物质检索方法

- 功能方面
 - 物质名称, CAS No
 - 分子式
 - 结构式
 - 理化性质
- 推荐的物质检索功能
 - 有机物, 天然产物及衍生物 ---结构比较方便
 - 无机物 ---分子式比较方便
 - 高分子化合物 ---首先分子式, 其次结构

物质名称检索



Substance Identifier "qinghaosu" > substances (1) > 63968-64-9 > commercial sources (91)

REFERENCES

- Research Topic
- Author Name
- Company Name
- Document Identifier
- Journal
- Patent
- Tags

SUBSTANCES

- Chemical Structure
- Markush
- Molecular Formula
- Property
- Substance Identifier

REACTIONS

- Reaction Structure

SUBSTANCES: SUBSTANCE IDENTIFIER

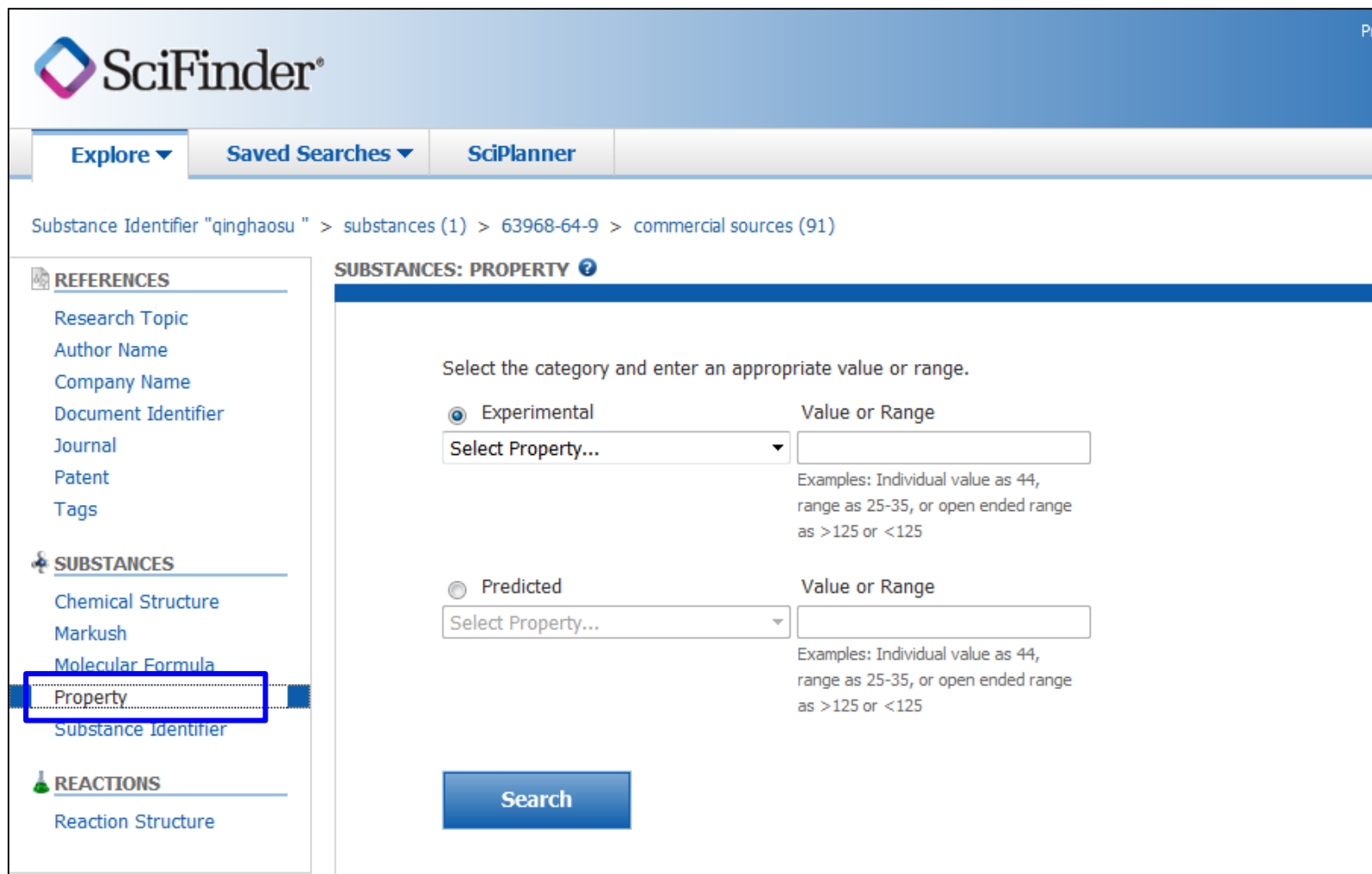
qinghaosu

Enter one per line.
 Examples:
 50-00-0
 999815
 Acetaminophen

Search

直接输入物质的名称，CAS No，俗名，都能检索，一次最多检索25个物质，用换行换开

理化性质检索



Substance Identifier "qinghaosu " > substances (1) > 63968-64-9 > commercial sources (91)

REFERENCES

- Research Topic
- Author Name
- Company Name
- Document Identifier
- Journal
- Patent
- Tags

SUBSTANCES

- Chemical Structure
- Markush
- Molecular Formula
- Property**
- Substance Identifier

REACTIONS

- Reaction Structure

SUBSTANCES: PROPERTY ?

Select the category and enter an appropriate value or range.

Experimental

Select Property...

Examples: Individual value as 44,
range as 25-35, or open ended range
as >125 or <125

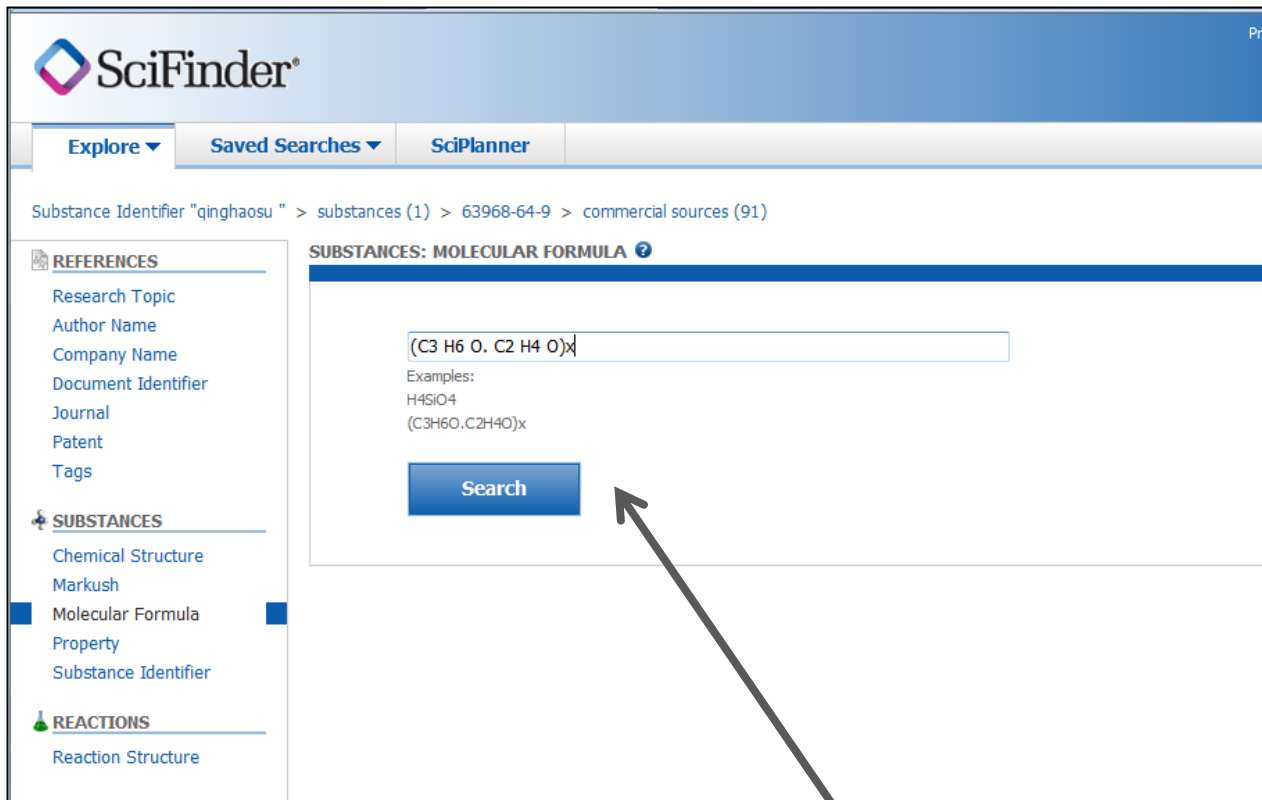
Predicted

Select Property...

Examples: Individual value as 44,
range as 25-35, or open ended range
as >125 or <125

Search

分子式检索



Substance Identifier "qinghaosu " > substances (1) > 63968-64-9 > commercial sources (91)

REFERENCES

- Research Topic
- Author Name
- Company Name
- Document Identifier
- Journal
- Patent
- Tags

SUBSTANCES

- Chemical Structure
- Markush
- Molecular Formula**
- Property
- Substance Identifier

REACTIONS

- Reaction Structure

SUBSTANCES: MOLECULAR FORMULA

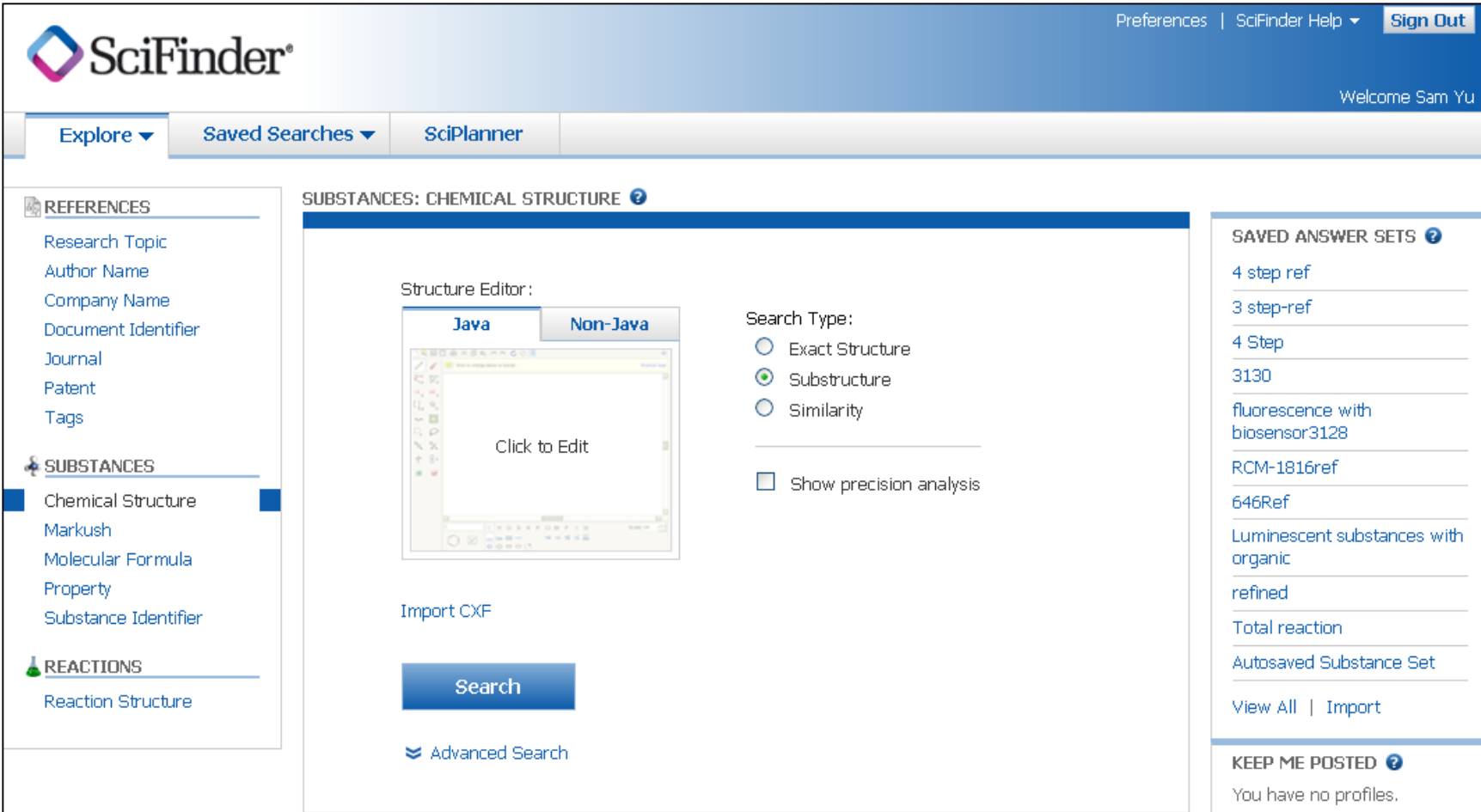
(C3 H6 O. C2 H4 O)x

Examples:
 H4SiO4
 (C3H6O.C2H4O)x

Search

SciFinder中的分子式的检索，需要按照HILL排序方式输入，简单来说，CH写前面，其他的按照字母顺序写

结构式检索



The screenshot displays the SciFinder web interface for a chemical structure search. The top navigation bar includes the SciFinder logo, user preferences, help, and a sign-out button. Below the navigation bar, there are tabs for 'Explore', 'Saved Searches', and 'SciPlanner'. The main content area is titled 'SUBSTANCES: CHEMICAL STRUCTURE' and features a 'Structure Editor' window with 'Java' and 'Non-Java' tabs. The editor contains a 'Click to Edit' prompt. To the right of the editor, there are search type options: 'Exact Structure', 'Substructure' (selected), and 'Similarity'. A checkbox for 'Show precision analysis' is also present. A 'Search' button is located below the editor. On the left side, there is a sidebar menu with categories: 'REFERENCES' (Research Topic, Author Name, Company Name, Document Identifier, Journal, Patent, Tags), 'SUBSTANCES' (Chemical Structure, Markush, Molecular Formula, Property, Substance Identifier), and 'REACTIONS' (Reaction Structure). On the right side, there is a 'SAVED ANSWER SETS' section listing various saved searches like '4 step ref', '3 step-ref', '4 Step', '3130', 'fluorescence with biosensor3128', 'RCM-1816ref', '646Ref', 'Luminescent substances with organic refined', 'Total reaction', and 'Autosaved Substance Set'. At the bottom right, there is a 'KEEP ME POSTED' section indicating 'You have no profiles.'

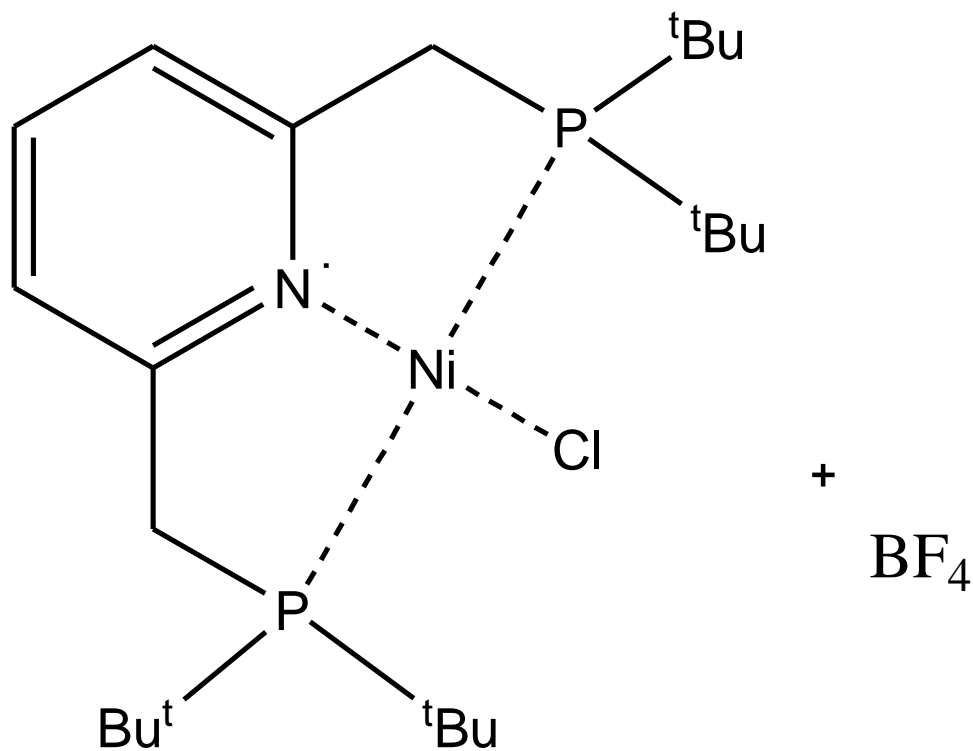
SciFinder结构绘制工具

The image shows the SciFinder Structure Editor interface with various tools highlighted by red boxes and Chinese labels. The interface includes a top menu bar, a toolbar, a main drawing area, and a right-hand panel with search options.

Labels and their corresponding tools:

- 铅笔 (Pencil)
- 橡皮 (Eraser)
- 结构和反应切换功能 (Structure and reaction switching function)
- 元素周期表 (Periodic table)
- 常用基团 (Common groups)
- 可变基团 (Variable groups)
- R基团定义工具 (R-group definition tool)
- 可变位置连接工具 (Variable position connection tool)
- 重复基团工具 (Repeat group tool)
- 模版工具 (Template tool)
- 碳链工具 (Carbon chain tool)
- 索套选择工具 (Lasso selection tool)
- 选择工具 (Selection tool)
- 原子锁定工具 (Atom locking tool)
- 环锁定工具 (Ring locking tool)
- 镜面旋转工具 (Mirror rotation tool)
- 旋转工具 (Rotation tool)
- 单双键, RS构型, 不确定键定义工具 (Single/double bond, RS configuration, uncertain bond definition tool)
- 正电子 (Positive charge)
- C原子和单键恢复工具 (C atom and single bond recovery tool)
- 负电子 (Negative charge)
- 常见环, 多元环工具 (Common rings, multi-membered rings tool)
- 结构检索选择 (Structure search selection)

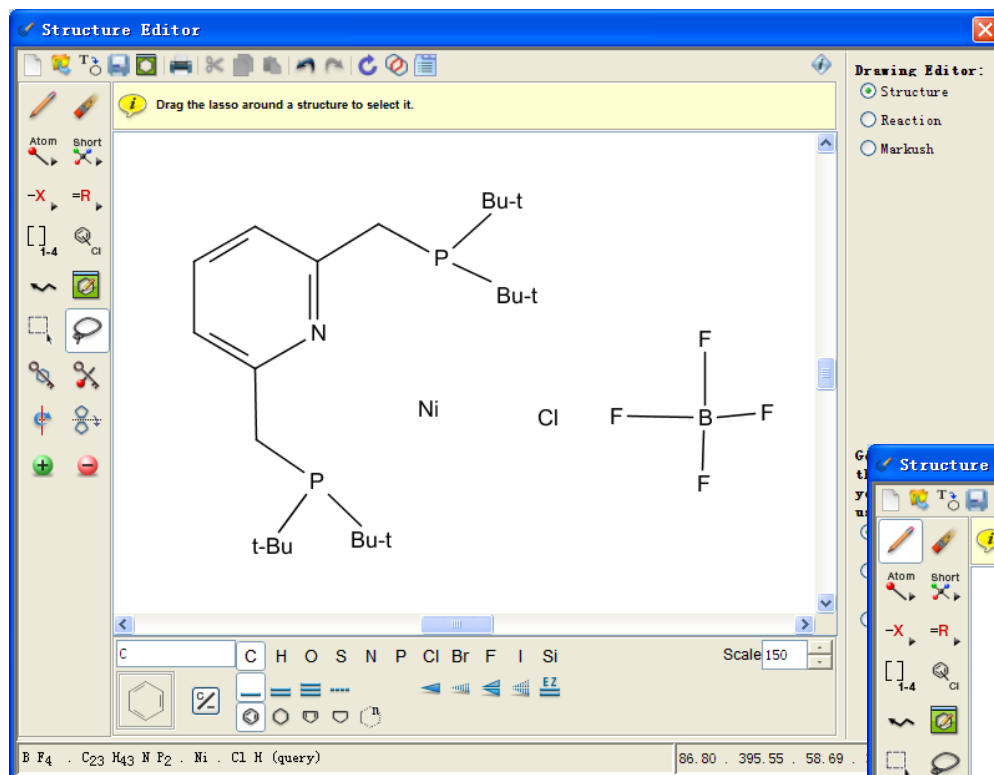
精确结构检索—检索金属配合物



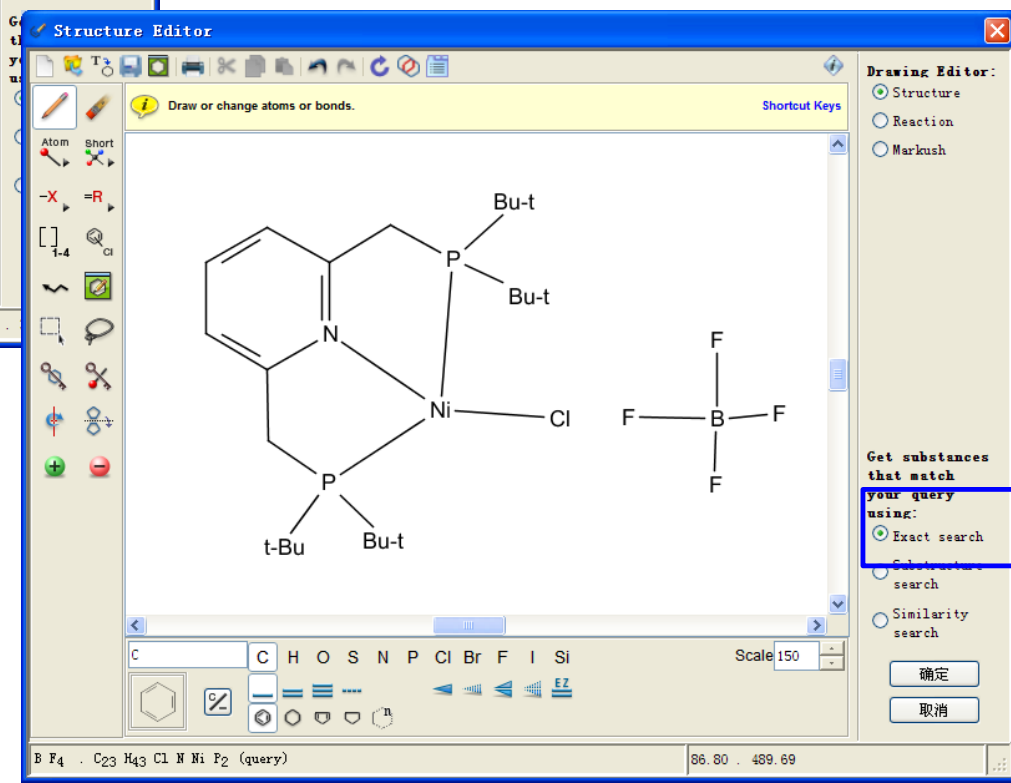
该结构中包含：

配体
金属
阳离子
阴离子

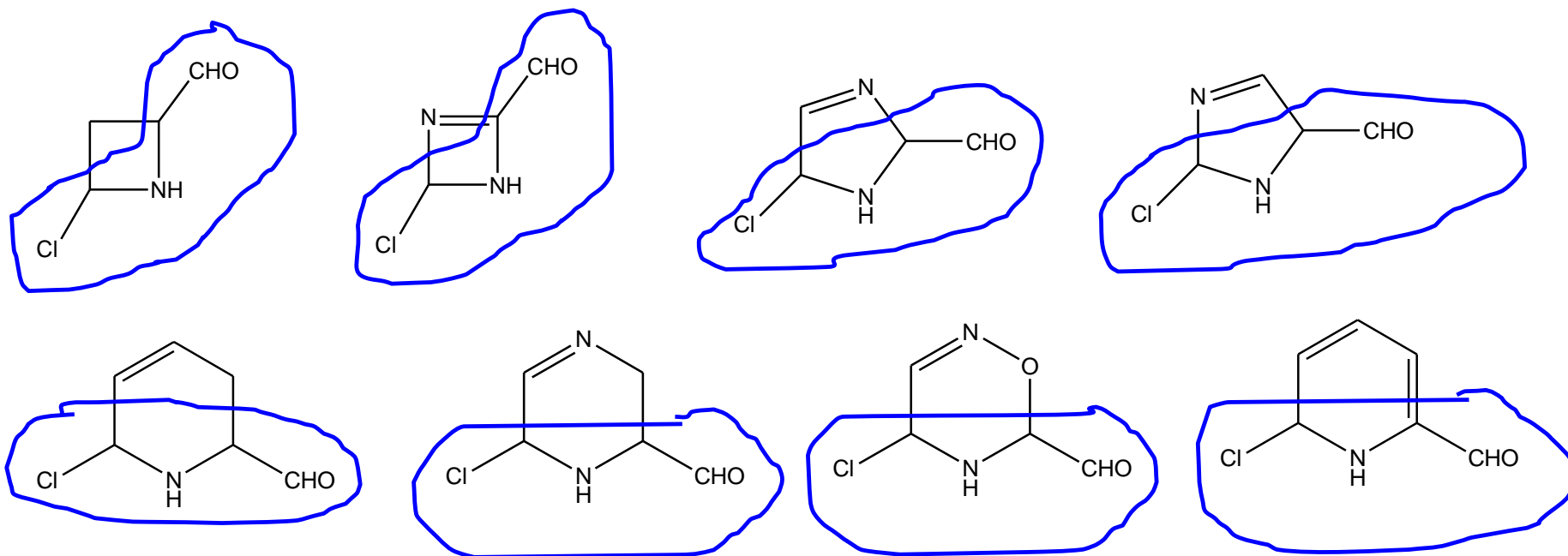
检索界面



任何一种结构, 使用精确结构都可以检索到

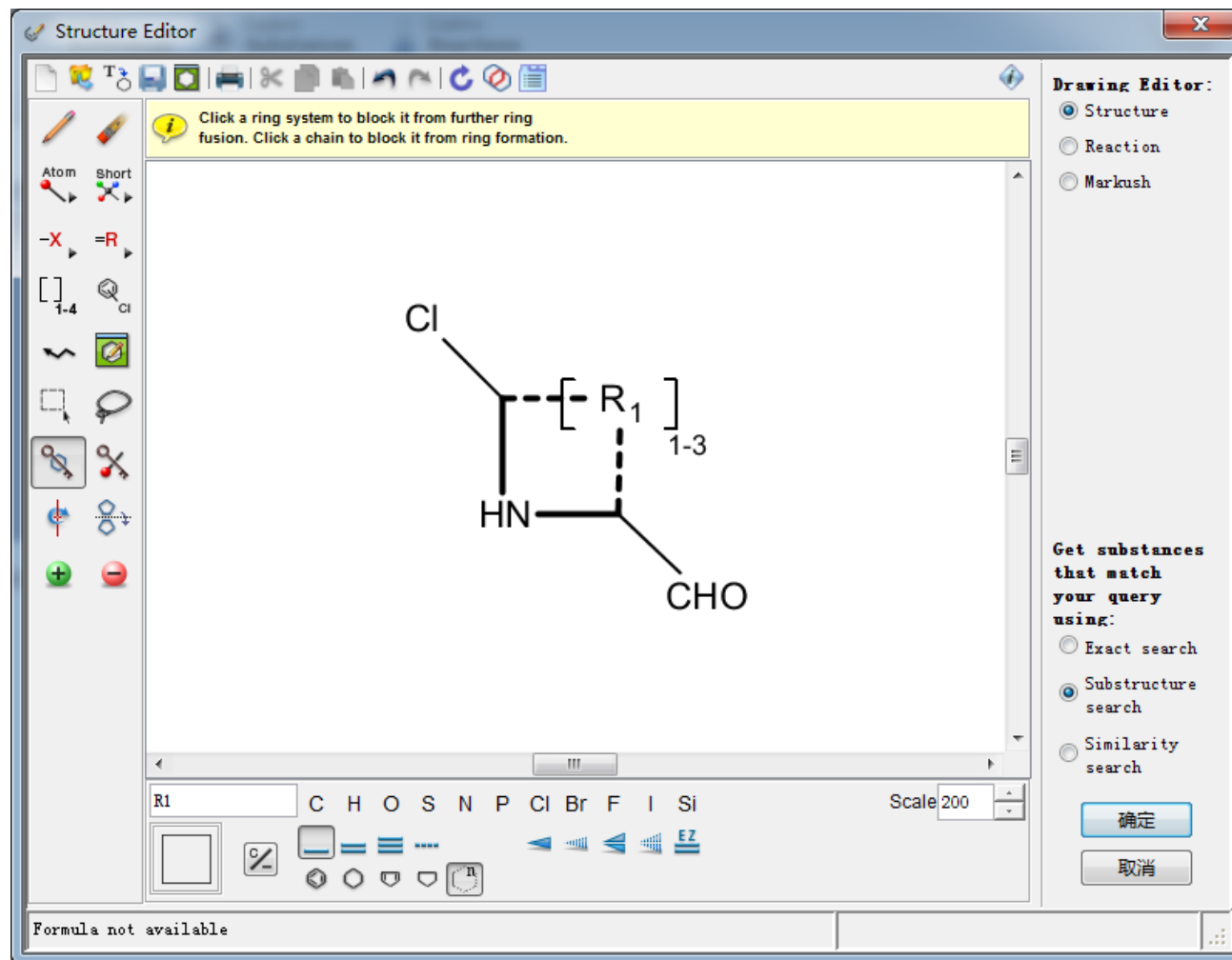


我想获得以下的一系列物质




○ ○ ○ ○ ○ ○

结构定义



用亚结构检索获得所有的物质

亚结构检索结果

Preferences | SciFinder Help | [Sign Out](#)

Welcome Sam Yu

Explore ▾ Saved Searches ▾ SciPlanner Save Print Export

Chemical Structure substructure > substances (469)

SUBSTANCES ?
Get References
Get Reactions
Get Commercial Sources
Tools ▾
Create Keep Me Posted Alert
Send to SciPlanner

Analyze **Refine**
Sort by: Number of References ▾
Answers per Page [50] View: ||| ||| |||

0 of 469 Substances Selected
Page: 1 of 10

Analyze by: ?

Substance Role ▾

Preparation 155

Reactant or Reagent 123

Biological Study 15

Uses 11

Prophetic in Patents 8

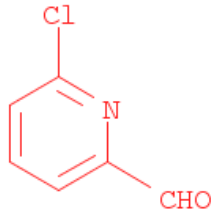
Properties 6

Formation, Nonpreparative 2

Analytical Study 1

1. **Substance Detail**
54087-03-5

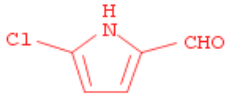
~33



C₆ H₄ Cl N O

2. **Substance Detail**
1757-28-4

~19

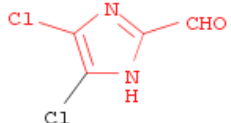


C₅ H₄ Cl N O
1H-Pyrrole-2-carboxaldehyde, 5-chloro-

Experimental Properties

3. **Substance Detail**
81293-97-2

~11



C₄ H₂ Cl₂ N₂ O
1H-Imidazole-2-carboxaldehyde, 4,5-dichloro-

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43

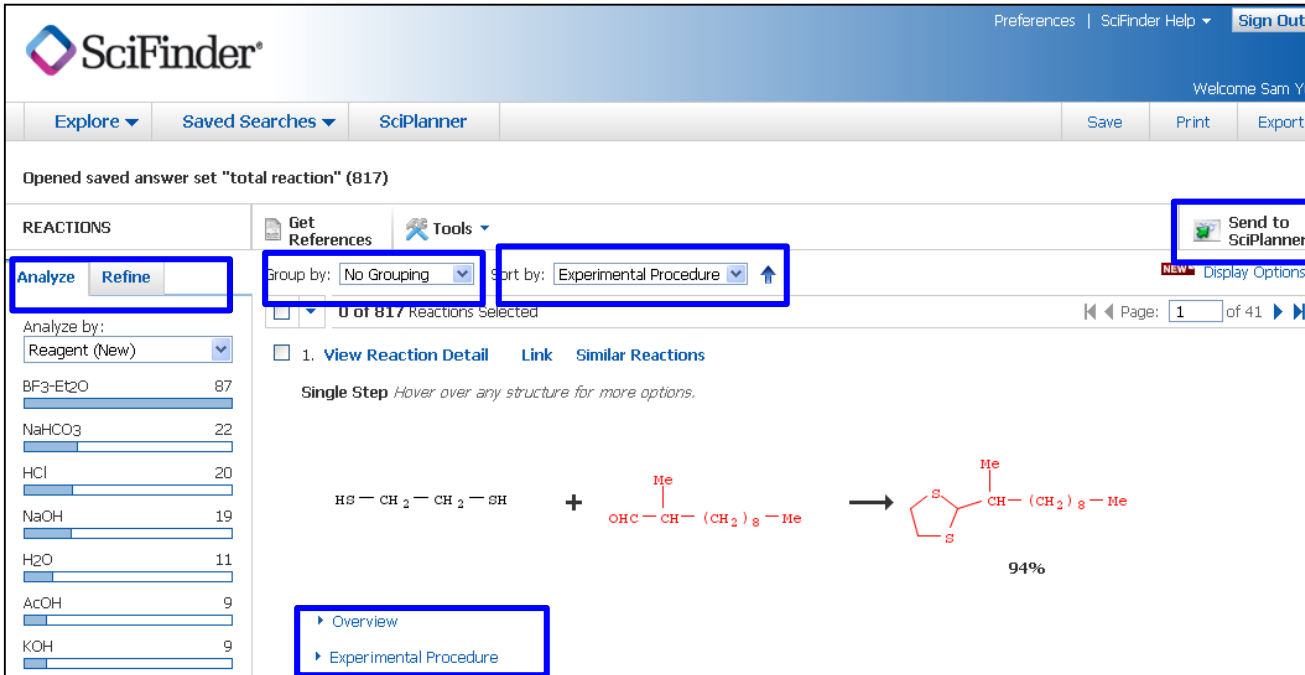
练习

- 用结构检索二茂铁
- 检索策略
 - 绘制两个换戊二烯
 - 绘制一个铁
 - 精确检索，选择配位化合物

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的注册**

SciFinder Web中的反应记录



Preferences | SciFinder Help | Sign Out

Welcome Sam Yu

Explore | Saved Searches | SciPlanner | Save | Print | Export

Opened saved answer set "total reaction" (817)

REACTIIONS

Analyze Refine

Get References Tools

Group by: No Grouping Sort by: Experimental Procedure ↑

Send to SciPlanner

0 of 817 Reactions Selected

Page: 1 of 41

Analyze by:
 Reagent (New)

BF3-Et2O	87
NaHCO3	22
HCl	20
NaOH	19
H2O	11
AcOH	9
KOH	9

1. View Reaction Detail Link Similar Reactions

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

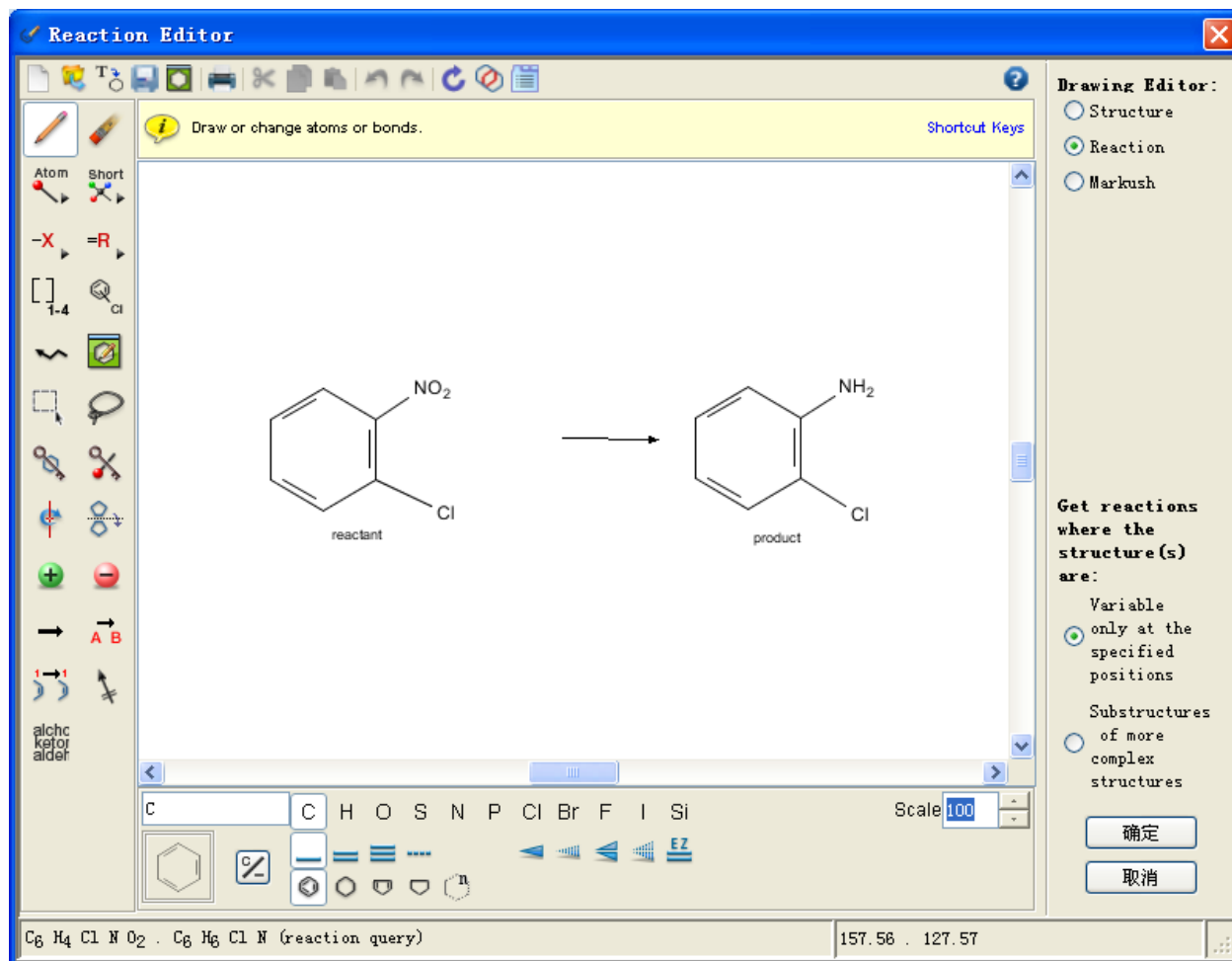
HS-CH2-CH2-SH + CC(C)CCCCCCCCC → CC(C)CCCCCCCC1SCC1

 94%

Overview
 Experimental Procedure

1. 反应分组功能
2. 反应排序功能
3. 反应后处理功能
4. 反应全景及实验过程
5. SciPlanner


SciFinder反应检索



Allow variability only as specified:
 仅在特定位点发生变化

Substructure: 亚结构检索, 允许有更多取代情况

反应检索界面



[Preferences](#) | [SciFinder Help](#) | [Sign Out](#)

Explore ▾
Saved Searches ▾
SciPlanner

Reaction Structure structure variable only at spe... > reactions (335)
Welcome Sam Yu

REFERENCES

- Research Topic
- Author Name
- Company Name
- Document Identifier
- Journal
- Patent
- Tags

SUBSTANCES

- Chemical Structure
- Markush
- Molecular Formula
- Property
- Substance Identifier

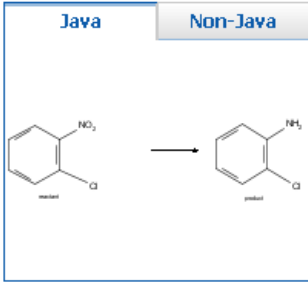
REACTIONS

- Reaction Structure

REACTIONS: REACTION STRUCTURE ?

Structure Editor:

Java
Non-Java



Click image to change structure or view detail.

[Import CXF](#)

Search

Search Type:

- Allow variability only as specified
- Substructure

Java Structure Editor

Having issues with Java? Switch to the Non-Java editor.

To switch between editors, click the tabs above the structure editor box.

SAVED ANSWER SETS ?

- 4 step ref
- 3 step-ref
- 4 Step
- 3130
- fluorescence with biosensor3128
- RCM-1816ref
- 646Ref
- Luminescent substances with organic
- refined
- Total reaction
- Autosaved Reaction Set

View All | Import

KEEP ME POSTED ?

精确反应检索结果

SciFinder® Preferences | SciFinder Help | [Sign Out](#)

Welcome Sam Yu

[Explore](#) | [Saved Searches](#) | [SciPlanner](#) | [Save](#) | [Print](#) | [Export](#)

Reaction Structure structure variable only at spe... > **reactions (335)**

[REACTIONS](#) ? | [Get References](#) | [Tools](#) v | [Send to SciPlanner](#)

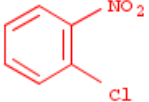
[Analyze](#) | [Refine](#)


Group by: No Grouping v | Sort by: Relevance v ↓ NEW [Display Options](#)

v 0 of 335 Reactions Selected Page: 1 of 17

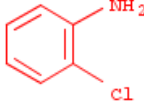
1. [View Reaction Detail](#) [Link](#) [Similar Reactions](#)


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



~90 

→

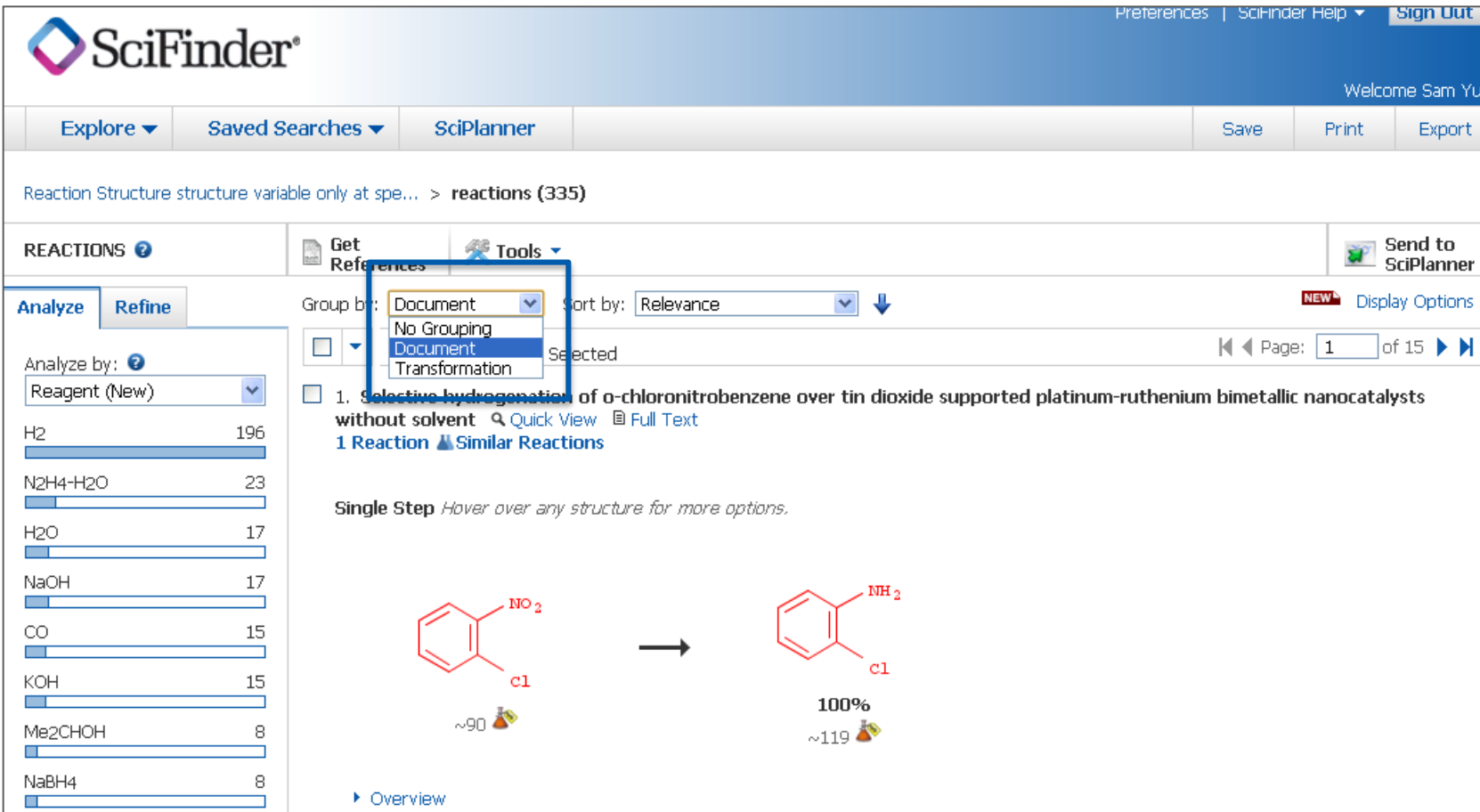


100%
~119 

[Overview](#)

Analyze by:	Count
Reagent (New)	
H2	196
N2H4-H2O	23
H2O	17
NaOH	17
CO	15
KOH	15
Me2CHOH	8

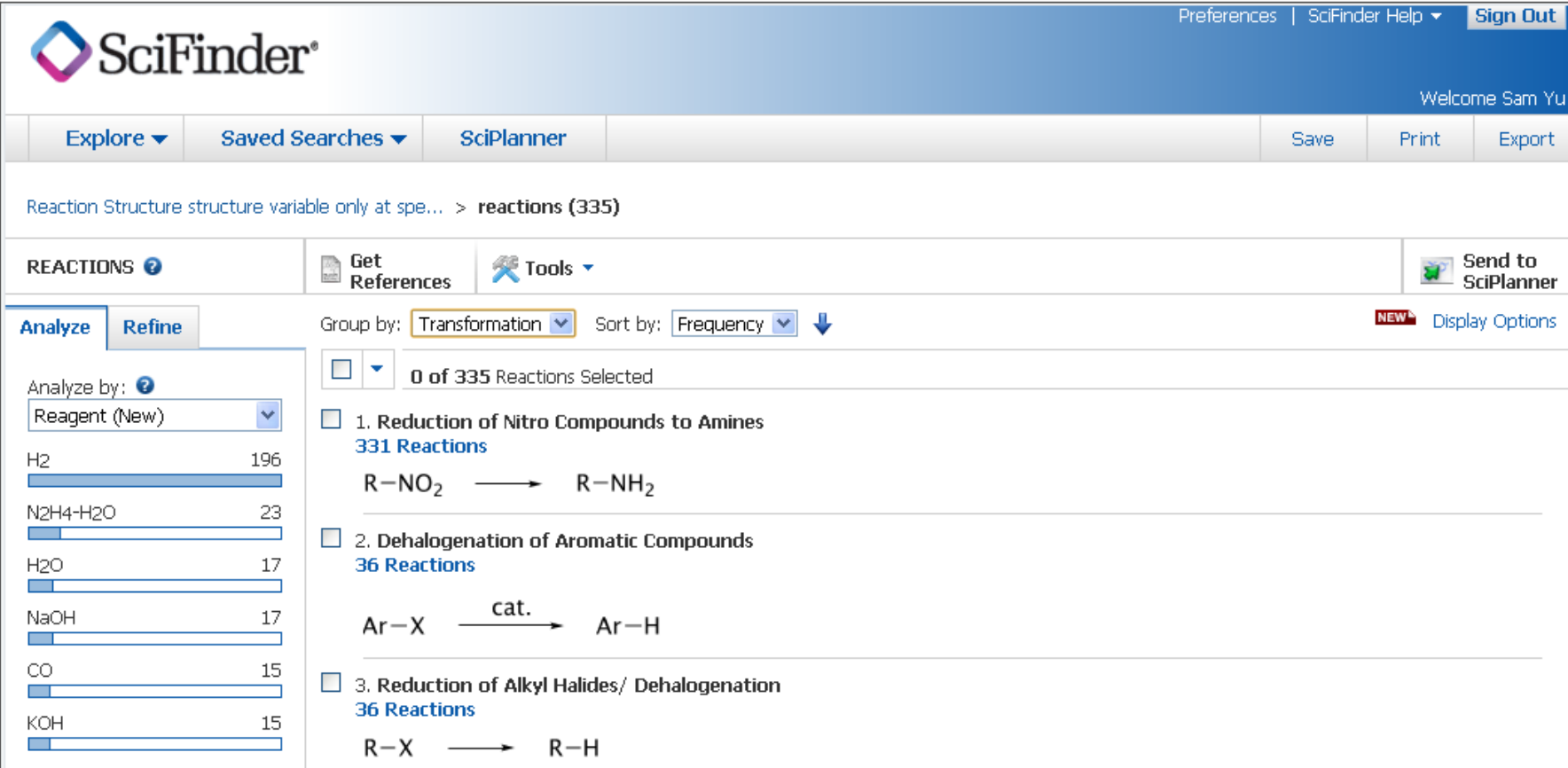
Group by Document 按照出处文献分类显示



The screenshot shows the SciFinder web interface. At the top, there are navigation links for 'Preferences', 'SciFinder Help', and 'Sign Out'. Below this is a header with the SciFinder logo and a welcome message 'Welcome Sam Yu'. A main navigation bar includes 'Explore', 'Saved Searches', 'SciPlanner', 'Save', 'Print', and 'Export'. The main content area displays search results for 'reactions (335)'. On the left, there is an 'Analyze' sidebar with a 'Reagent (New)' dropdown and a list of reagents with their counts: H2 (196), N2H4·H2O (23), H2O (17), NaOH (17), CO (15), KOH (15), Me2CHOH (8), and NaBH4 (8). The main results area shows a 'Group by:' dropdown menu with 'Document' selected. Below this, a list of reaction entries is visible, including one for 'Selective hydrogenation of o-chloronitrobenzene...'. A chemical reaction scheme is shown below the text, depicting the reduction of o-chloronitrobenzene to o-chloroaniline. The reaction is labeled 'Single Step' and shows a yield of 100% with approximately 119 references.

来自同一篇文章的反应都被整合到一起并集中显示

Group by Transformation 按照反应类型分类显示



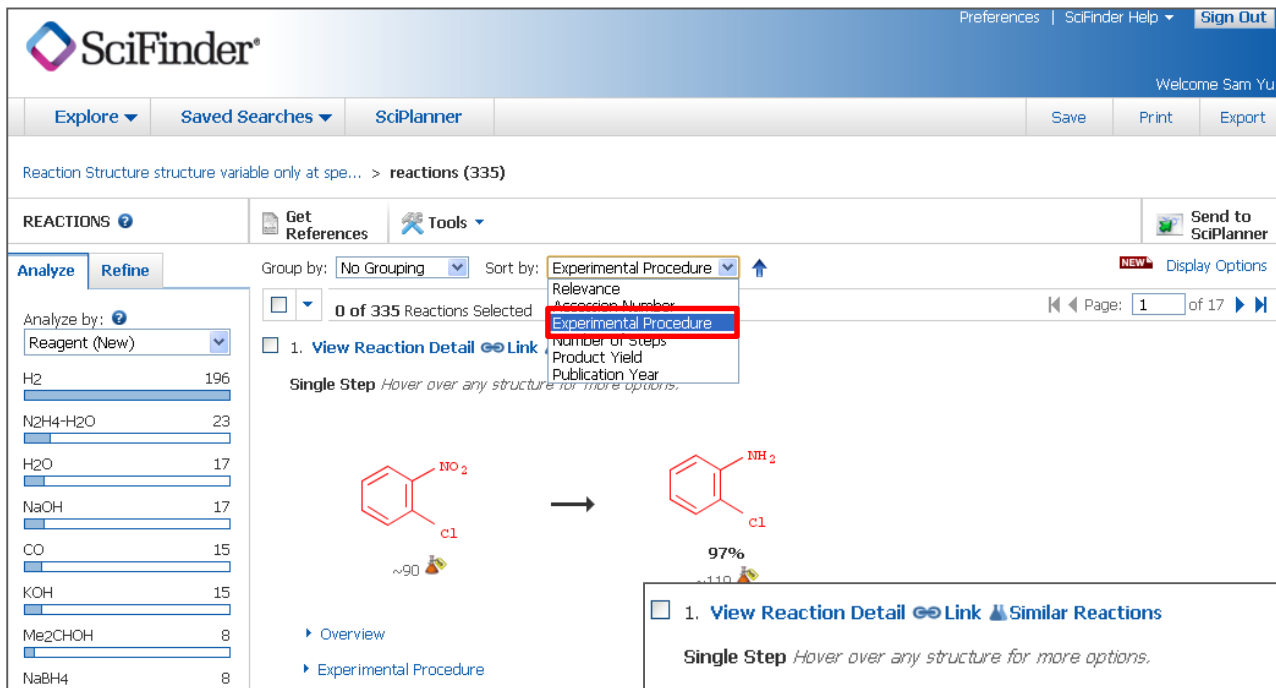
The screenshot shows the SciFinder interface with the following elements:

- Navigation:** Explore, Saved Searches, SciPlanner, Save, Print, Export.
- Page Info:** Reaction Structure structure variable only at spe... > reactions (335). Welcome Sam Yu.
- Tools:** Get References, Tools, Send to SciPlanner.
- Filters:** Analyze (selected), Refine. Analyze by: Reagent (New).

H2	196
N2H4-H2O	23
H2O	17
NaOH	17
CO	15
KOH	15
- Grouping and Sorting:** Group by: Transformation, Sort by: Frequency.
- Results:** 0 of 335 Reactions Selected.
 - 1. Reduction of Nitro Compounds to Amines**
331 Reactions
$$\text{R-NO}_2 \longrightarrow \text{R-NH}_2$$
 - 2. Dehalogenation of Aromatic Compounds**
36 Reactions
$$\text{Ar-X} \xrightarrow{\text{cat.}} \text{Ar-H}$$
 - 3. Reduction of Alkyl Halides/ Dehalogenation**
36 Reactions
$$\text{R-X} \longrightarrow \text{R-H}$$

同一类反应被整合到一起并以通式结构集中显示；
仅适用于单步反应，未被分类的反应显示在结果集最后

获得有实验步骤的反应结果集



SciFinder® Preferences | SciFinder Help | Sign Out

Welcome Sam Yu

Explore | Saved Searches | SciPlanner | Save | Print | Export

Reaction Structure structure variable only at spe... > reactions (335)

REACTIONS

Analyze Refine

Group by: No Grouping Sort by: Experimental Procedure

0 of 335 Reactions Selected

1. [View Reaction Detail](#)

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


Analyze by: Reagent (New)

H2	196
N2H4-H2O	23
H2O	17
NaOH	17
CO	15
KOH	15
Me2CHOH	8
NaBH4	8

Overview
Experimental Procedure

1. [View Reaction Detail](#)

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



Overview

Experimental Procedure

JOC The Journal of Organic Chemistry

General/Typical Procedure: **Reflux Conditions (Table 1)**. To a solution of 2.0 mmol of substrate **Preparation and Isolation of Fe3O4 Nanoparticles**. A solution of Fe(acac)3 0.02 mmol (7.1 mg) and hydrazine hydrate (2 mmol) in methanol (1.5 mL) was placed into a 10 mL microwave vial and heated at 150 °C for 1 minutes. The resulting mixture was cooled at room temperature and after 20-30 min the black precipitate was retrieved with magnetic separation or centrifugation (5000 rpm, 5 min). The solid was washed 3 times with fresh methanol and dried overnight in a drying oven at 70 °C. The obtained Fe3O4 nanocrystals were characterized by means of X-ray powder diffraction (XRD) and high-resolution transmission electron microscopy (HRTEM). **16 Reflux Conditions**

练习

- 检索从硝基吡啶还原成吡啶氨的反应，
- 检索策略
 - 分别绘制硝基吡啶和吡啶氨
 - 中间绘制箭头，确定反应物和产物

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的注册**

SciFinder Web的注册和登陆

SciFinder Web的系统要求

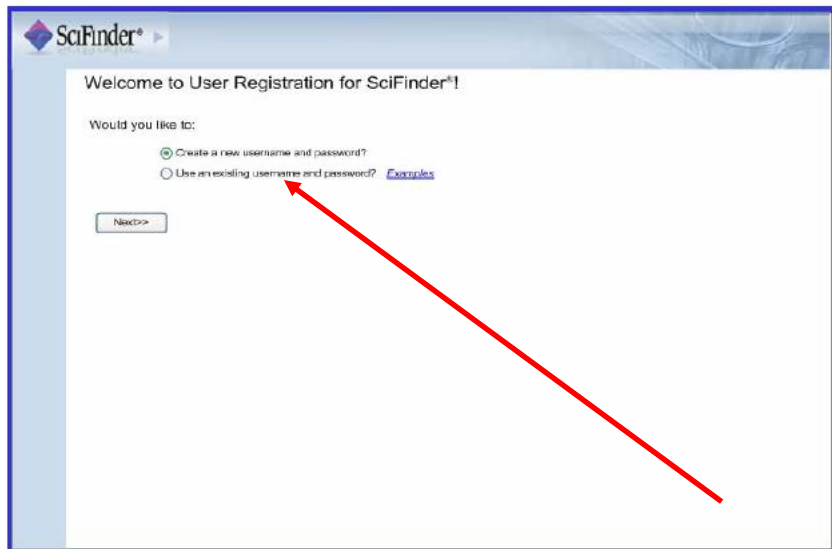
Windows用户支持IE 9. x或者FireFox 2. x

Mac 用户支持 Firefox 和 Safari

Java 安装（初次使用结构时自动安装，建议安装Java 7）

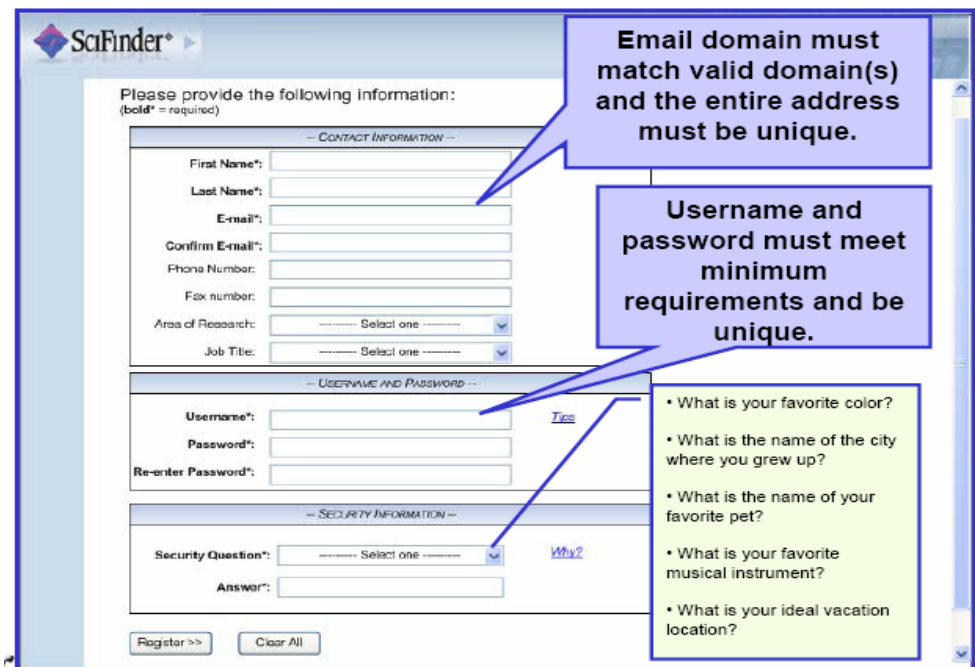
在图书馆相关页面上找到SciFinder Web注册用的网址

点击URL创建SciFinder Web账号



开始创建SciFinder Web帐号

创建ID所用的IP不能是代理服务
器的IP



Email domain must match valid domain(s) and the entire address must be unique.

Username and password must meet minimum requirements and be unique.

- What is your favorite color?
- What is the name of the city where you grew up?
- What is the name of your favorite pet?
- What is your favorite musical instrument?
- What is your ideal vacation location?

设置用户名及密码注意事项

用户名：

必须是唯一的，且包含 5-15 个字符。它可以只包含字母或字母组合、数字和/或以下特殊字符：

- (破折号)
- _ (下划线)
- . (句点)
- @ (表示“at”的符号)

密码：

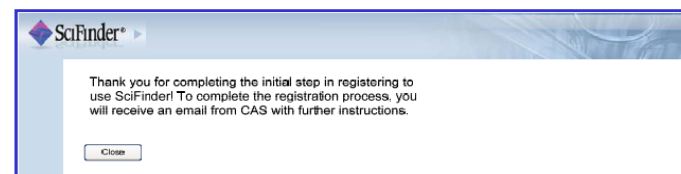
必须包含 7-15 个字符，并且至少包含三个以下字符：

- 字母
- 混合的大小写字母
- 数字
- 非字母数字的字符（例如 @、#、%、&、*）

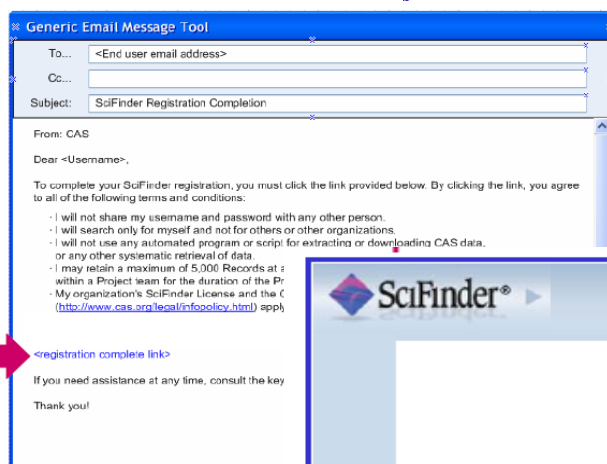
密码设置小技巧：

- 1：不要和账号中有重复的字符
- 2：密码格式最好是abc@123

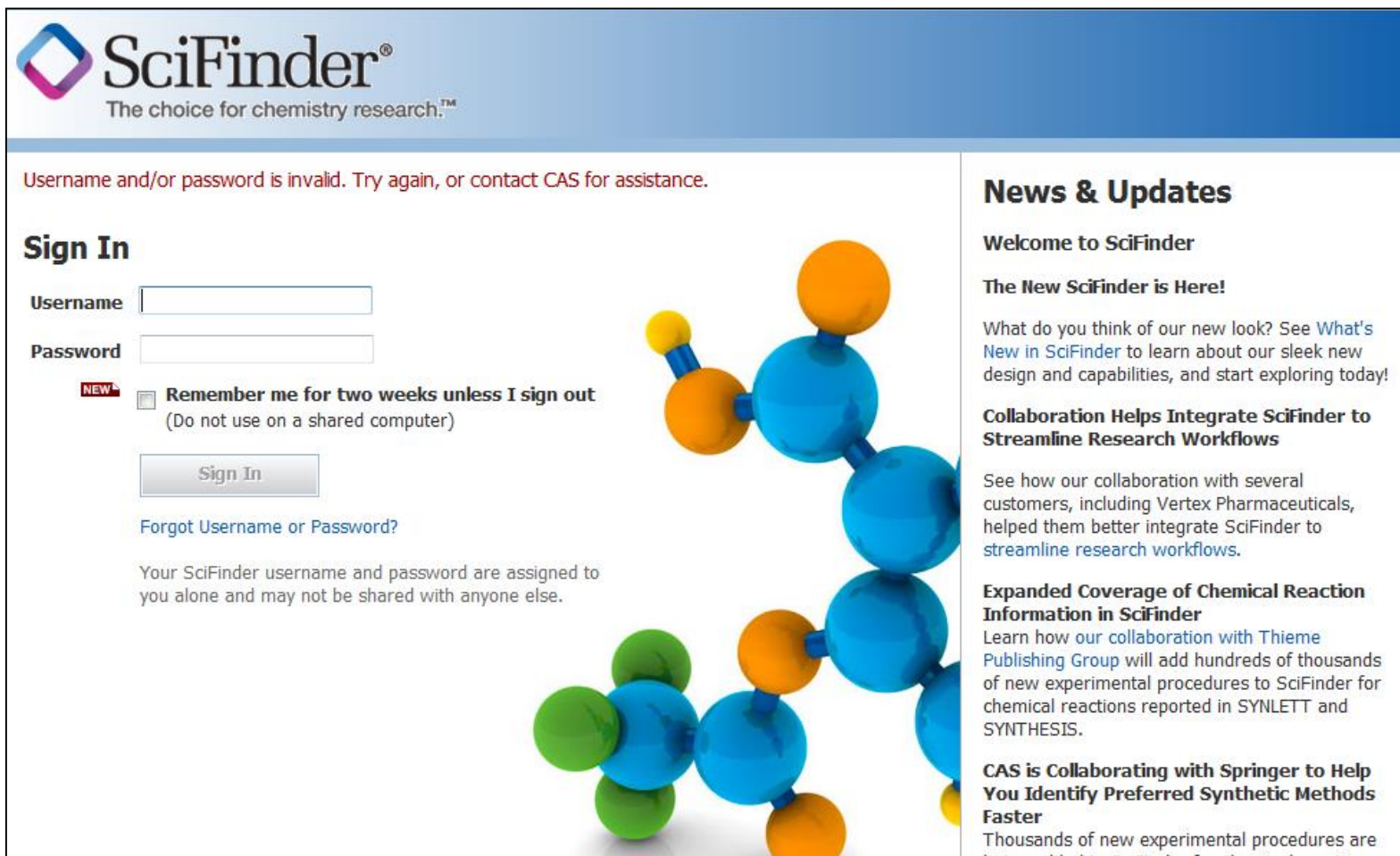
对新ID的Email确认



需要点击邮件中的确认链接



SciFinder Web 常见问题



SciFinder[®]
The choice for chemistry research.™

Username and/or password is invalid. Try again, or contact CAS for assistance.

Sign In

Username

Password

NEW Remember me for two weeks unless I sign out
(Do not use on a shared computer)

[Forgot Username or Password?](#)

Your SciFinder username and password are assigned to you alone and may not be shared with anyone else.

News & Updates

Welcome to SciFinder

The New SciFinder is Here!

What do you think of our new look? See [What's New in SciFinder](#) to learn about our sleek new design and capabilities, and start exploring today!

Collaboration Helps Integrate SciFinder to Streamline Research Workflows

See how our collaboration with several customers, including Vertex Pharmaceuticals, helped them better integrate SciFinder to streamline research workflows.

Expanded Coverage of Chemical Reaction Information in SciFinder

Learn how our [collaboration with Thieme Publishing Group](#) will add hundreds of thousands of new experimental procedures to SciFinder for chemical reactions reported in SYNLETT and SYNTHESIS.

CAS is Collaborating with Springer to Help You Identify Preferred Synthetic Methods Faster

Thousands of new experimental procedures are being added to SciFinder for chemical reactions.

账号或密码错误，请在username处填写，截图，并与图书馆联系

SciFinder Web 常见问题

任何需要反馈给图书馆的问题，都请点击测试IP地址的链接

<http://www.cas.org/cgi-bin/casip>



Your IP address comes across to CAS as: 210.32.9.45

将页面截图下来，一并发给图书馆

SciFinder Web的注意事项

鉴于360浏览器，及360安全卫士会对SciFinder Web的使用造成一定的影响，如打不开全文链接，无法下载，并会对SciFinder的一些功能进行屏蔽，我们建议不要使用360浏览器访问SciFinder，即使在用其他浏览器的时候，也请关闭360安全卫士

SciFinder Web网络在线资源平台

www.igroup.com.cn/cas



资源下载：PDF文件

在线演示：Flash演示

网络培训：不定期的网络专题培训

**SciFinder北方高校群：
275247551**

Thank You

李虹

SciFinder 培训专员

Mail: Della [@igroup.com.cn](mailto:Della@igroup.com.cn)

Tel:010-82335058-808