

CAS SciFinder Discovery Platform (Academic)

全面高效获取科技信息



杜德鑫

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美国化学文摘社 (CAS) 北京代表处

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CAS

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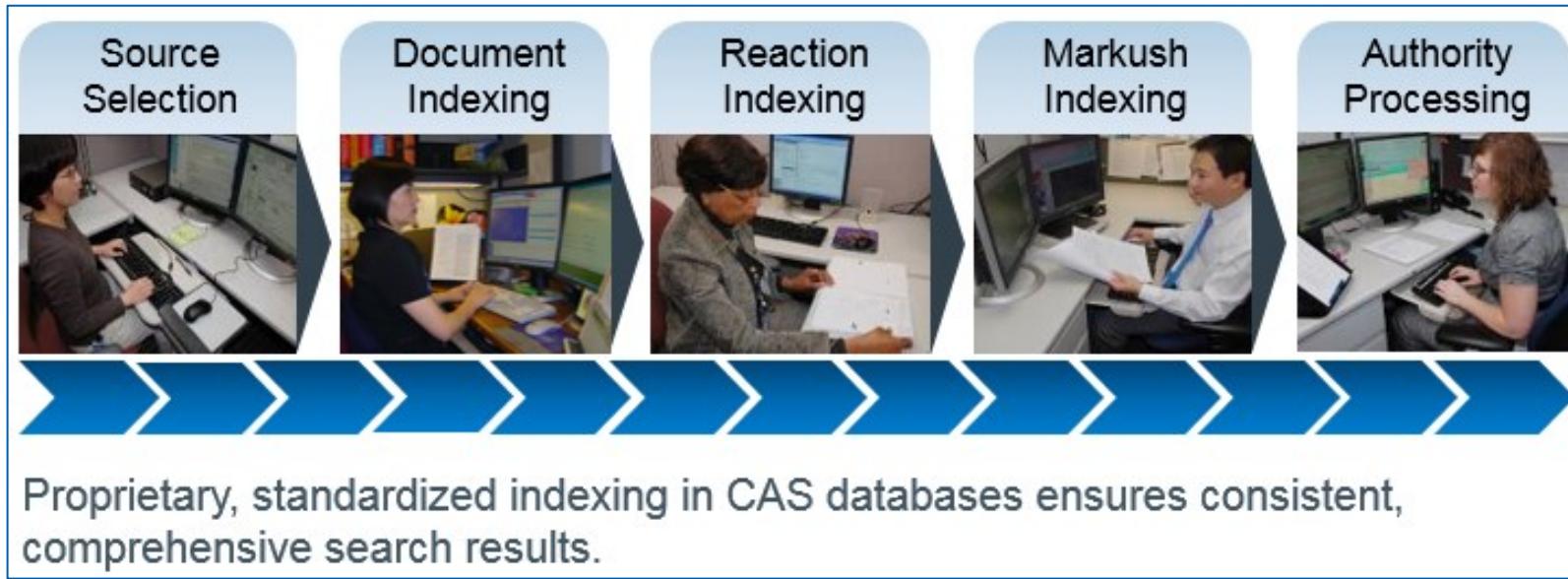


大纲

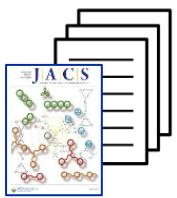
- CAS 与 CAS SciFinder Discovery Platform (Academic) 简介
- 科研信息的高效查阅
 - 如何拓展文献调研?
 - 如何调研某类物质?
 - 如何调研反应信息?
 - 怎么查、怎么选具体的实验方案?
- 常见问题



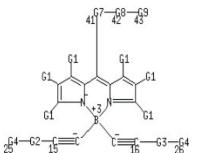
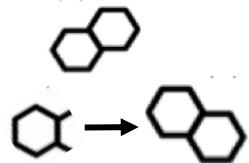
CAS 科学家智力标引



Data
pre-repository



1990
Smith, M.
anthracene



Androst-4-en-3-one,
17-hydroxy-17-
methyl-, (17 β)-

CAS 科学家利用人类智慧对公开内容进行揭示，使相关信息更容易被挖掘

CAS 具有最全面的学科连接内容合集



Over
50K
scientific journals
and documents

Over
279
million substances

Over
50
languages
translated

109
patent offices
worldwide

CAS SciFinder Discovery Platform 涵盖的工作流程 解决方案



新一代的权威科学研究工具，是化学及相关学科智能研究平台，提供全球全面、可靠的化学及相关学科研究信息和分析工具



专业的配方数据库，助力配方研究科学家快速评估配方、寻找可替代供应商和探索监管信息



独特的分析方法详情数据库，有助于分析科学家快速获取详尽的分析方法信息、直接用于实验，并启发新方法的建立

CAS SciFinderⁿ 登录

<https://scifinder-n.cas.org>

The screenshot shows the initial step of a two-step verification process. It features the CAS SciFinder logo at the top left. Below it is the heading "Log In to SciFinderⁿ". A text input field labeled "Username or Email Address" contains the value "ddu@acs-i.org". A large blue "Next" button is positioned below the input field. At the bottom of the screen, there are links for "Create an account." and "Can't log in?".

The screenshot shows the second step of the two-step verification process. It features the CAS SciFinder logo at the top left. Below it is the heading "Log In to SciFinderⁿ". To the right of the heading, the text "Welcome, ddu@acs-i.org" is displayed, followed by a "Not You?" link. A text input field labeled "Password" contains several dots, indicating the password has been entered. A large blue "Log In" button is positioned below the password field. A checkbox labeled "Keep me signed in" is located below the "Log In" button. At the bottom of the screen, there are links for "Create an account." and "Can't log in?".

CAS SciFinderⁿ 主界面

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SCIFINDER DISCOVERY PLATFORM

- CAS SciFinderⁿ
- CAS Analytical Methods
- CAS Formulus
- STN IP PROTECTION SUITE
- STNext
- CAS Scientific Patent Explorer
- REGULATORY
- CAS Chemical Compliance Index
- ACCOUNT MANAGEMENT
- CAS Profile

CAS 应用

CAS SciFinderⁿ Alerts Saved Dexin Du

Good Afternoon, Dexin

All Substances Reactions References Suppliers

Search by Keyword, Substance Name, CAS RN, Patent Number, PubMed ID, AN, CAN, and/or DOI.

Author Name: Enter last name, first name middle name. Example: Schubert, J A

+ Add Advanced Search Field

Draw

结构检索

Retrosynthetic Analysis: Make reaction plans with conditions, yields, catalysts, and experimental procedures.

Search CAS Lexicon: Build powerful searches using CAS concepts, chemical classes, and taxonomy.

Search CAS Sequences: Query BLAST, CDR, and Motif algorithms for nucleotide and protein based sequences.

Recent Search History

历史记录

View All Search History

August 22, 2023

References 2:29 PM Toripalimab and "chemotherapy" and "non-small-cell lung cancer" (41 Results)

Rerun Search Edit Search

What's New? Help and Support

My CAS Profile Settings Log Out

账户信息

大纲



- CAS 与 CAS SciFinder Discovery Platform (Academic) 简介
- 科研信息的高效查阅
 - 如何拓展文献调研?
 - 如何调研某类物质?
 - 如何调研反应信息?
 - 怎么查、怎么选具体的实验方案?
- 常见问题

如何拓展文献检索？

- 主题词怎么选择？如何构建？
- 研究某结构相关的文献？
- 如何筛选文献？追踪最新进展？
- 关注某篇文献的被引文献和引文——引文地图

检索目标课题研究文献

主题词、物质名称、CAS 登记号、专利号、PubMed ID、文献号、DOI 号

All Substances Reactions References Suppliers

lign

Lignin
Lignan
Lignol
Linox
Lignans
Lignite
Lignone
Lignase

自动提示

利用布尔逻辑运算符 & 通配符精准检索相关文献

- 支持布尔逻辑运算符 (or/and/not), 默认运算顺序 or > and > not
- “ ” 不允许词形变化, 但可出现单数或复数; () 优先运算, 括号中表达式还可以和其他术语交互
- 支持通配符 * 或 ?, * 代表 0 或多个字符, ? 代表 0 或 1 个字符

The screenshot shows the CAS References search interface. At the top, there are tabs for All, Substances, Reactions, References (which is selected and highlighted in blue), and Suppliers. Below the tabs is a search bar containing the query "Lignin and depolymerize or deconstruction and enzyme". To the right of the search bar are buttons for Draw and Search. Underneath the search bar, there are dropdown menus for AND, Author Name, and a field to Enter last name, first name middle name, with an example provided: "Example: Schubert, J A". There is also a button to Add Advanced Search Field. At the bottom of the interface, there are three cards: "Retrosynthetic Analysis" (with a hexagonal icon), "Search CAS Lexicon" (with a yellow-bordered hexagonal icon), and "Search CAS Sequences" (with a DNA helix icon).

CAS Lexicon 词库检索近义词和相关技术术语

Search CAS Lexicon

Biomass hydrotreatment Search Concept

Your Query
You may include up to 1,000 terms in a search. Clear All

Preferred Term

Biomass hydrotreatment
This will search synonyms: **Biomass** hydrogenation; **Biomass** refining h...
[View fewer synonyms](#)

Broader Terms (1) Select All

Biomass refining

Narrower Terms (2) Select All

Biomass hydrocracking
 Biomass hydroisomerization

Related Terms (2) Select All

Biomass hydrotreatment catalysts
 Petroleum hydrotreating

Select a boolean operator OR ▾ Add Term(s) Learn more about CAS Lexicon searching. Q

- Preferred Terms
- Broader Terms
- Narrower Terms
- Related Terms

根据作者/出版物/研究机构/物质结构检索相关文献

Lignin and depolymerize or deconstruction and enzyme

AND Abstract/Keywords depolymerize

+ Add Advanced Search Field

Authors
Publication Name
Organization
Title
Abstract/Keywords
Concept
Substances
Bioactivity Data NEW
Publication Year
Document Identifier
Patent Identifier
Publisher

物质结构

Retrosynthetic Analysis
Make reaction plans with conditions, yields, catalysts, and experimental procedures.

Search CAS Sequences
Query BLAST, CDR, and Motif algorithms for nucleotide and protein based sequences.

自定义高级检索项

Draw

检索结果分析与筛选

References search for "Lignin and depolymerize or deconstruction and enzyme" + 1 Advanced Field

Substances Reactions Citing Knowledge Graph Save and Alert

Filter Behavior: 140 Results, Sort: Relevance, View: Partial Abstract

Filter by: Search Within Results, Substance Role, Concept, CA Section (highlighted)

Results:

- Glycosylated linkers in multimodular lignocellulose-degrading enzymes dynamically bind to cellulose**
By: Payne, Christina M.; Resch, Michael G.; Chen, Liqun; Crowley, Michael F.; Himmel, Michael E.; Taylor, Larry E. II; Sandgren, Mats; Stahlberg, Jerry; Stals, Ingeborg; Tan, Zhongping; et al
Proceedings of the National Academy of Sciences of the United States of America (2013), 110(36), 14646-14651, S14646/1-S14646/11
Language: English, Database: CPlus and MEDLINE
Plant cell-wall polysaccharides represent a vast source of food in nature. To **depolymerize** polysaccharides to soluble sugars, many organisms use multifunctional **enzyme** mixtures consisting of glycoside hydrolases, lytic polysaccharide mono-oxygenases, polysaccharide lyases, and carbohydrate esterases, as well as accessory, redox-active **enzymes** for **lignin** depolymerization. Many of these **enzymes** that degrade lignocellulose are multimodular with carbohydrate-binding modules (CBMs) and catalytic domains connected by flexible, glycosylated linkers. These linkers have long been thought to simply serve...
[View More](#)
- Glycosylated linkers in multimodular lignocellulose-degrading enzymes dynamically bind to cellulose**
By: Payne, Christina M.; Resch, Michael G.; Chen, Liqun; Crowley, Michael F.; Himmel, Michael E.; Taylor, Larry E. II; Sandgren, Mats; Stahlberg, Jerry; Stals, Ingeborg; Tan, Zhongping; et al

Full Text, Substances (4), Reactions (0), Citing (127), Citation Map

Sort: Relevance, Times Cited, Accession Number: Ascending, Accession Number: Descending, Publication Date: Newest, Publication Date: Oldest

结果集二次检索研究内容：Search Within Results

References search for "Lignin and depolymerize or deconstruction and enzyme" + 1 Advanced Field

Substances Reactions Citing Knowledge Graph Save and Alert

Filter Behavior Filtering: Search Within Results: ethanol Clear All Filters

Search Within Results

Search for up to 3 text strings within the result set.

ethanol

Search

Filter by Exclude

Search Within Results

Search for up to 3 text strings within the result set.

Enter a query... Search

Searching for... Clear All

ethanol X

Substance Role Concept CA Section Document Type

17 Results Sort: Relevance View: Partial Abstract ...

1

Lignocellulosic ethanol production without enzymes - Technoeconomic analysis of ionic liquid pretreatment followed by acidolysis

By: Oleskowicz-Popiel, Piotr; Klein-Marcuschamer, Daniel; Simmons, Blake A.; Blanch, Harvey W.
Bioresource Technology (2014), 158, 294-299 | Language: English, Database: CPlus and MEDLINE

Deconstruction of polysaccharides into fermentable sugars remains the key challenge in the production of inexpensive lignocellulosic biofuels. Typically, costly enzymatic saccharification of the pretreated biomass is used to depolymerize its cellulosic content into fermentable monomers. In this work, we examined the production of lignocellulosic recovery, a process that does not require the use of enzymes to produce fermentable sugars. In the base case, the minimum selling price (MSP) was \$8.05/gal, but with improved performance of the hydrolysis, extraction, and sugar recovery, the MSP can be lowered to \$4.00/gal. Addnl., two scenarios involving lignin recovery were considered. Although the results based on current assumptions indicate that this process is expensive compared to more established technologies, improvements in the hydrolysis yield, the sugar extraction efficiency, and the sugar recovery were shown to result in more competitive processes.

View Less

Full Text Substances (4) Reactions (0) Citing (28) Citation Map

The screenshot shows a search interface for a database. On the left, there's a sidebar with a 'Search Within Results' section containing a text input field with 'ethanol' and a 'Search' button. Below it are dropdown menus for 'Substance Role', 'Concept', 'CA Section', and 'Document Type'. The main area has a title 'References search for "Lignin and depolymerize or deconstruction and enzyme" + 1 Advanced Field'. It includes tabs for 'Substances', 'Reactions', 'Citing', and 'Knowledge Graph', along with icons for saving and alerting. A 'Filter Behavior' section allows filtering by 'Search Within Results' with an input field 'Enter a query...' and a 'Search' button. The results list shows one item: 'Lignocellulosic ethanol production without enzymes - Technoeconomic analysis of ionic liquid pretreatment followed by acidolysis'. The result summary includes authors (Oleskowicz-Popiel, Piotr; Klein-Marcuschamer, Daniel; Simmons, Blake A.; Blanch, Harvey W.), publication details (Bioresource Technology (2014), 158, 294-299), language (English), and databases (CPlus and MEDLINE). The full abstract is displayed, mentioning the deconstruction of polysaccharides into fermentable sugars, the use of enzymes for saccharification, and the resulting selling price (\$8.05/gal). It also discusses improvements in the process and scenarios involving lignin recovery.

物质角色筛选文献：Substance Role

^ Substance Role

- Biological Study (32)
- Process (22)
- Reactant or Reagent (12)
- Preparation (6)
- Properties (6)

[View All](#)

排序：

文献数量

字母顺序

Substance Role

By Count Alphanumeric

0 Selected

- Biological Study (32)
- Biological Study, Unclassified (25)
- Process (22)
- Reactant (11)
- Reactant or Reagent (11)
- Physical, Engineering, or Chemical Process (10)

Substance Role

By Count Alphanumeric

0 Selected

- Analyte (1)
- Industrial Manufacture (1)
- Properties (6)
- Analytical Study (1)
- Modifier or Additive Use (2)
- Purification or Recovery (1)
- Biochemical Process (6)
- Other Use, Unclassified (1)
- Reactant (11)
- Biological Study (32)
- Physical, Engineering, or Chemical Process (10)
- Reactant or Reagent (11)
- Biological Study, Unclassified (25)
- Preparation (6)
- Removal or Disposal (6)
- Biosynthetic Preparation (2)
- Process (22)
- Therapeutic Use (1)
- Uses (3)

确定文献核心研究内容：Concept

^ Concept

- Lignin (37)
- Biomass (29)
- Depolymerization (27)
- Enzymic hydrolysis (14)
- Enzymes (13)

[View All](#)

Concept

Top Count Alphanumeric Search

0 Selected

- Lignin (37)
- Biomass (29)
- Depolymerization (27)
- Enzymic hydrolysis (14)
- Enzymes (13)
- Fermentation (13)
- Hydrolysis (12)
- Laccase (10)
- Trametes versicolor (10)
- Basidiomycota (9)
- Biofuels (9)
- Corn straw (9)
- Microbial gene (9)
- Cell wall (5)
- Crystallinity (5)
- Clitocybula dusenii (3)
- Decomposition (3)

Concept

Top Count Alphanumeric Search

自定义检索

Concept Name

depolymerization

Select All on Page

- Depolymerization (27)
- Depolymerization catalysts (3)
- Models, Molecular (3)
- Optimization (3)
- Pleurotus (3)
- DNA sequences (4)
- Enzymes, lignin-metabolizing (4)

筛选不同研究领域文献：CA Section

^ CA Section

- Cellulose, Lignin, Paper, and Other Wood Products (36)
- Fermentation and Bioindustrial Chemistry (30)
- Unavailable (21)
- Enzymes (14)
- Microbial, Algal, and Fungal Biochemistry (9)

[View All](#)

CA Section

By Count Alphanumeric

0 Selected

- Cellulose, Lignin, Paper, and Other Wood Products (36)
- Fermentation and Bioindustrial Chemistry (30)
- Unavailable (21)
- Enzymes (14)
- Microbial, Algal, and Fungal Biochemistry (9)
- Fossil Fuels, Derivatives, and Related Products (6)
- Biochemical Genetics (5)
- Plant Biochemistry (4)
- Electrochemical, Radiational, and Thermal Energy Technology (3)
- Textiles and Fibers (2)
- Waste Treatment and Disposal (2)
- Biochemical Methods (1)
- Fertilizers, Soils, and Plant Nutrition (1)
- Food and Feed Chemistry (1)
- General Biochemistry (1)
- Mammalian Biochemistry (1)
- Optical, Electron, and Mass Spectroscopy and Other Related Properties (1)
- Pharmaceuticals (1)
- Plastics Fabrication and Uses (1)

文献结果集管理

References search for ""natural fibers" and high-density polyethylene"

合并、下载、分享和保存

Substances Reactions Citing Knowledge Graph Save and Alert

Based on your query, we've returned the most relevant results. Would you like to load the entire result set? Learn about result relevance.

Load More Results

Filtering: Search Within Results: wood flour Concept: 5 Selected Clear All Filters

45 Results

1

Concept: 5 Selected

- Wood fibers
- Cotton fibers
- Wool
- Wood
- Plant fibers

Sort: Relevance View: Partial Abstract ...

Green high density polyethylene (HDPE) r...
technical applications

By: Mazur, Karolina; Jakubowska, Paulina; Romanska, Paulina; Kuciel, Stanislaw ID
Composites, Part B: Engineering (2020), 202, 108399 | Language: English, Database: CAplus

In this study, the impact of natural fibers (NFs) on the mech., thermal and hydrodegrdn. behavior was assessed. Composites based on biobased high-d. polyethylene were manufactured with a 40 wt% of wood flour, basalt fibers, flax fibers, and walnut shell flour. The results confirmed the reinforcing effect of NFs on mech. properties, especially in relation to the stiffness of the composites. Significant improvement was visible in the case of composites with basalt fibers with about 600% and 156% improvements for Youngs modulus and tensile strength, resp. Moreover, to evaluate the viability of NF...

View More

Feedback

Filter Behavior

Filter by Exclude

Search Within Results

Substance Role

Concept

CA Section

Full Text

Substances (2)

Reactions (0)

Citing (48)

Citation Map



保存和提醒



Save Results and Create Alert ×

Name
天然纤维&HDPE

Save Options

Query Only
 Selected Answers
 All Answers (Up to 20,000)

Alert Frequency

No Alerts
 As Available
 Weekly
 Monthly

Add Existing Tags (Optional)

Innocare
 natural product drugs
 SCU

New Tag (Optional)

Tag Color

Save Cancel

- 结果保存
- 自定义提醒频率
- 标签分类

下载



File Type

PDF

Citation (.ris)
Excel (.xlsx)
PDF
Quoted (.txt)
Rich Text (.rtf)
Tagged (.txt)

Download Reference Results

File Type

PDF

Select Quantity

All Results
 Selected Results
 Range (ex. 2 to 20)
[] to []

Display

Result Summary
 Result Details

File Name

Reference_20230628_1301

Include

Task History
 Abstract
 Concepts
 Substances

Formulations
 Analytical Methods
 Citations

Download **Cancel** [Learn more about downloads.](#)

合并



Combine Reference Results

Select a Combine Option:

- Add
- Intersect
- Subtract

Select

[Learn More About Combine](#)

- 并集
- 交集
- 差集

Combine Reference Results: Subtract

[Return to Combine Option](#)

Select 1 Saved Item:

<input checked="" type="radio"/> 天然纤维&HDPE	Query	November 21, 2023
<input type="radio"/> 天然产物 & high-density polyethylene	Query	November 21, 2023
<input type="radio"/> eye pressure	Query	November 14, 2023
<input type="radio"/> melatonin	Query	November 14, 2023
<input type="radio"/> CLImaging	Query	November 3, 2023
<input type="radio"/> ECL-imaging	Query	November 3, 2023

Select 1 Saved Item to Subtract:

- Subtract the selected saved item from the current answer set.**
- Subtract the current answer set from the selected saved item.**

Select

[Learn More About Combine](#)

查看目标文献详情

Green high density polyethylene (HDPE) reinforced with basalt fiber and agricultural fillers for technical applications

Substances (2) Reactions (0) Citing (48) Citation Map

By: Mazur, Karolina; Jakubowska, Paulina; Romanska, Paulina; Kuciel, Stanislaw

In this study, the impact of natural fibers (NFs) on the mech., thermal and hydrodegrdn. behavior was assessed. Composites based on biobased high-d. polyethylene were manufactured with a 40 wt% of wood flour, basalt fibers, flax fibers, and walnut shell flour. The results confirmed the reinforcing effect of NFs on mech. properties, especially in relation to the stiffness of the composites. Significant improvement was visible in the case of composites with basalt fibers with about 600% and 156% improvements for Youngs modulus and tensile strength, resp. Moreover, to evaluate the viability of NFs as reinforcements, water absorption and its influence on mech. properties were investigated. Unmodified polymer and composites with basalt fibers showed similar relationships - low water absorption. Composites reinforced with lignocellulosic fibers exhibited high water uptake and progressive deterioration of properties over time.

Keywords: green HDPE basalt fiber agricultural filler composite stiffness application

View Source Full Text

相似文献

Similar References NEW

Mechanical properties of bio-based epoxy composites reinforced with hybrid-interlayer ramie and recycled carbon fibres
A Sustainable Polymer Composite from Recycled Polypropylene Filled with Shrimp Shell Waste
Mechanical properties and water absorption of fiber-reinforced polypropylene composites prepared by bagasse and beech...

Get Similar References

Concepts

CAS 科学家提供的核心研究点

Absorption

Modifier: of water

Melting point

Bending strength

Microstructure

Charpy impact strength

Natural fibers

Crystallinity

Polymer fracture-surface morphology

Crystallization temperature

Stiffness

Elongation at break

Stress-strain relationship

Flax fibers

Surface roughness

Flexibility

Synthetic fibers, basalt

Flexural modulus

Role: Modifier or Additive Use

Flours and Meals, walnut

Synthetic polymeric fibers, lignocellulosic

Modifier: Rehofix UNG 300

Role: Modifier or Additive Use

Fusion enthalpy

Tensile strength

Hydrolytic polymer biodegradation

Walnut, flour and meal

Modifier: Rehofix UNG 300

Wood fibers

重点研究物质

Substances

Substances (2)

9002-88-4

 $(C_2H_4)_x$
Polyethylene

2072054-87-4

Image Not Available

Unspecified
Rehofix UNG 300

Role: Modifier or Additive Use, Uses

Notes: Rehofix UNG 300

物质角色

查看专利详情

Continuous fiber composite reinforced synthetic wood elements

Substances (3) Reactions (0) Citing (5) Citation Map Save

PATENT

By: Branca, Alfonso

Patent Number: US20040048055

Publication Date: 2004-03-11

Application Number: US2002-242187

Application Date: 2002-09-11

Kind Code: A1

Assignee: Unknown

Source: United States
CODEN: USXXCO

Database Information: AN: 2004:203395
CAN: 140:236798
Cplus

Keywords: synthetic wood element continuous fiber composite reinforced; recycled polyethylene; glass fiber-reinforced recycled polyethylene

PatentPak Viewer Get Prior Art Analysis Full Text

Priority Application Number: US2002-242187 Application Date: 2002-09-11

IPC Data

Patent	Class	Patent Family Classification Codes
US20040048055	IPCI	B32B 0027/04 A
US20070237940	IPCI	B32B 0027/04

Concepts

Substances

Substances (3)

9002-88-4	9003-07-0	9002-86-2
$(C_2H_4)_x$ Polyethylene	$(C_3H_6)_x$ 1-Propene, homopolymer	$(C_2H_3Cl)_x$ Ethene, chloro-, homopolymer
PatentPak	PatentPak	PatentPak
Role: Polymer in Formulation, Technical or Engineered Material Use, Uses	Role: Polymer in Formulation, Technical or Engineered Material Use, Uses	Role: Polymer in Formulation, Technical or Engineered Material Use, Uses
Notes: recycled	Notes: (un)recycled	

24

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PatentPak Viewer 高效阅读专利

CAS PatentPak

PAGE 14 /15 ZOOM DOWNLOAD PDF PDF+

Key Substances in Patent

CAS RN 10103-46-5

O=P(O)(O)O

• x Ca

Analyst Markup Locations (1)

Page 13

CAS RN 1302-42-7

O=Al=O

• Na⁺

EXAMPLE 4

55 Zeolite-pulp composite (100 g) obtained in Production Example 2 was impregnated with an aqueous solution of calcium chloride (0.30 mmol/1000 ml) and this zeolite was changed to 5A zeolite having larger pore size. To the 5A zeolite-pulp composite (10.0 g) were added collagen (5.0 g) and calcium phosphate (1.0 g) to give a molded product (5 cm×3 cm×1 cm).

60 PRODUCTION EXAMPLE 3

55 Pulp (300 g) was impregnated with an aqueous solution of sodium metasilicate 9 hydrate (190 g/5000 ml) and a mixed aqueous solution (5000 ml) of sodium aluminate (150 g) and sodium hydroxide (330 g) was added, which was followed by immersion at 90° C. for 2 hr to give a zeolite-pulp composite. The zeolite-pulp composite thus obtained had a zeolite-holding percentage of 30.1 wt %.

65 EXPERIMENTAL EXAMPLE 4

The product (5 cm×3 cm×1 cm) obtained in Example 4 was immersed in an artificial body fluid (100 cm³) and preserved at 38° C. Thirty days later, the product was taken

This zeolite-pulp composite was applied to an inclined wire-netting paper making machine (angle of inclination 50°, rate 10 m/min) to make a zeolite-holding paper (basic weight 100 g/m², paper width 50 cm).

精准定位

US 6,372,333 B1

15 EXAMPLE 6

A rayon nonwoven fabric (basic weight 60 g/m², cloth width 50 cm) prepared by wet method was adhered to the

16 section of the rayon fiber when regenerating the rayon, and having polypropylene (core diameter 20 µm; fineness 50 µm; average fiber length 20 mm) was impregnated with an

小结

1. 检索词的构建：使用布尔逻辑算符及通配符连接主题词，CAS Lexicon 丰富选词
2. 利用高级检索选项以及文本与结构联合进行自定义组合检索
3. 通过聚类筛选工具快速获得目标文献
4. 利用引文地图拓展检索
5. 使用 PatentPak 高效阅读专利

如何调研某类物质？

- 快速检索聚合物或无机化合物？
- 利用谱图数值确认产物或杂质？从属性值出发，调研某类材料？
- 检索完整分子结构？通式结构？或含有某些片段的物质？
- 如何确认结构新颖性？
- 如何查找相似的序列？

检索实验所需物质

All Substances Reactions References Suppliers

物质/文献标识符

Search by Substance Name, CAS RN, Patent Number, P

AND Molecular Formula

+ Add Advanced Search Field

Retrosynthetic Analysis
Make reaction plans with conditions, yields, catalysts, and experimental procedures.

Molecular Formula
CAS Registry Number
Chemical Identifier
Document Identifier
Patent Identifier

Experimental Spectra
Bioactivity Data NEW
Biological
Chemical Properties
Density
Electrical
Lipinski
Magnetic
Mechanical
Optical and Scattering
Structure Related
Thermal

Koc
logD
logP
Mass Intrinsic Solubility (g/L)
Mass Solubility (g/L)
Molar Intrinsic Solubility (mol/L)
Molar Solubility (mol/L)
Molecular Weight
pKa
Vapor Pressure (Torr)

Lea

结构检索

6CuN₂O₅.C₂H₃N

高级检索

Edit

Chemical Structure Drawing

Edit Drawing Remove

Search CAS Sequences
Query BLAST, CDR, and Motif algorithms for nucleotide and protein based sequences.

Search Patent Markush

CAS A division of the American Chemical Society

筛选可用作催化剂的物质

Reaction Role

- Product (421)
- Reactant (109)
- Reagent (9)
- Catalyst (272)
- Solvent (1)

Reference Role

- Catalyst Use (272)
- Uses (272)
- Preparation (259)
- Synthetic Preparation (255)
- Properties (127)

[View All](#)

Substances search for drawn structure

Structure Match: As Drawn (4) Substructure (1,991)

Filtering: Reaction Role: Catalyst X Reference Role: Catalyst Use X Clear All Filters

Sort: Relevance View: Partial

272 Results

Rank	Chemical Structure	Chemical Name	Components	Component RN	Description
1		161265-03-8	1	2139242-12-7	Phosphine, 1,1'-(9,9-dimethyl-9H-xanthene-4,5-diyl)bis[1,1-diphenyl-4,5-dihydro-1H-1,3-dioxolyl]phosphine
2		2892148-77-3	2	2242797-96-0	Phosphonium, [5-(diphenylphosphino)-9,9-dimethyl-9H-xanthen-4-yl]methylidphenyl...
3		2666309-71-1	1	2242797-96-0	Phosphonium, [5-(diphenylphosphino)-9,9-dimethyl-9H-xanthen-4-yl]triphenylchl...

Sort: Relevance View: Partial

Relevance
CAS RN: Ascending
CAS RN: Descending
Molecular Formula: Ascending
Molecular Formula: Descending
Molecular Weight: Ascending
Molecular Weight: Descending
Number of References: Ascending
Number of References: Descending
Number of Suppliers

分子式检索物质

不含碳元素，按元素符号首字母顺序书写

All Substances Reactions References

Search by Substance Name, CAS RN, Patent Number, PubMed ID, Molecular Formula Co₂O₃

Substances search for "Co₂O₃" Molecular Formula

References Reactions Suppliers

Filter Behavior Filter by Exclude

Search Within Results

Reaction Role Product (1) Reagent (1) Catalyst (1)

Reference Role Properties (4) Reactant (3) Reactant or Reagent (3)

4 Results

1 1308-04-9 Co₂O₃ Cobalt oxide (Co₂O₃)

Image Not Available

8,257 References 119 Reactions 12 Suppliers

含碳元素，碳排第一位，氢排第二位，其他元素符号按首字母顺序书写

All Substances Reactions References

Search by Substance Name, CAS RN, Patent Number, PubMed ID, Molecular Formula CH₂O₃

Substances search for "CH₂O₃" Molecular Formula

References Reactions Suppliers

Filter Behavior Filter by Exclude

Search Within Results

Reaction Role Product (11) Reagent (2) Reagent (2) Catalyst (2) Solvent (2)

Reference Role

51 Results

1 463-79-6 CH₂O₃ Carbonic acid

32K References 578 Reactions 8 Suppliers

金属离子和阴离子间用点·隔开，补充和阳离子等同个数的氢原子

All Substances Reactions References

Search by Substance Name, CAS RN, Patent Number, PubMed ID, Molecular Formula H₂O₄S.2Na

Substances search for "H₂O₄S.2Na" Molecular Formula

References Reactions Suppliers

Filter Behavior Filter by Exclude

Search Within Results

Reaction Role Product (2) Reagent (2) Catalyst (1)

Reference Role Process (6) Uses (6) Biological Study (5) Properties (5)

9 Results

1 7757-82-6 H₂O₄S.2Na

Components: 2 Component RN: 7664-93-9 Sodium sulfate

116K References 57K Reactions 213 Suppliers

谱图和分子量联合检索物质

The screenshot shows the CAS Substance Search interface. On the left, there are two vertical navigation panels. The top panel includes fields for Molecular Formula, CAS Registry Number, Chemical Identifier, Document Identifier, Patent Identifier, Experimental Spectra (with Proton NMR selected), Bioactivity Data (NEW), Biological, Chemical Properties (with Koc selected), Density, and Experimental Spectra. The bottom panel includes fields for Experimental Spectra, Bioactivity Data (NEW), Biological, Chemical Properties (with Koc selected), Density, Electrical, Lipinski, Magnetic, Mechanical, Optical and Scattering, Structure Related, Thermal, logD, logP, Mass Intrinsic Solubility (g/L), Mass Solubility (g/L), Molar Intrinsic Solubility (mol/L), Molar Solubility (mol/L), Molecular Weight, pKa, and Vapor Pressure (Torr). The main search interface at the top has tabs for All, Substances (selected), Reactions, References, and Suppliers. Below the tabs is a search bar with placeholder text: "Search by Substance Name, CAS RN, Patent Number, PubMed ID, AN, CAN, and/or DOI." The search results area displays two search fields: one for Proton NMR (3.5, 6.5 to 7.5, 11.1) with an allowance of ± 0.2 ppm and examples 8.03, 7.2, 2.63 | 5.95, 7 to 8.5 | 6.3; and another for Molecular Weight (170 to 200) with predicted values only and examples 46.07 | 125 to 350 | >300. A button "+ Add Advanced Search Field" is located at the bottom of the search results area.

- H 谱化学位移: 3.5, 6.5 至 7.5, 11.1
- 分子量: 170 至 200

从小到大的顺序输入检索信息
英文模式下输入逗号和空格

谱图和分子量联合检索物质

Substances search for 2 Advanced Fields

References Reactions Suppliers Save and Alert

Filter Behavior 123 Results Sort: Relevance View: Partial

Filter by Exclude

Search Within Results

Reaction Role

- Product (123)
- Reactant (103)
- Reagent (9)
- Catalyst (9)

Reference Role

- Preparation (123)
- Synthetic Preparation (122)
- Reactant (104)
- Reactant or Reagent (104)
- Properties (65)

Bioactivity Data

Commercial Availability

- Available (108)
- Not Available (15)

Number of Components

1 5418-95-1 2-Guanidinobenzimidazole C₈H₉N₅ References: 277, Reactions: 397, Suppliers: 64

2 157086-07-2 rel-(1R,2R,3R,4S)-3-Phenylbicyclo[2.2.1]hept-5-ene-2-carboxaldehyde C₁₄H₁₄O References: 38, Reactions: 133, Suppliers: 2

3 74163-81-8 (-)-1,2,3,4-Tetrahydroisoquinoline-3-carboxylic acid C₁₀H₁₁NO₂ References: 358, Reactions: 459, Suppliers: 116

4 712-53-8 3-Formyl-4-hydroxy-5-methoxybenzoic acid C₉H₈O₅ References: 38, Reactions: 133, Suppliers: 2

5 1852487-06-9 Acetic acid (2Z)-2-[[1-(2-propyn-1-yl)-1H-pyrrol-2-yl]methylene]hydrazide C₁₀H₁₁N₃O References: 38, Reactions: 133, Suppliers: 2

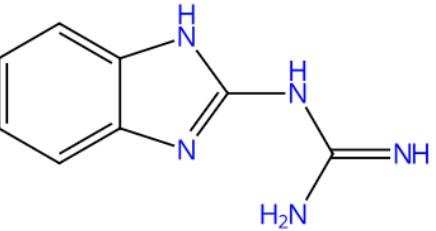
6 1319734-00-3 7-Methoxy-5H-pyrido[3,2-b]indole C₁₂H₁₀N₂O References: 38, Reactions: 133, Suppliers: 2

- 点击 CAS 登记号查看物质详情
- 查看物质相关的文献、反应和供应商信息

查看物质详情

CAS Registry Number: 5418-95-1

References (277) Reactions (397) Suppliers (64)



C8H9N5
Guanidine, N-1H-benzimidazol-2-yl- (ACI)

Key Physical Properties

Value	Condition
175.19	-
245 °C (decomp)	-
392.7±25.0 °C	Press: 760 Torr
1.56±0.1 g/cm ³	Temp: 20 °C; Press: 760 Torr
13.67±0.30	Most Basic Temp: 25 °C

Experimental Properties | Spectra

Proton NMR Spectrum for 5418-95-1

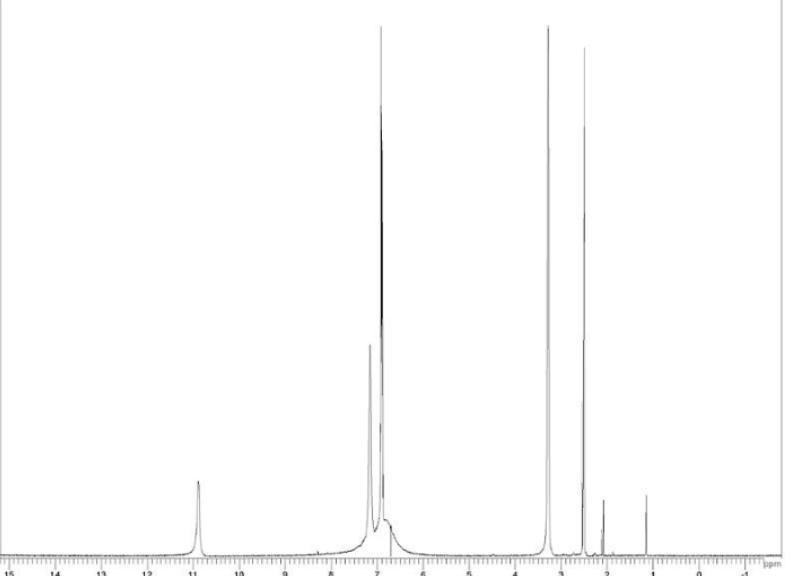
5418-95-1
C8H9N5
CAS Name
2-Guanidinobenzimidazole

Conditions

- Working Frequency: 300 MHz
- Solvent: DMSO-d₆ (2206-27-1)
- Temperature: 24 °C

Spectrum Summary

- Spectrum ID: ASI_6014117
- Source: Spectral data were obtained from John Wiley & Sons, Inc.



Experimental Spectra

1^H NMR 1³C NMR IR Mass Raman

View Proton NMR Spectrum

View Proton NMR Spectrum

View Proton NMR Spectrum

Source

(1) WSS (1) WSS (2) ENAMINE

利用结构信息检索物质

X 可变基团

R 自定义基团

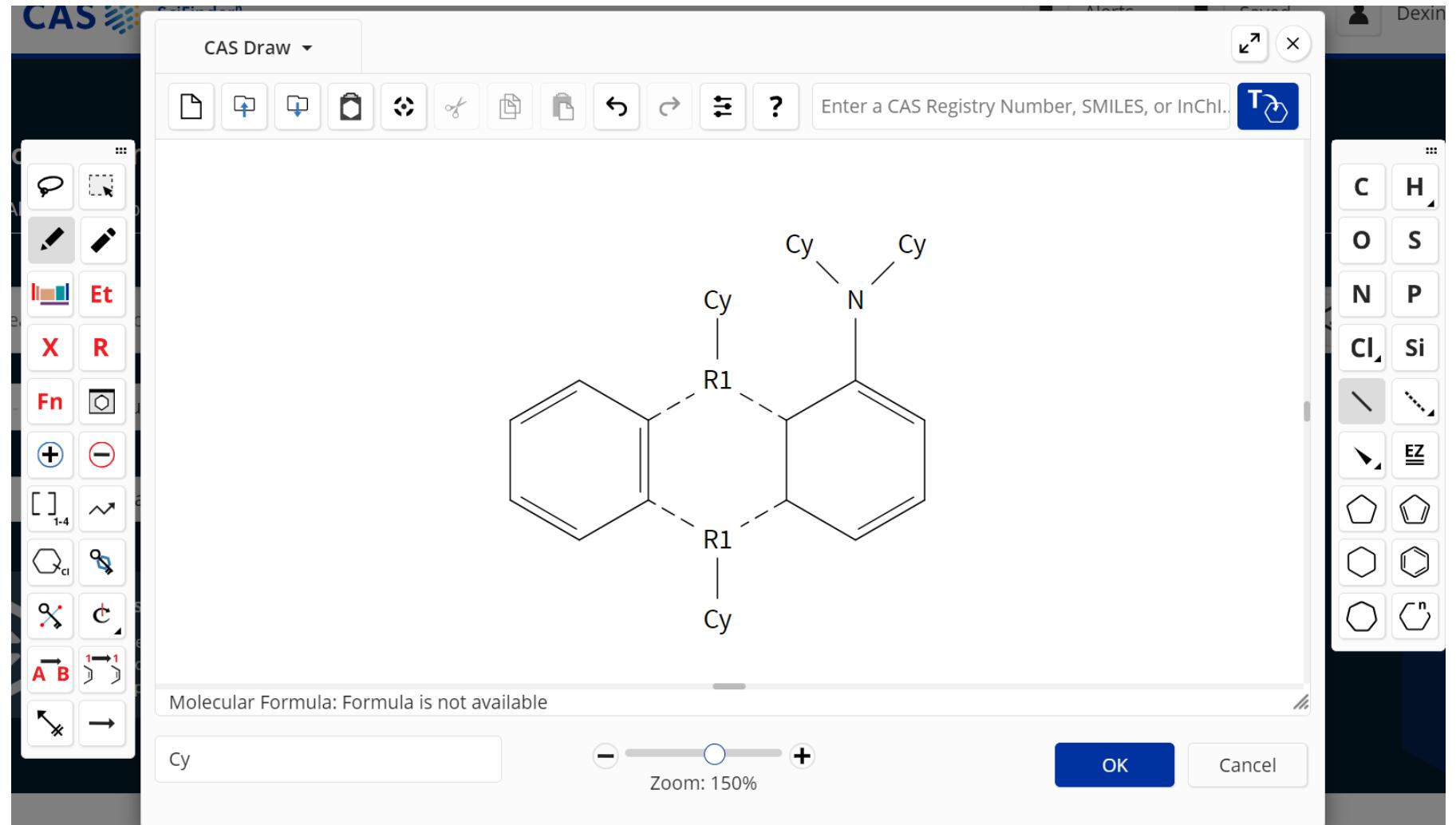
Fn 片段结构

[]₁₋₄ 重复工具

取代位点可变

A → B 反应角色标记

锁定工具



检索结果集：Structure Match

CAS SciFinder® Substances Enter a query...

Return to Home

Substances search for drawn structure

References Reactions Suppliers

Structure Match

- As Drawn (0)
- Substructure (21)**
- Similarity (46)

Analyze Structure Precision

Chemscape Analysis

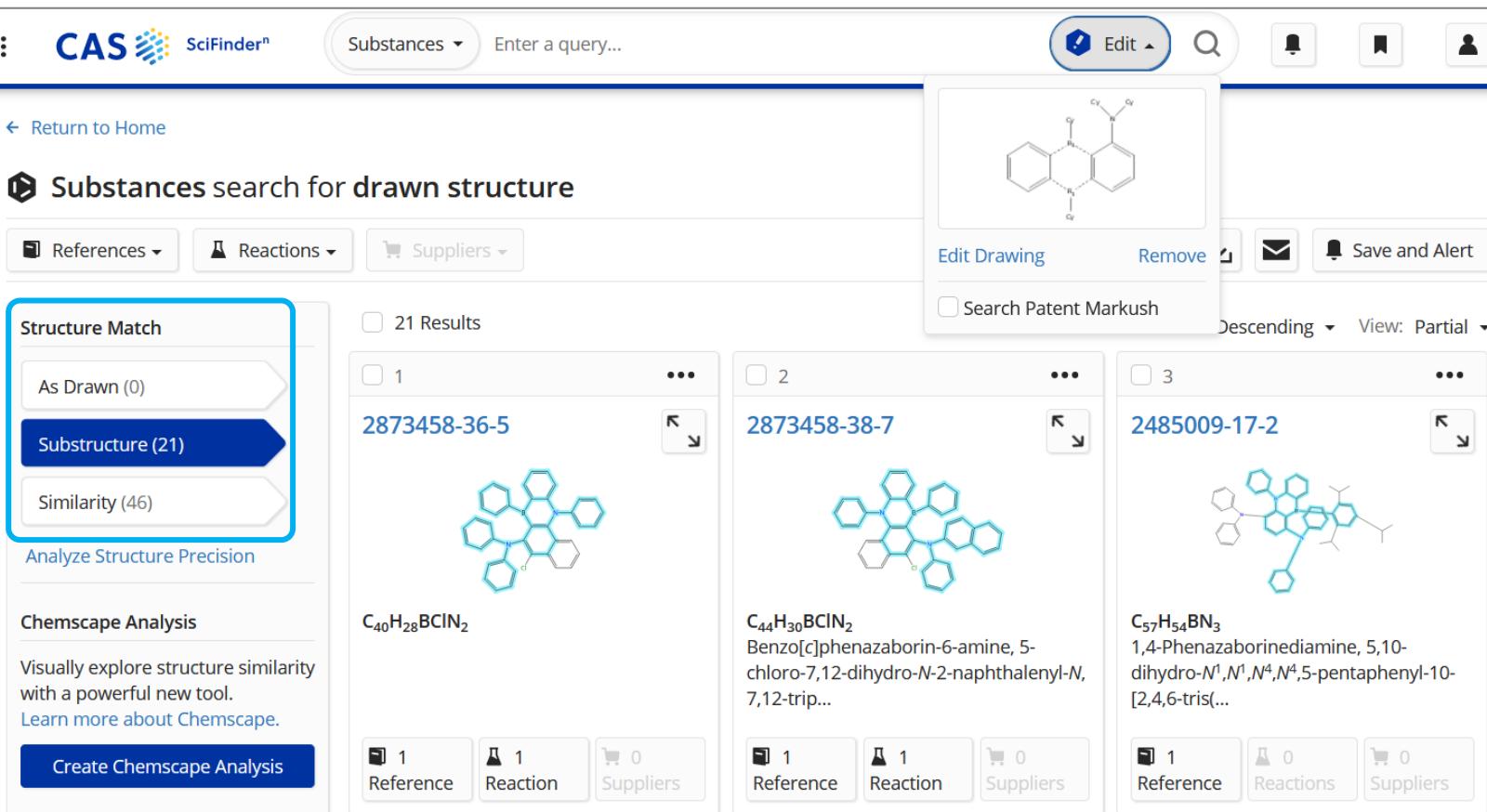
Visually explore structure similarity with a powerful new tool.
Learn more about Chemscape.

Create Chemscape Analysis

21 Results

...
1 2873458-36-5 <chem>C40H28BCIN2</chem>	2 2873458-38-7 <chem>C44H30BCIN2</chem> Benzo[c]phenazaborin-6-amine, 5-chloro-7,12-dihydro-N-2-naphthalenyl-N,7,12-trip...	3 2485009-17-2 <chem>C57H54BN3</chem> 1,4-Phenazaborinediamine, 5,10-dihydro-N ¹ ,N ¹ ,N ⁴ ,N ⁴ ,5-pentaphenyl-10-[2,4,6-tris(...]
1 Reference 1 Reaction 0 Suppliers	1 Reference 1 Reaction 0 Suppliers	1 Reference 0 Reactions 0 Suppliers

Edit Drawing Remove Edit Save and Alert Search Patent Markush Descending View: Partial



- **As Drawn:** 绘制结构中可出现 R 基团和可变基团。绘制结构中价态未达饱和的原子只能接氢，环系（如有）不能与其他的环稠合或成桥环。
- **Substructure:** 包括 As Drawn 的检索结果，另外价态未达饱和的原子可以连接氢以外的其他原子，环系（如有）可以与其他环稠合或成桥环。
- **Similarity:** 获得片段或整体结构与被检索结构相似的物质，母体结构可以被取代和改变。

检索结果集筛选目标物质：Filter Behavior

物质在反应中的角色

- Reaction Role
 - Product (54)
 - Reactant (3)
 - Reagent (1)
- Reference Role
 - Preparation (80)
 - Synthetic Preparation (75)
 - Biological Study (34)
 - Uses (34)
 - Reactant (24)

[View All](#)

物质在文献中的研究角色

Filter Behavior

Filter by Exclude

Search Within Results

- Reaction Role
- Reference Role

Commercial Availability

Number of Components

Molecular Weight

LogP

Element

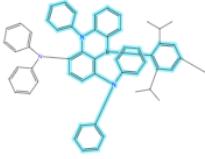
- Functional Group
- Aromatic Rings
- Substance Class

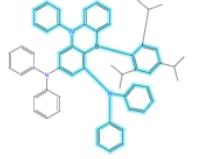
Isotopes

Metals

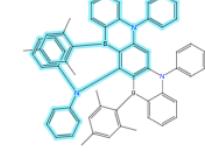
Reference Availability

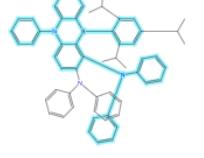
4 2873458-38-7 
C44H30BCIN2
Benzo[c]phenazaborin-6-amine, 5-chloro-7,12-dihydro-N-(2-naphthalenyl)-N,7,12-trip...

5 2485009-17-2 
C57H54BN3
1,4-Phenazaborinediamine, 5,10-dihydro-N¹,N¹,N⁴,N⁴,5-pentaphenyl-10-[2,4,6-tris(...]

6 2485009-22-9 
C57H54BN3
1,3-Phenazaborinediamine, 5,10-dihydro-N¹,N¹,N³,N³,5-pentaphenyl-10-[2,4,6-tris(...]

7 2485009-19-4 
C57H54BN3
2,4-Phenazaborinediamine, 5,10-dihydro-N²,N²,N⁴,N⁴,5-pentaphenyl-10-

8 2410379-95-0 
C60H51B2N3

9 2485009-21-8 
C57H54BN3
1,2-Phenazaborinediamine, 5,10-dihydro-N¹,N¹,N²,N²,5-pentaphenyl-10-

Functional Group

- Amine (103)
- Tertiary amine (102)
- Amide (75)
- Ether (35)
- Alkene (30)

View All

Substance Class

- Organic/Inorganic Small Molecule (84)
- Salt and Compound With (11)
- Polymer (5)
- Protein/Peptide Sequence (3)

CAS Markush 检索实现结构查新

具体物质 (Specific Substance):

- 以具体化学结构陈述的特定物质，会被分配 CAS 登记号

预测性物质 (Prophetic Substance)

- 使用 Markush 结构陈述的预测物质，一个 Markush 可以陈述数千甚至更多的化学物质
- 被 Markush 结构包含，但未被实施或呈现在表格、权利要求书或说明书中的结构，则不会被分配 CAS 登记号
- Markush 检索能够检索到仅通过 Substance 可能检索不到的结构

The screenshot shows the CAS PatentPak interface. On the left, there are three boxes for 'Key Substances in Patent' with their respective CAS RNs and chemical structures:

- CAS RN 103-08-2: A branched chain alcohol.
- CAS RN 3391-86-4: An alkene with a hydroxyl group.
- CAS RN 111-27-3: A branched chain alcohol.

On the right, the patent claim is displayed:

What is claimed is:

1. A perfuming composition containing a compound of formula

(I) or a polyalcohol or polyether group; R₃ represents hydrogen, an alkyl or alkoxy group from C₁ to C₄, linear or branched, a OH group or a NH₂ group; R₄ and R₅, taken separately, can be hydrogen or have the meaning given above for R₁ and can be identical to or different from R₁ or from each other; or R₄ and R₅, taken together, form a bridging group between the two aromatic rings, which bridging group can be a methylene or a keto group; m is an integer from 0 to 3 and n is an integer from 0 to 2; R₆ and R₇, taken separately, each represents hydrogen, an alkyl group from C₁ to C₄, an alcohol group having an alkyl chain from C₁ to C₁₂, or a phenyl group, or, R₆ and R₇, taken together with the nitrogen atom form a 5-membered or 6-membered ring optionally containing another hetero atom; R₈ represents hydrogen, an alkyl group from C₁ to C₄, an alcohol group having an alkyl chain from C₁ to C₁₂ or a phenyl group;

M represents hydrogen or an alkali metal; and R* is the organic part derived from a primary or secondary fragrant alcohol R*OH, wherein the fragrant alcohol is released upon exposure of the composition to light to provide a fragrance.

2. A perfuming composition according to claim 1, wherein the 2-benzoyl benzoate is of formula

(II)

in which R represents a group of formula

in which X and Y can be identical or different and represent hydrogen, a linear or branched alkyl or alkoxy group from C₁ to C₁₂, a phenyl group, an olefinic group from C₂ to C₁₂, an alcohol group a CO₂M group, a —NR₆R₇ group or a group of formula

The patent claim continues with further details and structures.

完整的结构检索流程

CAS SciFinder® Substances Enter a query... Edit

← Return to Home

Patent Markush search for drawn structure

References Patent Markush Match Substructure (46)

As Drawn (13) Substructure (46)

Filter Behavior Filter by Exclude

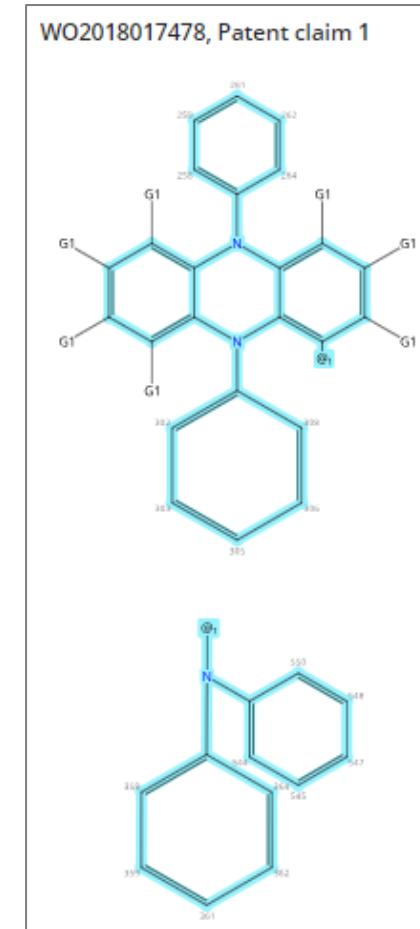
^ Patent Office China (6) World Intellectual Property Organization (4) United States (2) Japan (1)

^ CA Section Electric Phenomena (3) Heterocyclic Compounds (One Hetero Atom) (3) Chemistry of Synthetic High Polymers (2) Heterocyclic Compounds (More Than One Hetero Atom) (2) Benzene, Its Derivatives, and Condensed Benzenoid Compounds (1) View All

13 Results

1 WO2018017478 Catalytic functional group removal from a polymer
By: Mattson, Kaila M.; Hawker, Craig J.; Pester, Christian W.; Gutekunst, Will R.; Schmidt, Bernhard V.K.J.
World Intellectual Property Organization, WO2018017478 A1 2018-01-25 | Language: English, Database: CPlus
Assignee: The Regents of University of California
Patent claim 1
 PatentPak Full Text
258,259,261,262,264: opt. substd. by G6
302,303,305,306,308: opt. substd. by G6
358,359,361,362,364: opt. substd.

2 WO2011143563 Azaborinine compounds as host materials and dopants for PHOLE DS
By: Kottas, Gregg; Kwong, Raymond C.
World Intellectual Property Organization, WO2011143563 A2 2011-11-17 | Language: English, Database: CPlus
Assignee: Universal Display Corporation
Patent claim 1
 PatentPak Full Text
There are no notes to display for this structure.



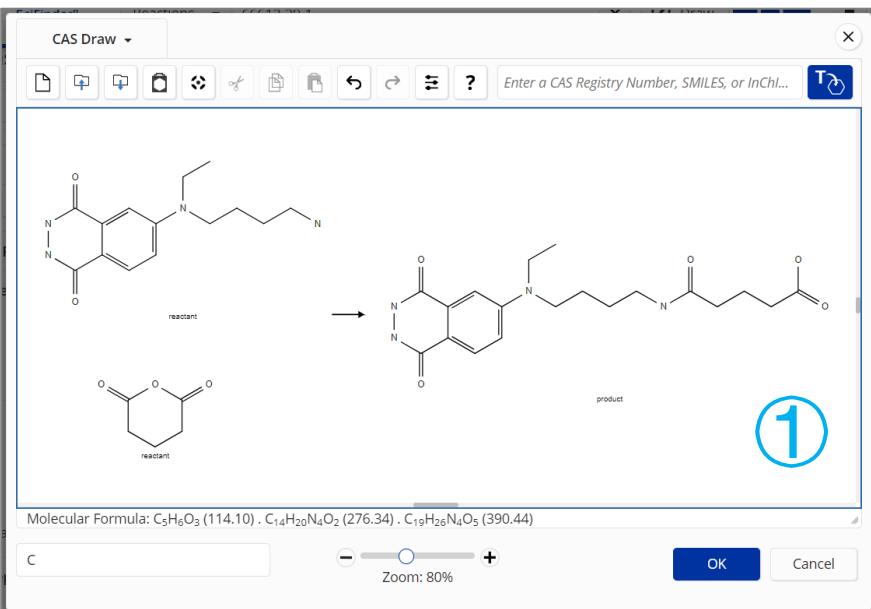
物质检索小结

1. 物质检索方法：物质、文献标识符检索；分子式、物性参数、谱图数据检索；及结构式检索，充分利用结构绘制工具，合理扩大或限定结构检索范围
2. 正确理解 As Drawn、Substructure、Similarity 检索结果集的意义和范围
3. 充分利用物质筛选选项准确定位目标物质：Reaction Role、Reference Role 等
4. 利用 CAS Markush 检索尽可能全面的获得结构的公开信息

3. 如何进行反应调研?

- 如何从我感兴趣的底物、产物或催化剂出发，找到关联的反应？
- 如何查找相似反应？
- 如何关注特定转化类型的反应？
- 如何在大量反应结果中，快速找到最想要的反应？
- 如何查找涉及机理研究的反应？或人名反应？
- 如何设计新化合物的逆合成路线？

反应检索



Reactions search for drawn structure

References 3 Results Group: By Document Sort: Relevance View: Collapsed 1

Structure Match As Drawn (3) Full Text

Substructure (5)

Similarity (29K)

Filter Behavior Filter by Exclude

Search Within Results 90-100% (3)

Yield 1 (3)

Number of Steps 1 (3)

A new isoluminol reagent for chemiluminescence labeling of proteins
By: Palmioli, Alessandro; Crisma, Marco; Peggion, Cristina; Brusasca, PierNatale; Zanin, Davide; et al
Tetrahedron Letters (2013), 54(33), 4446-4450 | Language: English, Database: Cplus

Suppliers (68) Suppliers (92)

31-366-CAS-10683461

Steps: 1 Yield: 100% ②

直接反应检索

检索具体物质能够发生的反应

Reactions search for "42196-31-6"

References ▾

Filter Behavior

Filter by Exclude

Search Within Results

Substance Role

- Product (59)
- Reactant (216)
- Reagent (182)
- Catalyst (23K)
- Solvent (1)

Non-Participating Functional Groups

Experimental Protocols

- Synthetic Methods (14K)
- Experimental Procedure (2,773)

Catalyst

- Palladium trifluoroacetate (23K)
- 2,2'-Bipyridine (1,270)

23,702 Results

Group: By Scheme ▾ Sort: Relevance ▾ View: Expanded ▾

Scheme 1 (5 Reactions)

Steps: 1 Yield: 99-100% ⋮

Suppliers (107) Suppliers (100) Suppliers (34)

31-239-CAS-1403436 Steps: 1 Yield: 100% ⋮

1.1 Reagents: [Trifluoroacetic acid](#)
Catalysts: [1,1-Bis\(diphenylphosphino\)ferrocene](#),
[Palladium trifluoroacetate](#)
Solvents: [Toluene](#)

Transition metal-catalyzed process for addition of amines to carbon-carbon double bonds

By: Hartwig, John; et al
World Intellectual Property Organization, WO2001064620 A1
2001-09-07

PatentPak ▾ Full Text ▾

31-239-CAS-10342038 Steps: 1 Yield: 100% ⋮

1.1 Catalysts: [1,1-Bis\(diphenylphosphino\)ferrocene](#),
[Palladium trifluoroacetate](#)
Solvents: [Toluene](#)

1.2 Reagents: [Trifluoromethanesulfonic acid](#)

Palladium-Catalyzed Intermolecular Hydroamination of Vinylarenes Using Arylamines

By: Kawatsura, Motoi; et al
Journal of the American Chemical Society (2000), 122(39),
9546-9547

Full Text ▾

- Substance Role 限定反应角色
- Catalyst 筛选催化剂

如何检索某种催化剂能够催化的反应？

Screenshot of the SciFinder search interface showing results for a drawn structure of a catalyst.

The search results are filtered by "Reaction Role: Catalyst".

Results:

- 1. Structure: **91742-21-1**, C2HF6NO4S2.Na. Components: 2. Component RN: 82113-65-3. Description: Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-, sodium salt.
- 2. Structure: **1449420-54-5**, C10H20NaO5.C2F6NO4S2. Components: 2. Description: Sodium(1+), (1,4,7,10,13-pentaoxacyclopentadecane-κO¹,κO⁴,κO⁷,κO¹⁰,κO¹³)-, salt ...

Filtering options include "References", "Reactions", and "Suppliers".

查看某种催化剂能够催化的反应

Reactions for 91742-21-1

References ▾

Filter Behavior

Filter by Exclude

Substance Role: Catalyst X

Clear All Filters

84 Results Group: By Scheme ▾ Sort: Relevance ▾ View: Expanded ▾

Scheme 1 (1 Reaction)

Steps: 1 Yield: 93% ⋮

Suppliers (44) Suppliers (57)

31-080-CAS-19444697 Steps: 1 Yield: 93% ⋮

1.1 Catalysts:
[Iridium-\[\(1,2,3,4,5-η\)-1,2,3,4,5-pentamethyl-2,4-cyclopentadien-1-yl\]bis\(trifluoromethanesulfonyl\)imide](#)
[Sodium bis\(trifluoromethanesulfonyl\)imide](#)
Solvents: [1,2-Dichloroethane](#); 12 h, 40 °C

Delineating Physical Organic Parameters in Site-Specific Functionalization of Indoles
By: Kim, Youyoung; et al
ACS Central Science (2018), 4(6), 768-775

Full Text ▾

Collapse Scheme ▾

查看文献中的重要反应

References for 50525-27-4

Substances Reactions Citing Knowledge Graph Save and Alert

Filter Behavior

Filter by Exclude

Search Within Results

Document Type

- Journal (540)
- Patent (251)
- Review (2)
- Conference (8)
- Letter (2)
- Preprint (3)

Substance Role

- Uses (612)
- Analytical Study (255)
- Biological Study (175)

802 Results Sort: Times Cited View: No Abstract

1 Merging Photoredox Catalysis with Organocatalysis: The Direct Asymmetric Alkylation of Aldehydes

By: Nicewicz, David A.; MacMillan, David W. C.
Science (Washington, DC, United States) (2008), 322(5898), 77-80 | Language: English, Database: CAplus and MEDLINE
View Abstract

Full Text Substances (33) Reactions (16) Citing (1,688) Citation Map

2 Efficient Visible Light Photocatalysis of [2+2] Enone Cycloadditions

By: Ischay, Michael A.; Anzovino, Mary E.; Du, Juana; Yoon, Tehshik P.
Journal of the American Chemical Society (2008), 130(39), 12886-12887 | Language: English, Database: CAplus and MEDLINE
View Abstract

Full Text Substances (37) Reactions (21) Citing (808) Citation Map

查看相似反应

Filter Behavior

Filtering: Substance Role: Catalyst X Clear All Filters

84 Results Group: By Scheme ▾ Sort: Relevance ▾ View: Expanded ▾

Scheme 1 (1 Reaction)

Steps: 1 Yield: 93% ⋮

31-080-CAS-19444697 Steps: 1 Yield: 93% ⋮ Delineating Physical Organic P...
1.1 Catalysts: Iridium, [(1,2,3,4,5-η)-1,2,3,4,5-pentamethylcyclopentadien-1-yl]bis(trifluoromethyl), Sodium bis(trifluoromethanesulfonyl)imide
Solvents: 1,2-Dichloroethane; 12 h, 40 °C

Get Similar Reactions

Set Reaction Similarity

Broad (3,535)
 Medium (110)
 Narrow (32)
Reaction centers plus adjacent atoms and bonds

Full Text ▾ Get Reactions Cancel

Collapse Scheme ▾ 检索相似反应

催化剂可以催化的反应类型

Filter Behavior

Filtering: Substance Role: Catalyst X Clear All Filters

84 Results Group: By Transformation Sort: Reaction Count: Descending View: Expanded

1 Amination of Aromatic Compounds View 24 Related Reactions

Ar-H + HN3 -> Ar-NH2

2 Amination of Aromatic Nitrogen Heterocycles/ Chichibabin Reaction View 24 Related Reactions

Nc1ccccc1 + NH2R -> Nc1ccccc1NHR

3 Reduction of Azides to Primary Amines/ Staudinger Reaction View 24 Related Reactions

R-N3 -> R-NH2

Filter Behavior

Filter by Exclude

Search Within Results

Substance Role

Product (354)

Reactant (69)

Reagent (153)

Catalyst (84)

Solvent (2)

Non-Participating Functional Groups

Alkene (71)

Halide (63)

Alkyl halide (52)

Acyclic alkene (46)

Cyclic alkene (32)

[View All](#)

Experimental Protocols

Synthetic Methods (56)

Catalyst

Number of Steps

Sort: Reaction Count: Descending

Reaction Count: Descending

Reaction Count: Ascending

Transformation Name: A to Z

Transformation Name: Z to A

关注反应的机理研究或人名反应？

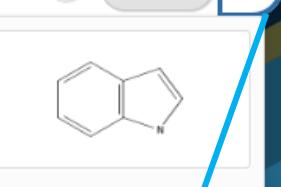
结构与关键词联用检索

All Substances Reactions References Suppliers

Friedel-crafts acylation

AND Author Name Enter last name, first name middle name. Example: Schubert, J A

+ Add Advanced Search Field

 Edit Drawing Remove

References search for "Friedel-crafts acylation" + drawn structure

Substances Reactions Citing Knowledge Graph

Structure Match As Drawn (1,100) Substructure (2,270)

Filter Behavior Filter by Exclude

Document Type Journal (996) Patent (68) Review (31) Conference (27)

1,100 Results Sort: Relevance View: Partial Abstract

1 ZrCl₄-Mediated Regio- and Chemoselective Friedel-Crafts Acylation of Indole By: Guchhait, Sankar K.; Kashyap, Maneesh; Kamble, Harshad Journal of Organic Chemistry (2011), 76(11), 4753-4758 | Language: English, Database: CPlus and MEDLINE

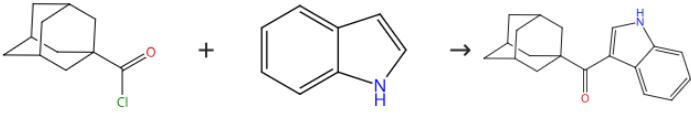
An efficient method for regio- and chemoselective Friedel-Crafts acylation of indoles using acyl chlorides in the presence of ZrCl₄ has been discovered. It minimizes/eliminates common competing reactions that occur due to high and multiatom-nucleophilic character of indole. In this method, a wide range of aryl, heteroaryl, alkenoyl, and alkanoyl chlorides undergo smooth acylation with various indoles without NH protection and afford 3-acylindoles in good to high yields.

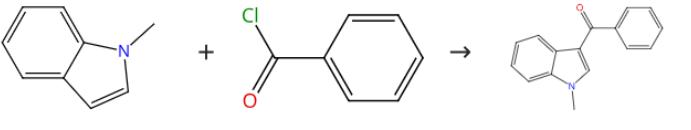
Full Text Substances (40) Reactions (21) Citing (99) Citation Map

Reactions search for "2011:601374"

References Filter Behavior Filter by Exclude

21 Results Group: By Scheme Sort: Relevance View: Collapsed

Scheme 1 (1 Reaction) Steps: 1 Yield: 82% 

Scheme 2 (1 Reaction) Steps: 1 Yield: 78% 

便捷查看详细反应操作

Structure Match

Filtering: Experimental Protocols: Synthetic Methods X Clear All Filters

26 Results Group: By Document Sort: Relevance View: Collapsed

1 •••

Photoinduced Electron Transfer in Ruthenium Bipyridyl Complexes: Evidence for the Existence of a Cage with Molecular Oxygen

By: Yavin, Eylon; Weiner, Lev; Arad-Yellin, Rina; Shanzer, Abraham
Journal of Physical Chemistry A (2004), 108(42), 9274-9282 | Language: English, Database: CPlus

Full Text View 4 Related Reactions

Absolute stereochemistry shown



Suppliers (75)

31-352-CAS-241330 Steps: 1 Yield: 100%

1.1 Solvents: Ethanol; 4 h, rt
1.2 Reagents: Trifluoroacetic acid
Solvents: Dichloromethane; 1 - 2 h, rt

Experimental Protocols

Reaction Overview
Steps: 1 Yield: 100%

Step 1

Stage	Reagents	Catalysts	Solvents	Conditions
1	-	-	Ethanol	4 h, rt
2	Trifluoroacetic acid	-	Dichloromethane	1 - 2 h, rt

Alternative Steps (0)

JOURNAL
Photoinduced Electron Transfer in Ruthenium Bipyridyl Complexes: Evidence for the Existence of a Cage with Molecular Oxygen
By: Yavin, Eylon; et al
View All Journal of Physical Chemistry A (2004), 108(42), 9274-9282

View Source Full Text

Company/Organization
Department of Organic Chemistry and Department of Chemical Research Support
Weizmann Institute of Science
Rehovot 76100
Israel

Products Ruthenium(2+), bis(2,2'-bipyridine- $\kappa N^1, \kappa N^1$)[[N,N-((2,2'-bipyridine)-4,4'-diyl- $\kappa N^1, \kappa N^1$)dicarbonyl]bis[alaninato]](2-); dihydrogen, (OC-6-22); Yield: 100%

Reactants Tris(2,2'-bipyridyl)dichlororuthenium(II) hexahydrate
L-Alanine, N,N-((2,2'-bipyridine)-4,4'-diyl)bis-, bis(1,1-dimethylethyl) ester

Reagents Trifluoroacetic acid

Solvents Ethanol
Dichloromethane

Procedure
1. Stir 2,2'-bipyridyl derivative with equivalents amount of Ru-(bipy)₂Cl₂·6H₂O in 80% ethanolic solution for 4 hours under argon.
2. Remove the solvent.
3. Purify the product by column chromatography eluting with a CH₃CN/n-BuOH/0.4M KNO₃ (9/0.5/0.5) solution.
4. Remove the ^tbutyl ester group by stirring in trifluoroacetic acid/dichloromethane (1:4) solutions for 1-2 hours.
5. Evaporate the solvent.

Transformation Hydrolysis or Hydrogenolysis of Carboxylic Esters or Thioesters

Characterization Data
Ruthenium(2+), bis(2,2'-bipyridine- $\kappa N^1, \kappa N^1$)[[N,N-((2,2'-bipyridine)-4,4'-diyl- $\kappa N^1, \kappa N^1$)dicarbonyl]bis[alaninato]](2-); dihydrogen, (OC-6-22)

无需浏览原文即可获取详细的实验信息

逆合成反应路线设计

Good Evening, Dexin

All Substances Reactions References Suppliers

Search by Keyword, Substance Name, CAS RN, Patent Number, PubMed

- Author Name Enter last name, first name middle name
+ Add Advanced Search Field

Retrosynthetic Analysis
Make reaction plans with conditions, yields, catalysts, and experimental procedures.

Search CAS Library
Search CAS Registry Number
Search CAS concepts, classes, and taxonomies

Retrosynthetic Analysis

Draw or import a structure.

Enter a CAS Registry Number, SMILES, or InChI...

Molecular Formula: C₂₂H₂₉FO₅ (392.47)

C Zoom: 100% Start Retrosynthetic Analysis Cancel

逆合成反应路线设计

Substances search for drawn structure

References ▾

Reactions ▾

Suppliers ▾

Structure Match

As Drawn (1)

Substructure (5)

Similarity (880K)

Analyze Structure Precision

Chemscape Analysis

Visually explore structure similarity
with a powerful new tool.

Learn more about Chemscape.

Create Chemscape Analysis

1 Result

1

...

2414255-10-8



C₄₆H₂₉N

Benzonitrile, 4-[10-(9,9-diphenyl-9H-fluoren-2-yl)-9-anthracyl]-

2
References

6
Reactions

0
Suppliers

CAS RN
2414255-10-8

CAS Name

Benzonitrile, 4-[10-(9,9-diphenyl-9H-fluoren-2-yl)-9-anthracyl]-

Get Substance Details

Get Bioactivity Data

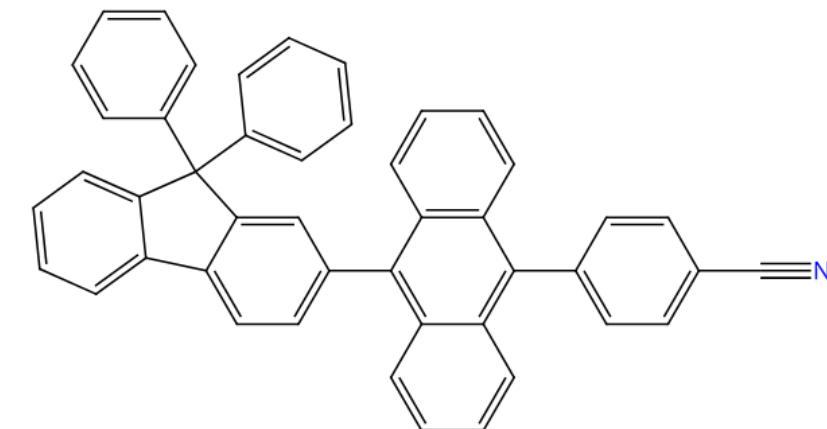
Get Reactions (6)

Synthesize (6)

Start Retrosynthetic Analysis

Get References (2)

Get Suppliers (0)



Edit Structure - Reset +

- 先进行物质检索
- 点击目标化合物，弹出物质菜单
- 点击 Start Retrosynthetic Analysis

预设路线参数

Retrosynthesis Plan Options for 2414255-10-8

Powered by ChemPlanner®

Select Synthetic Depth 合成深度 [Learn more.](#)

1
 2
 3
 4



Set Rules Supporting Predicted Reactions 反应规则是否常见 [Learn more.](#)

Common
 Uncommon (includes Common Rules)
 Rare (includes Common and Uncommon Rules)

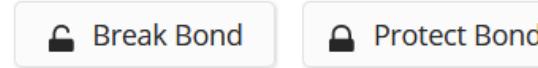
Set Starting Materials Cost Limit [Learn more.](#)

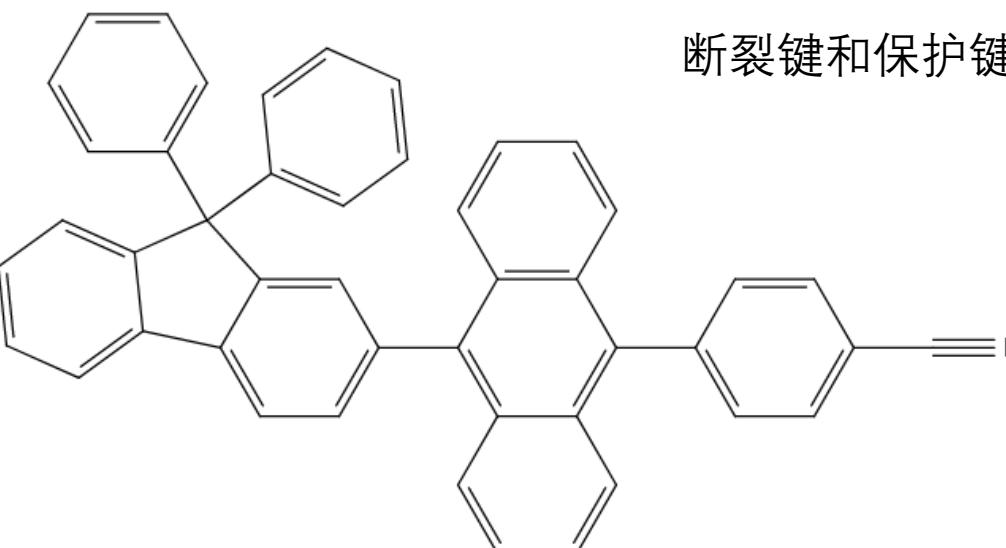
1000 起始原料费用 [USD/mol](#)

Email me when my plan is complete

[Create Retrosynthesis Plan](#)

Break and Protect Bonds [Learn more.](#)


Clear All Bond Selections



路线概览和参数调节

Retrosynthesis Plan for drawn structure

Powered by ChemPlanner®

Key

Experimental Steps

Predicted Steps

Edit Plan Options

View Excluded Options



Save

Plan Information

Estimated Yield: 74%

Overall Price: \$190.19
(USD per 100 grams)

Scoring Profiles

参数调节

Complexity Reduction

Convergence

High

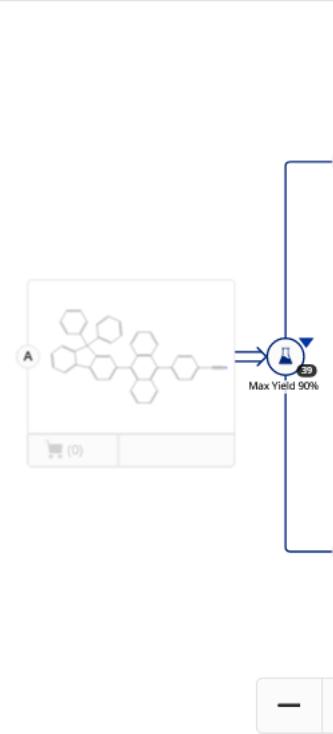
Evidence

Medium

Cost

Low

Yield



Reset



Step

A \Rightarrow B + C

Maximum Yield: 90%
Evidence (1)
Alternative Steps (39)

路线概览

1.1 Reagents: Potassium carbonate
Catalysts:
Tetrakis(triphenylphosphine)
palladium
Solvents: TolueneWater; 12 h, 90 °C

B \Rightarrow D + E

Maximum Yield: 92%
Evidence (8)
Alternative Steps (16)

1.1 Reagents: Potassium carbonate
Catalysts:
Tetrakis(triphenylphosphine)
palladium
Solvents: EthanolTolueneWater; 12 h, 110 °C

C \Rightarrow F + G

Maximum Yield: 82%
Evidence (9)
Alternative Steps (20)

1.1 Reagents: Butyllithium
Solvents: Tetrahydrofuran; -78 °C; 1 h, -78 °C
View All
Experimental Protocols



路线详情

Retrosynthesis Plan for drawn structure

Powered by ChemPlanner®

Key Experimental Steps Predicted Steps Edit Plan Options

View Excluded Options Save

Step Evidence

A \Rightarrow B + C
Reagents: Potassium carbonate
Catalysts: Tetrakis(triphenylphosphine) palladium
Solvents: TolueneWater; 12 h, 90 °C

B \Rightarrow D + E
Reagents: Potassium carbonate
Catalysts: Tetrakis(triphenylphosphine) palladium
Solvents: EthanolTolueneWater; 12 h, 110 °C

C \Rightarrow F + G
Reagents: Butyllithium
Solvents: Tetrahydrofuran; -78 °C; 1 h, -78 °C

View All Alternatives
View Evidence
Exclude This Step
Feedback

Chemical structures and reaction steps:

- Starting material: A substituted benzene ring.
- Step A: Reagents: Potassium carbonate; Catalysts: Tetrakis(triphenylphosphine) palladium; Solvents: TolueneWater; 12 h, 90 °C. Yields 37 equivalents.
- Step B: Reagents: Potassium carbonate; Catalysts: Tetrakis(triphenylphosphine) palladium; Solvents: EthanolTolueneWater; 12 h, 110 °C. Yields 93 equivalents.
- Step C: Reagents: Butyllithium; Solvents: Tetrahydrofuran; -78 °C; 1 h, -78 °C.
- Intermediate structures: B (a substituted benzene ring), D (a substituted cyclohexene ring), and E (a substituted benzene ring).

Buttons: - Reset +

View All Alternatives

查看所有替代路线

View Evidence

查看某步路线的支持报道

Exclude This Step

删除不感兴趣的步骤

查看逆合成反应路线中的实验报道

Reactions from Retrosynthesis Plan Evidence

References ▾

Filter Behavior

Filter by Exclude

Search Within Results

Yield

Number of Steps

Non-Participating Functional Groups

Reaction Mapping

Reaction Scale

Experimental Protocols

Synthetic Methods (4)

Reaction Type

Reagent

Catalyst

8 Results

Group: By Scheme ▾ Sort: Relevance ▾ View: Expanded ▾

Scheme 1 (8 Reactions) Steps: 1 Yield: 55-92% ⚡

31-179-CAS-22392291 Steps: 1 Yield: 92% ⚡

1.1 Reagents: [Potassium carbonate](#)
Catalysts: [Tetrakis\(triphenylphosphine\)palladium](#)
Solvents: [Ethanol](#)|[Toluene](#)|[Water](#); 12 h, 110 °C

Anthracene-based dark blue light organic electroluminescent material and application in organic light-emitting device thereof
By: Wang, Lei; et al
China, CN111303009 A 2020-06-19

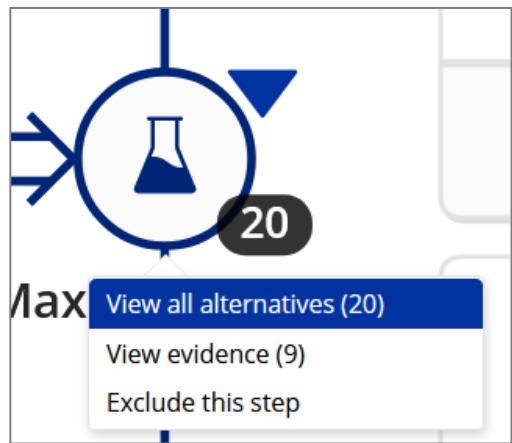
[PatentPak](#) ▾ [Full Text](#) ▾

31-614-CAS-25144957 Steps: 1 Yield: 55% ⚡

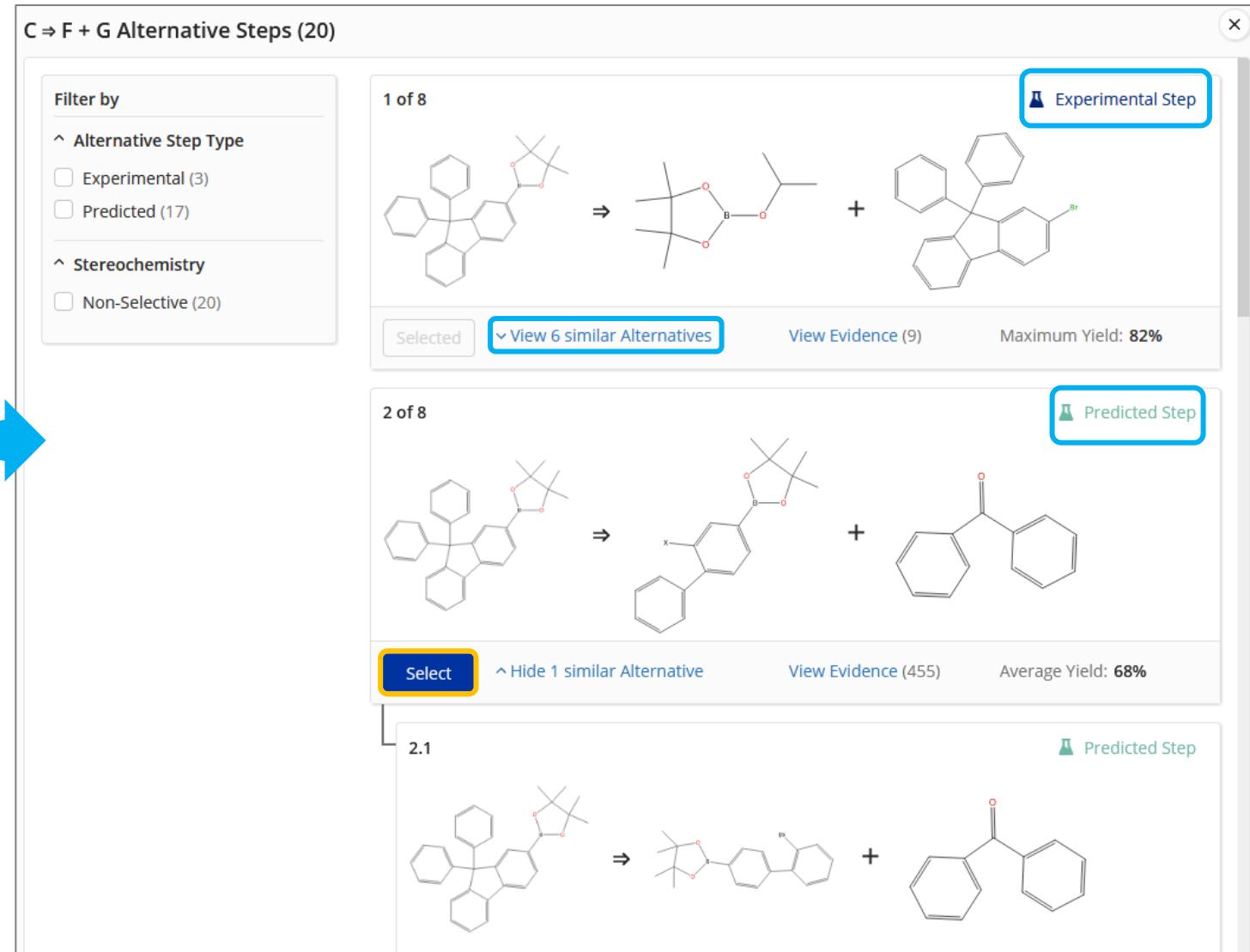
1.1 Reagents: [Potassium carbonate](#)

Anthracene-based fluorescent emitters toward superior-efficiency nondoped TTA-OLEDs with deep blue emission and low efficiency roll-off

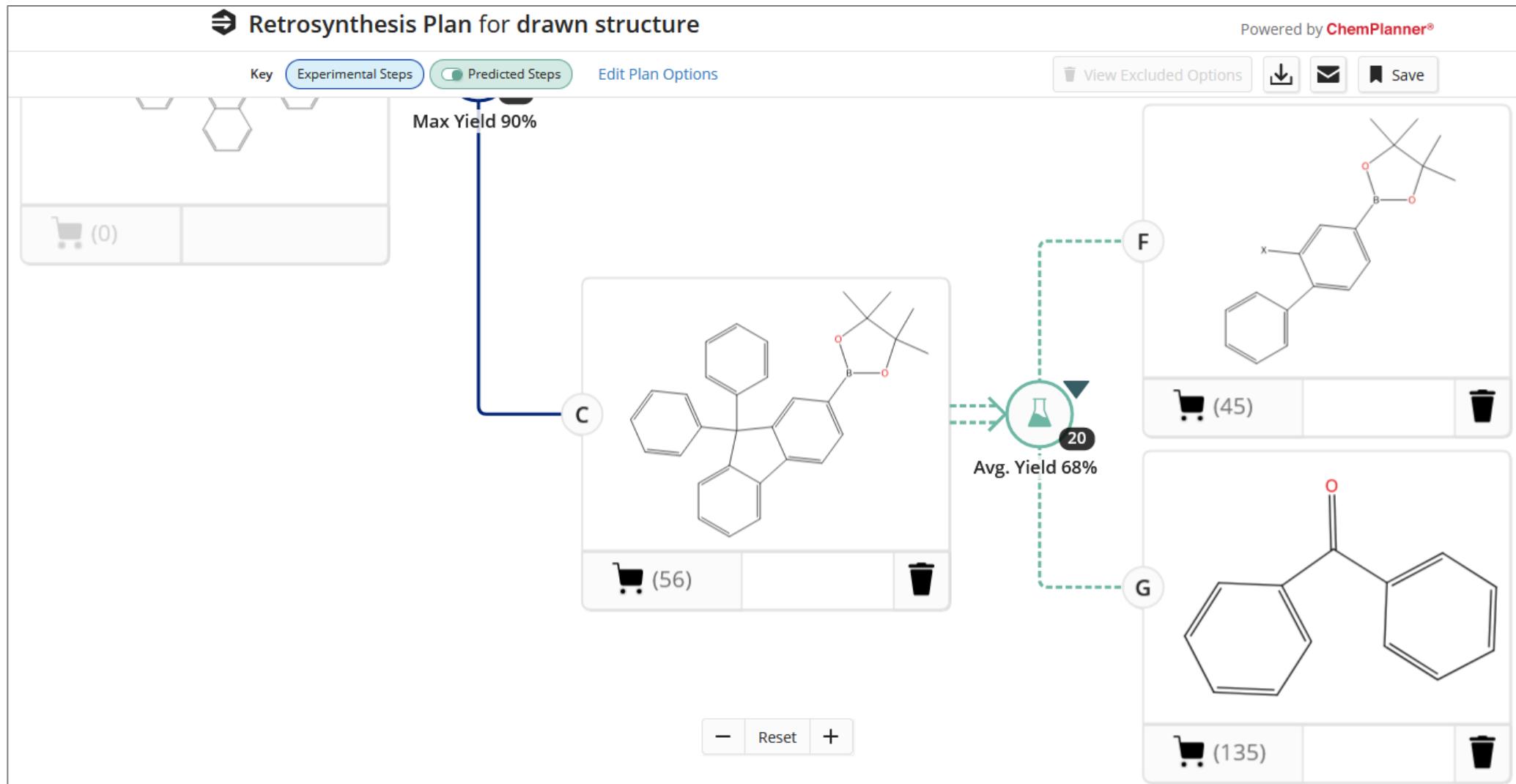
选择替代路线



Max View all alternatives (20)
View evidence (9)
Exclude this step



新的逆合成反应路线



反应检索小结

1. 反应检索方法：通过物质标识符、文献标识符、结构式进行反应检索
2. 反应结果集筛选精炼：
 - Non-Participating Functional Groups 确定不参与反应的官能团
 - Search Within Results 在结果集中进行二次筛选
3. 反应详情：Experimental Protocols 获取 CAS 科学家增值标引的反应详情
4. Retrosynthesis 支持化合物的反应路线预测（未知和已知化合物）
5. 反应路线参数的预先设定与调节
6. 查看反应路线详情和文献支持，自定义选择替代路线或删除不感兴趣的路线

具体的实验方案怎么查、怎么选？

- 如何获取获得具体的实验操作和表征数据等信息？
- 能一键获取从原文中提取的分析操作和数据详情吗？
- 如何对多种分析方法进行充分评估？
- 我研究的物质有什么具体的配方应用？
- 专利配方的组成和制备工艺是什么？如何进行实验评估？

直观的合成实验详情 Synthetic Methods™

- CAS 科学家标引的合成详情
- 节省阅读全文的时间，高效获得所需的合成实验信息

CAS Reaction Number: 31-614-CAS-24450288

Filter Behavior

Filter by Exclude

Yield

Number of Steps

Non-Participating Functional Groups

Reaction Mapping

Experimental Protocols

Synthetic Methods (40)

Experimental Procedure (83)

View PDF Full Text

Company/Organization
Werner Siemens Imaging Center,
Department of Preclinical Imaging
and Radiopharmacy
Eberhard Karls University
Tuebingen 72076
Germany

Procedure

- Suspend methyl 5-Fluoro-2-(1-methyl-1H-1,2,4-triazol-5-yl)acetyl)-3-nitrobenzoate (8.1 g, 25.2 mmol) and 4-bromobenzaldehyde (8.9 g, 50.5 mmol) in THF (50 mL) and MeOH (10 mL).
- Add titanium(III) chloride solution [20% wt solution in HCl (2 M), 130 mL, 6 equiv] to the resulting mixture in dropwise fashion over 30 minutes at room temperature.
- Maintain the reaction temperature between 30 and 50°C for 2 hours.
- Quench the mixture by the slow addition of water (260 mL).
- Pour the reaction mixture into a separating funnel.
- Extract the mixture with ethyl acetate (4 x 140 mL).
- Pool the organic fractions.
- Wash the organic fractions with NaHCO₃ (3 x 60 mL) and NaHSO₃ (3 x 100 mL).
- Dry the organic fractions with sodium sulfate (Na₂SO₄).
- Concentrate the solvent under reduced pressure to obtain a thick yellow syrup.
- Wash the residue with aliquots of diethyl ether (3 x 10 mL), carefully.
- Dry the resulting yellow syrup under high vacuum to obtain product.

Transformation

Mannich Reaction/ Mannich-Type Reactions/ Biginelli Condensation
Condensation Reaction between Compounds with Active Hydrogen and Aldehydes or Ketones/
Knoevenagel Reaction
Reduction of Nitro Compounds to Amines

Scale

gram

Characterization Data

5-Quinolinicarboxylic acid, 2-(4-bromophenyl)-7-fluoro-1,2,3,4-tetrahydro-3-(1-methyl-1H-1,2,4-triazol-5-yl)-4-oxo-, methyl ester

State

yellow amorphous solid

CAS Method Number 3-315-CAS-33168860

Transformations

- Mannich Reaction/ Mannich-Type Reactions/ Biginelli Condensation
- Condensation Reaction between Compounds with Active Hydrogen and Aldehydes or Ketones/
Knoevenagel Reaction
- Reduction of Nitro Compounds to Amines

CAS 分析实验方法详情

- CAS 科学家标引的分析实验详情
- 无需全文，高效获得所需的分析实验信息

Analysis of Vanadium in Stainless steel by Electrochemical extraction

CAS MN: 1-119-CAS-286328

Method Category: Element Detection

Technique: Electrothermal atomic absorption spectroscopy; Decomposition; Electrochemical extraction

Materials	Role	Image	CAS RN
Vanadium	analyte	View Structure	7440-62-2
Stainless steel	matrix		12597-68-1
Al ₂ O ₃ cutting wheel	material		
SiC grinding paper	material		
0.05 µm pore size polycarbonate filter	material		
Standard calomel reference electrode	material		
Platinum ring counter electrode	material		
Hollow cathode lamps	material		
Electrodeless discharge lamp	material		
THGA graphite tubes	material		
Nitric acid	reagent	View Structure	7697-37-2
Hydrofluoric acid	reagent	View Structure	7664-39-3
Acetylacetone	reagent	View Structure	123-54-6
Chromium	reagent	View Structure	7440-47-3
Methanol	reagent	View Structure	67-56-1
Tetramethylammonium chloride	reagent	View Structure	75-57-0

实验原料

Source

Determination of alloying and impurity elements from matrix and inclusions from a process sample of a double stabilized stainless steel

Sipola, Teija; Alatarvas, Tuomas; Fabritius, Timo; Peramaki, Paavo

ISIJ International (2016), 56 (8), 1445 - 1451. Iron and Steel Institute of Japan

CODEN: IINTEY | ISSN: 09151559 | DOI: 10.2355/isijinternational.isijint-2016-071

[Full Text](#)

[View in CAS SciFinder](#)

[Abstract](#)

文献来源

Equipment Used

Cutting machine, Secotom-10, Struers

Ultrasonic cleaning unit, P 30 H, Elmasonic

Grinding machine, Labopol-6, Struers

Potentiostat, SP-150, BioLogic

Vacuum pump, BUSCHI

Graphite furnace atomic absorption spectrometer, AAnalyst 600, PerkinElmer

Autosampler, AS-800, PerkinElmer

分析仪器

Conditions

Instrument

internal gas flow rate: 250 mL/min (non-atomization), 0 mL/min (atomization); current: 15 mA; wavelength: 318.4 nm; slit width: 0.7 nm; injection volume: 10 µL

分析条件

Instructions

Preparation of stainless steel process samples

1. Cut stainless steel pieces from a corner piece of different slabs using a Struers Secotom-10 cutting machine with an Al₂O₃ cutting wheel.
2. Grind and polish the steel samples using a Struers Labopol-6 grinding machine with SiC grinding paper to a size of approximately 15 x 10 x 5 mm.
3. Clean the sample from grinding paper traces using an Elmasonic P 30 H ultrasonic cleaning unit (frequency 37 kHz, room temperature).
4. Clean all glassware in an acid bath, rinse with ultrapure water and methanol sequentially.

Electrolytic extraction of stainless steel using 10% acetylacetone

1. Perform electrolytic extraction on a BioLogic SP-150 potentiostat.
2. Use 10% acetylacetone (10 v/v% acetylacetone, 1 w/v% tetramethylammonium chloride and methanol) as the electrolyte.
3. Use the sample as the working electrode and set the potential to 0.150 V vs. the standard calomel electrode (SCE).
4. Suspend the sample in the electrolyte in a platinum basket and use a platinum ring as a counter electrode.
5. Filter the electrolyte through a 0.05 µm pore size polycarbonate filter with the help of a BUSCHI vacuum pump.
6. Expose the sample to ultrasound in methanol and filter the methanol with the electrolyte.

Decomposition of inclusions

1. Dry the polycarbonate filter containing the extracted inclusions overnight in a desiccator.
2. Place the dry filter in a PTFE container with 5 mL concentrated nitric acid and 2 mL HF and close gently.
3. Perform decomposition for 30 minutes at 120 °C (393.15 K).
4. Cool the containers to room temperature, remove the filter and dilute to the volume with water.
5. Prepare a blank sample similarly by filtering a fresh electrolyte through a polycarbonate filter.

Quantification of inclusions using graphite furnace atomic absorption spectrometry (GFAAS) with Cr as a matrix modifier

1. Perform GFAAS on a PerkinElmer AAnalyst 600 graphite furnace atomic absorption spectrometer equipped with an AS-800 autosampler and PerkinElmer THGA graphite tubes (standard platform B0504033).
2. Use a hollow cathode lamp (HCL) as the radiation source.
3. Use the following furnace program: ramp for 10 s to 110 °C, hold for 30 s; ramp for 10 s to 140 °C, hold for 30 s; ramp for 10 s to 1300 °C, hold for 20 s; perform atomization at 2400 °C for 6 s; ramp for 1 s to 2500 °C and hold for 5 s.
4. Set the instrument parameters as follows: internal gas flow rate: 250 mL/min (non-atomization), 0 mL/min (atomization); current: 15 mA; wavelength: 318.4 nm; slit width: 0.7 nm.
5. Add 0.05 µg Cr as a matrix modifier.
6. Inject 10 µL of the sample and perform measurements.

数据有效性

Validation

Linearity Range	0-400 µg/L
Concentration	< 1 µg

关注文献关联的分析实验方法？

方法一：文献结果集页面点击 CAS Solutions 中的 Analytical Methods 获得有具体分析实验方法的文献，从文献详情页中链接至分析实验方法

References search for "steel and impurity"

Substances Reactions Citing Knowledge Graph

Based on your query, we've returned the most relevant results. Would you like to load the entire result set? Learn about result relevance.

Load More Results

Filter Behavior

Filter by Exclude

Document Type Substance Role Language

CAS Solutions

Analytical Methods (23)

Formulus (9)

Filtering: CAS Solutions: Analytical Methods X Clear All Filters

23 Results Sort: Relevance View: Partial Abstract

1

Validation of an HPLC method for analysis of nifedipine residues on stainless-steel the manufacture of pharmaceuticals

By: Milenovic, D. M.; Lazic, M. L.; Veljkovic, V. B.; Todorovic, Z. B.
Acta Chromatographica (2008), 20(2), 183-194 | Language: English, Database: CPlus

[Analytical Methods](#)

A simple, sensitive, and convenient HPLC method has been developed, validated, and applied to anal. of nifed stainless-steel surfaces of equipment used in drug manufacture. Cotton swabs moistened with methanol were residues of the drug from the surfaces; recoveries were 82.26, 86.88, and 88.95% for 25, 125, and 250 µg per s the results, as relative standard deviation (RSD), was <5%. The method was validated over the concentration r Small quantities of residues of the drug and its main impurities were determined by HPLC. View More

electrolyte and arsenic in 10% acetylacetone electrolyte were in good agreement with industrial data. Titanium and aluminum were measured from the dissolved steel matrix but titanium was also detected in the inclusions. It was concluded that the anal. results for titanium and aluminum measured using an optical emission spectrometer is affected by the inclusions within the stainless steel.

Keywords: double stabilized stainless steel alloying impurity element inclusion

Open Access Full Text

Concepts Substances Analytical Methods

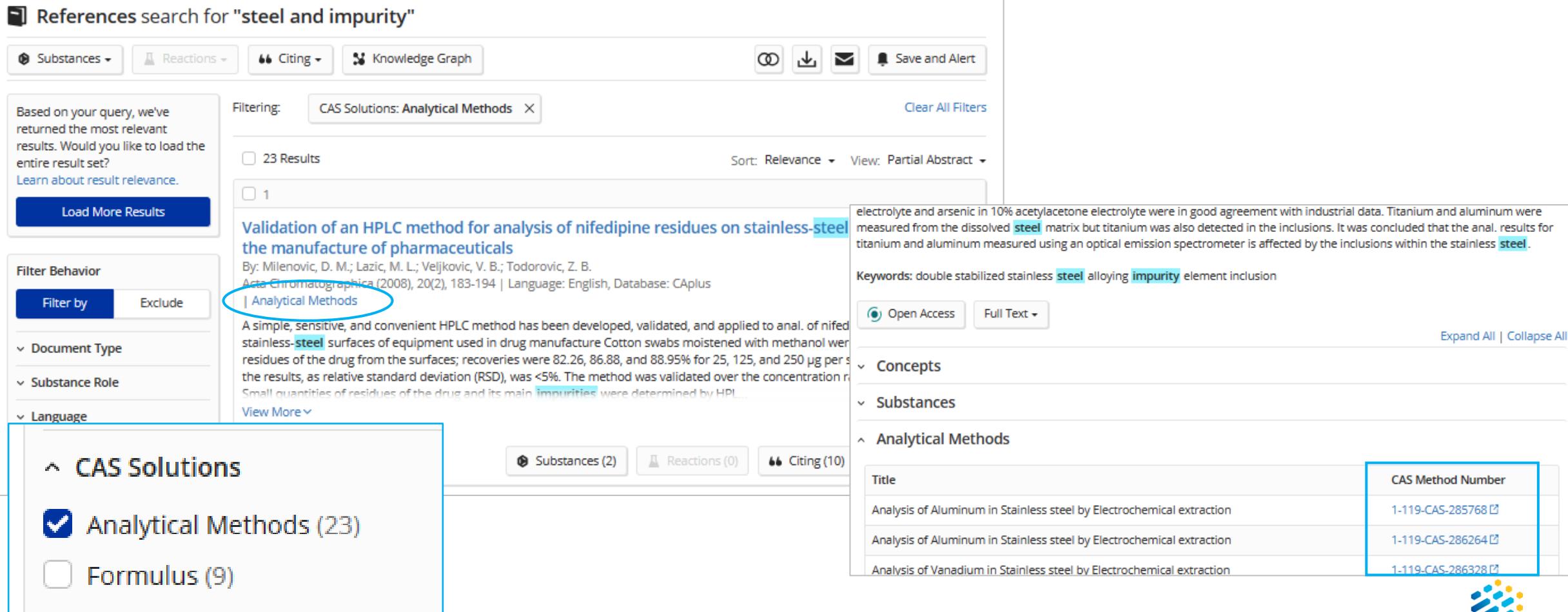
Title

CAS Method Number

Analysis of Aluminum in Stainless steel by Electrochemical extraction 1-119-CAS-285768

Analysis of Aluminum in Stainless steel by Electrochemical extraction 1-119-CAS-286264

Analysis of Vanadium in Stainless steel by Electrochemical extraction 1-119-CAS-286328



直接检索感兴趣的分析实验方法

方法二：登录 <https://methods.cas.org> 进行主题检索或分类浏览

CAS Solutions ▾

CAS Analytical Methods

Search

Enter keyword, matrix, analyte, etc.

Advanced Search

Browse Method Categories

Agricultural Applications / Analysis	Fuels / Geology / Biofuels	Pharmacology / Toxicology
Bioassays	Historical Analysis / Dating	Polymer Analysis
Biomolecule Isolation	Miscellaneous	Water Analysis
Environmental Analysis	Organic Compound Analysis	
Food Analysis	Organometallics / Inorganics	

方法分类: 13大类, 45小类

农业应用、生物鉴定、
生物分子分离、环境、
食品、考古、有机物、
药学、毒理学等

[Browse Method Categories](#) > [Agricultural Applications / Analysis](#)

除草剂、农药残留、土壤分析

[Herbicide Analysis](#)

[Pesticide Residue Analysis](#)

[Soil Analysis](#)

如何选择合适的分析方法?

CAS Solutions ▾

CAS Analytical Methods

steel and sulfur

Results (13)

Sort Relevance ▾

Analysis of Carbon in Steel by Laser induced breakdown spectroscopy
CAS MN: 1-119-CAS-267238

View Details & Instructions

Remove from Compare

Analyte Sulfur, Carbon

Matrix Steel

Other Materials Material: Continuum Surelite laser

Method Category Element Detection

Technique Laser induced breakdown spectroscopy

Equipment Used Laser-induced breakdown spectrometer; Laser pulse generation system (two synchronized lasers); optical system; Ablation chamber; Spectrometer; CCD camera; Gas environment controls

Source Double-pulse laser induced breakdown spectroscopy with ambient gas in the vacuum ultraviolet: Optimization of parameters for detection of carbon and sulfur in steel
Jiang, X.; Hayden, P.; Costello, J. T.; Kennedy, E. T.
Spectrochimica Acta, Part B: Atomic Spectroscopy (2014), 101, 106-113. Elsevier B.V.

Full Text ▾

View in CAS SciFinder®

Abstract ▾

Analysis of Carbon in Steel by Laser induced breakdown spectroscopy

Return to Home

Analyte

Sulfur (13)

Carbon (9)

Manganese (4)

Aluminum (3)

Chromium (3)

View All

Matrix

Steel (13)

Reinforced concrete (1)

Method Category

Element Detection (3)

Technique

Laser induced breakdown spectroscopy (10)

Liquid scintillation counting (3)

Neutron activation analysis (3)

Time-of-flight mass spectrometry (2)

Atomic emission spectrometry (1)

View All

Year

- 分析目标物
- 介质
- 方法类别
- 分析技术
- 发表年份

如何选择合适的分析实验方法？

Compare Methods

		Expand All Collapse All	
	1	2	
Title	Analysis of Carbon in Steel by Laser induced breakdown spectroscopy	Analysis of Silver in Steel by Glow discharge mass spectrometry	
CAS Method Number	1-119-CAS-267238	1-119-CAS-101987	
Method Category	Element Detection	Element Detection	
Technique	Laser induced breakdown spectroscopy	Time-of-flight mass spectrometry; Glow discharge mass spectrometry	
Analyte	Sulfur; Carbon	Titanium; Chromium; Antimony; Magnesium; Lead; Silicon; Cobalt; Sulfur; Niobium; Tin; Nickel; Manganese; Vanadium; Boron; Molybdenum; Phosphorus; Silver; Tungsten; Copper; View All	
Matrix	Steel	Steel	
Other Materials	Continuum Surelite laser	Grimm-type chamber (with a 4 mm diameter anode and a 2.5 mm inner diameter flow tube)	
Equipment Used	Laser-induced breakdown spectrometer; Laser pulse generation system (two synchronized lasers); optical system; Ablation chamber; Spectrometer, VM-521, Acton View All	Orthogonal time-of-flight mass spectrometer, Tofwerk, Thun, Switzerland; Dry pump, Triscroll 300, Varian Inc., Palo Alto, USA; Radio frequency glow discharge orthogonal time-of-flight mass spectrometer (RFGD-TOFMS) includes a RFGD bay unit (RF generator, matching box, RF connector, refrigerator disc and sample mounting system with a pneumatic piston to press the sample against the source) (GD Profiler HR instrument (Horiba Jobin Yvon, Longjumeau, France)).	

详细的分析实验方法对比

Source	Double-pulse laser induced breakdown spectroscopy with ambient gas in the vacuum ultraviolet: Optimization of parameters for detection of carbon and sulfur in steel View All	A comparison of non-pulsed radiofrequency and pulsed radiofrequency glow discharge orthogonal time-of-flight mass spectrometry for analytical purposes View All
Method	Laser-induced breakdown spectroscopic analysis using nitrogen as ambient gas in double pulse mode 1. Perform the analysis using LIBS setup containing the View All	Glow discharge orthogonal time-of-flight mass spectrometry in pulsed mode 1. Collect the NIST 1262b certified reference steel. View All
Limit of Detection	2.9 ppm Carbon, 1.5 ppm Sulfur	0.3 µg/g, Boron, 0.2 µg/g, Magnesium, 0.3 µg/g, Aluminum, 1.9 µg/g, Silicon, 1.6 µg/g, Phosphorus, 1.0 µg/g, Sulfur, 2.3 µg/g, Titanium, 1.1 µg/g, Vanadium, 1.0 µg/g, Chromium, 5.5 µg/g View All
Precision		12% (RSD, reproducibility), Boron, 28% (RSD, reproducibility), Magnesium, 2% (RSD, reproducibility), Aluminum, 6% (RSD, reproducibility), Silicon, 5% (RSD, View All
Sensitivity		6 - 165 cps/(µg/g)
Method	Laser-induced breakdown spectroscopic analysis using nitrogen as ambient gas in double pulse mode 1. Perform the analysis using LIBS setup containing the laser pulse generation system (two synchronized lasers), the optical system (lenses, mirrors, polarizer and half-wave plate), an ablation chamber, spectrometer, detection system (CCD camera and computer) and finally the gas environment controls (needle valve, gauge, pressure meters). 2. Use the Q-switched Nd:YAG lasers to create the plasmas in double-pulse mode by Continuum Surelite (model III-10), operating at the fundamental wavelength of 1.06 µm with a pulse width of 6 ± 1 ns and maximum output energy of 800 mJ. 3. Operate the laser at a repetition rate of 10 Hz.. 4. Insert the optical combination of a half-wave plate and a polarizer into the Surelite laser beam to vary the pulse energy incident on the sample. 5. Focus the approximately 10-mm-diameter beams produced by Surelite laser onto the steel samples by plano-convex lenses of 125 mm and 150 mm focal length. 6. The following interface region includes electrostatic focusing and deflecting components and couples the	Glow discharge orthogonal time-of-flight mass spectrometry in pulsed mode 1. Collect the NIST 1262b certified reference steel. 2. Determine the performance of the pulsed RFGD-TOFMS. 3. The radiofrequency glow discharge orthogonal time-of-flight mass spectrometer (RFGD-TOFMS) includes a RFGD bay unit (RF generator, matching box, RF connector, refrigerator disc and sample mounting system with a pneumatic piston to press the sample against the source) (GD Profiler HR instrument (Horiba Jobin Yvon, Longjumeau, France)). 4. Use the GD source of a copper-based modified Grimm-type chamber with a 4 mm diameter anode and a 2.5 mm inner diameter flow tube (EMPA, Switzerland). 5. Extract the ions originating from the source at pressure of 800 Pa through a sampler of 500 µm diameter and a 1 mm diameter skimmer. 6. The following interface region includes electrostatic focusing and deflecting components and couples the

研究课题在产品中的应用？配方的检索与设计

方法一：登 <https://formulus.cas.org> 输入检索式

The screenshot shows the Formulus search interface. On the left, there's a sidebar with buttons for 'Formulations', 'Ingredients', and 'Formulation Designer'. The 'Formulations' button is highlighted. The main search area has a heading 'Formulations' followed by the Chinese translation '原料、用途、物理形态、功能或文献识别符'. Below it is a search bar with the placeholder 'Search for Formulations by Ingredient, Purpose, Form, Function, etc.' and a search input field containing 'orthopedic and implant'. A blue oval highlights the link 'Try Advanced Search' below the search bar. To the right of the search bar is a blue search icon. At the bottom of the search area, there's a button labeled '高级检索'.

- 制药、化妆品、食品、农化、油墨、涂料等多领域中的配方
- 工艺、成分、目标成分的常见配伍成分、设计配方、探索合规要求等

配方结果集

- 利用聚类项精简结果：
行业、配方/制剂用途、物理形式、
物质状态、递送方式、涵盖信息、
文献类型、发表机构、发表年份

- 可查看制剂或配方成分，功能及用量
- 可查看原料详情
- 支持对比选中的制剂或配方
- 支持查看或下载专利全文
- 可查看制剂或配方详情

Formulations search for "orthopedic and implant"

Get Additional References

Compare (0/3) Save Sort: Relevance

Filter by

Industry

Cosmetics & Personal Care

Pharmaceutical

Unclassified

Purpose

Drug delivery systems (296)

Antitumor agents (107)

Pharmaceutical formulations (81)

Ophthalmic agents (73)

Antipsychotics (65)

[View All](#)

Physical Form

Pharmaceutical implants (1,064)

Tablets (315)

Capsules (226)

Powders (207)

Suspensions (154)

[View All](#)

State of Matter

Delivery Route

Ophthalmic drug delivery systems (177)

Subcutaneous drug delivery systems (138)

Intramuscular injections (81)

Pharmaceutical injections (74)

Pharmaceutical implants (61)

[View All](#)

Information Included

Component Amount (1,393)

Process (1,064)

Experimental Activity (721)

1,064 Results

1

Implants: Antitumor Agents

Location: Article page 3, 6, 7, 8, 9

Purpose: Antitumor agents

Physical Form: implant

Add to Compare

Component	Function	Amount Reported
Group: Ti-TNTs wire implants	implant	-
Ti wires	additives	-
Acetone	Solvents	-
Ethanol	Solvents	-
Perchloric acid	additives	1
Additional group components reported		
Trail aqueous solution	-	2 mg/mL

[View Formulation Detail](#)

2

Composition for Promoting Bone Formation

Location: Claim 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41

Purpose: promoting bone formation

Target: Amphibia, Ape, Aves, Bos taurus, Canis familiaris, Capra, Cavia porcellus, Equus caballus, Felis catus, Fish, Gerbil, Hamster, Homo sapiens, Monkey, Mus musculus, Oryctolagus cuniculus, Ovis aries, Rattus, Reptilia, Swine

Delivery Route: Intraosseous prosthetic implants, intramedullary application

Physical Form: pharmaceutical implants

Add to Compare

Component	Function	Amount Reported
Group: surgical implants	-	-
Dental implants	-	-

PATENT

Use of pro-inflammatory compounds for promoting bone formation

Assignee : Imperial Innovations Limited

配方的制备？实验评估？

Implants: Antitumor Agents

Purpose Target Delivery Route Physical Form Source

Antitumor agents - - implant View

Formulation Ingredients

Component	Function	Amount Reported	Optionality
Group: Ti-TNTs wire implants	implant	-	Mandatory
Ti wires	additives	-	Mandatory
Acetone	Solvents	-	Mandatory
Ethanol	Solvents	-	Mandatory
Perchloric acid	additives	1	Mandatory
butanol	Solvents	6	Mandatory
ethylene glycol electrolyte	solid support material	9	Mandatory
Water	Solvents	-	Mandatory
Trail aqueous solution	-	2 mg/mL	Mandatory

More Formulations like this... **NEW**

Ha-NP with HASE: Antitumor Agents
Purpose: Antitumor agents
Target: -
Delivery Route: -
Physical Form: Particles

CIPRODEX: Antibacterial
Purpose: Antibacterial agents
Target: Haemophilus influenzae, Hom...
Delivery Route: AURICULAR (otic)
Physical Form: Liquids, Suspensions

CIPRODEX Ciprofloxacin and Dexamethasone Suspension/ Drops: Antibacterial Agents or...
Purpose: Antibacterial agents, corticos...
Target: Haemophilus influenzae, Hom...
Delivery Route: AURICULAR (optic)
Physical Form: Liquids, Suspensions

Ha-NP-Loaded Microneedle Patch: Antitumor Agents
Purpose: Antitumor agents
Target: Neoplasm
Delivery Route: skin absorption
Physical Form: Pharmaceutical patches

Process

stage 1: Ti-TNTs wire implants were loaded overnight with 2 mg/mL Trail aqueous solution for in-vitro, ex-vivo and in-vivo studies. prior to loading, implants were cleaned with ethanol, dried under sterile conditions and placed in a 30 mL drops of Trail solutions placed on a parafilm strip. after overnight drug loading, implants were dabbed with a soft tissue and dried and placed in PBS solution to monitor drug release profile at 37 °C, over a range of selected time points.

- 制剂或配方原料
- 相似的制剂或配方
- 制备工艺
- 制剂或配方实验评估
- 专利来源

Experimental Activity

Descriptor	Notes	Details
Ex-vivo study	-	no caspase-3 activity was observed for PBS-TNTs samples
cell death	-	highest cell death was observed in Trail-TNTs
drug release	-	45 %
in-vitro cytotoxicity	-	luciferase activity confirmed 100% cell death in Trail-TNTs
loading amount	-	12.63 µg

Source Journal

Titanium wire implants with nanotube arrays: A study model for localized cancer treatment
Biomaterials
Language: English
Location: Article page 3, 6, 7, 8, 9

Full Text ▾ View in CAS SciFinder®

高级检索

[← Return to Home](#)

Advanced Formulations Search

Searches the following content fields: Ingredient, Function, Purpose, Physical Form, Delivery Route, and Target.

At least two search terms are required.

Search For Operator Enter one term

Function Anticorrosion
Ex: binder, surfactant, carrier

Search For Operator Enter one term

All Fields coating
General search of all fields

Add Another Term

All Fields
All Fields
Form
Function
Ingredient
Purpose
Route
Target

Optional
Required
Optional
Excluded

Clear All

检索原料

Searching for...

Formulations

Ingredients

Ingredients

Search by Ingredient Name, CAS Registry Number, or Function

propylene glycol

Ingredients search for "propylene glycol"



Filter by

Industry

- Agrochemical
- Cleaning & Surfactant Products
- Cosmetics & Personal Care
- Food & Related
- Inks, Paints, & Coatings
- Pharmaceutical

[View All](#)

Regulatory Information

- REACH (5)
- Cosing: Cosmetic Ingredient Inventory (3)
- EPA Pesticide Inactive Ingredients (3)
- FDA Inactive Ingredients Database (3)
- ANMAT (1)

[View All](#)

Experimental Properties

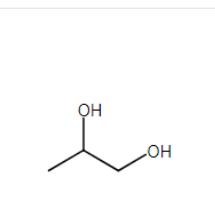
- Boiling Point (3)

2 Selected 3 Results

1

CAS RN: 57-55-6

[View Details](#)



C₃H₈O₂

(±)-Propylene glycol

Propylene glycol

Key Physical Properties	Value	Condition
Molecular Weight	76.09	-
Melting Point (Experimental)	-59 °C	-
Boiling Point (Experimental)	188.2 °C	-
Density (Experimental)	1.036 g/cm ³	Temp: 25 °C

[View 14 More](#)

[Commonly Formulated With](#) | [Regulatory Information](#) | [Experimental Properties](#)

Formulations

Suppliers

Add to Designer

- 制剂或配方中，与该原料同时使用的其它配伍成分
- 管控信息及清单
- 实验属性

- 使用该原料的制剂或配方
- 原料供应商信息
- 可将原料添加至设计工具

Formulation Designer

设计配方

Formulation Designer

Formulation Designer ?

[Clear All Selections](#)

Industry	Purpose	Physical Form	Add up to 5 Ingredients
Pharmaceutical	Cosmetics and Personal care products	Emulsions	<input type="text" value="Vitamin A"/> X
Cosmetics & Personal Care	Skin conditioners	Cream preparations	<input type="text" value="Polyethylene glycol"/> X
Agrochemical	Sunscreens	Cosmetic lotions	
Cleaning & Surfactant Products	Hair dyes	Cosmetic packs	
Food & Related	Hair preparations	Gels	+ Add Another Ingredient
Inks, Paints, & Coatings	Antiperspirants	Liquids	
	Cleaning compositions	Solutions	
	Skin-lightening cosmetics	Nanospheres	
	Skin cleansers	Pastes	
	Oral hygiene products	Capsules	
	Skin care products	- View More Physical Forms -	
	- View More Purposes -		

Create Template

设计配方

Formulation Designer 

Clear All Selections

Industry	Purpose	Physical Form	Active or Featured Ingredient
Cosmetics & Personal Care	Skin care products	Gels	Vitamin A Polyethylene glycol

Edit Selections 

Your Template

Function	Ingredient	Regulatory 	Top Alternatives	Amounts
Active or Featured Ingredient:	Vitamin A	ANMAT; NMPA	-	Amount not available 
Active or Featured Ingredient:	Polyethylene glycol	ANMAT; Cosing: Cosmetic Ingredient Inventory; Drug Master File List; EPA Pesticide Inactive Ingredients; EPA Safer Chemical Ingredients; FDA GRAS (Part 181, Subpart B); FDA Inactive Ingredients Database	-	Amount not available 
Function: Carriers	Ethylene glycol	Cosing: Cosmetic Ingredient Inventory; EPA Pesticide Inactive Ingredients; FDA Inactive Ingredients Database	Water; Polyethylene glycol	
Function: Skin conditioners	Ethylene glycol	Cosing: Cosmetic Ingredient Inventory; EPA Pesticide Inactive Ingredients; FDA Inactive Ingredients Database	Glycerol; Allantoin; 1,2-Octanediol; Tricaprin; Palm-oil glycerides, monoglycerides, diglycerides and triglycerides, hydrogenated	Approximate Range: 2 - 14% 

- 原料详情
- 原料管制信息
- 可替代的原料选项

Alternative Ingredients (Showing all 7)

Select the ingredient you would like to use:

Allantoin
Ethylene glycol
1,2-Octanediol

Tricaprin
Palm-oil glycerides, monoglycerides,
diglycerides and triglycerides,
hydrogenated
Glyceryl polyacrylate
N-(2-Hydroxyethyl)acetamide

文献关联的配方

方法二：在文献结果集页面，点击CAS solutions中的 Formulus 获得有具体配方或制剂信息的文献，从文献详情页中链接获取

References search for "encapsulat*" and "resistant starch""

Substances Reactions Citing Knowledge Graph Save and Alert

Based on your query, we've returned the most relevant results. Would you like to load the entire result set? Learn about result relevance.

Load More Results

857 Results Sort: Relevance View: Partial Abstract

1

Resistant starch from high-amyllose maize increases insulin sensitivity in overweight and obese men

By: Maki, Kevin C.; Pelkman, Christine L.; Finocchiaro, E. Terry; Kelley, Kathleen M.; Lawless, Andrea L.; Schild, Arianne L.; Ra...
Journal of Nutrition (2012), 142(4), 717-723 | Language: English, Database: CPlus and MEDLINE

This study evaluated the effects of 2 levels of intake of high-amyllose maize type 2 **resistant starch** (HAM-RS2) on insulin sensitivity (S_I) in participants with waist circumference ≥ 89 (women) or ≥ 102 cm (men). Participants received 0 (control starch), 15, or 30 g (double-blind) of HAM-RS2 in random order for 4-wk periods separated by 3-wk washouts. Minimal model S_I was assessed at the end of each period using the insulin-modified i.v. glucose tolerance test. The efficacy evaluable sample included 11 men and 11 women (mean \pm SEM) age 49.5 ± 1.6 y, with a BMI of 30.6 ± 0.5 kg/m 2 and waist circ...

View More

Full Text Substances (9) Reactions (0) Citing (131) Citations

2

Conserved and variable responses of the gut microbiome to resistant starch type 2

By: Bendiks, Zachary A.; Knudsen, Knud E. B.; Keenan, Michael J.; Marco, Maria L.
Microbiome (New York, NY, United States) (2020), 77, 12-28 | Language: English, Database: CPlus and MEDLINE

type 2 (RS2), a dietary fiber comprised solely of glucose, has been extensively studied in clinical trials to improve metabolic and systemic health. Because the health modulatory effects of RS2 are believed to occur through modification of the gut microbiome, those studies frequently include assessment of intestinal microbial composition and function. In this review, we identify the conserved responses of the gut microbiome to RS2, as well as the variable responses that may be influenced by host factors such as diet, genetics, and environment.

CAS Solutions

Formulus (37)

Analytical Methods (4)

定位配方或制剂的功能目标

Formulation Purpose

By Count

Alphanumeric

4 Selected

Food (7)

Antibacterial agents (1)

Antidiabetic agents (6)

Antihypertensives (1)

Dietary supplements (5)

Antioxidants (1)

Diet (3)

Antitumor agents (1)

Drug delivery systems (3)

Bakery products (1)

Antimicrobial agents (2)

Beverages (1)

Apply

Cancel

文献关联的配方

Resistant Starch Film-Coated Microparticles for an Oral Colon-Specific Polypeptide Delivery System and Its Release Behaviors

Substances (3) Reactions (0) Citing (42) Citation Map Save

JOURNAL
Journal of Agricultural and Food Chemistry
Volume: 62
Issue: 16
Pages: 3599-3609
Journal; Evaluation Study; Article;
Research Support, Non-U.S. Gov't
2014
DOI:
[10.1021/jf500472b](https://doi.org/10.1021/jf500472b)

CODEN: JAFCAU
E-ISSN: 1520-5118
ISSN-L: 0021-8561

Database Information
AN: 2014519911
CAN: 160:534190
PubMed ID: 24684664
Cplus and MEDLINE

Company/Organization
Ministry of Education Engineering
Research Centre of Starch and
Protein Processing, Guangdong
Province Key Laboratory for Green
Processing of Natural Products
and Product Safety
South China University of
Technology
Guangzhou 510640
China

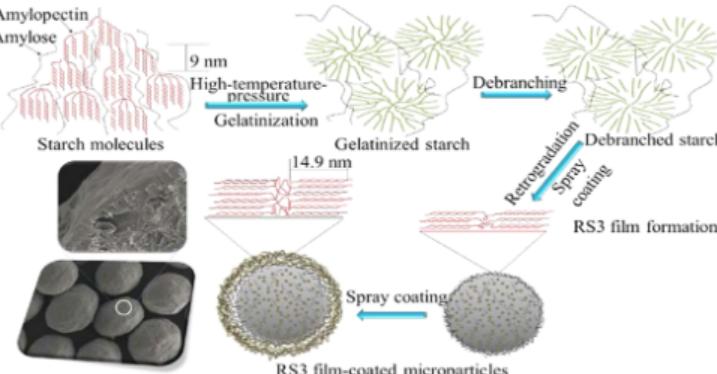
Publisher
American Chemical Society

Language
English

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By: Situ, Wenbei; Chen, Ling; Wang, Xueyu; Li, Xiaoxi

For the delivery of bioactive components to the colon, an oral colon-specific controlled release system coated with a resistant starch-based film through aqueous dispersion coating process was developed. Starch was modified by a high-temperature-pressure reaction, enzymic debranching, and retrogradation, resulting in a dramatic increase in the resistibility against enzymic digestion (meaning the formation of resistant starch, specifically RS3). This increase could be associated with an increase in the relative crystallinity, a greater amount of starch mol. aggregation structure, and the formation of a compact mass fractal structure, resulting from the treatment. The microparticles coated with this RS3 film showed an excellent controlled release property. In streptozotocin (STZ)-induced type II diabetic rats, the RS3 film-coated insulin-loaded microparticles exhibited the ability to steadily decrease the plasma glucose level initially and then maintain the plasma glucose level within the normal range for total 14-22 h with different insulin dosages after oral administration; no glycopenia or glycemic fluctuation was observed. Therefore, the potential of this new RS3 film-coated microparticle system has been demonstrated for the accurate delivery of bioactive polypeptides or protein to the colon.



Formation of the RS3 film coating layer and the RS3 film-coated microparticles

Keywords: starch film coated microparticle colon polypeptide delivery insulin

View PDF Full Text Expand All | Collapse All

Concepts

Concepts
MEDLINE® Medical Subject Headings
Substances
Formulations

Resistant Starch (RS 3)Film-Coated Microparticles: Drug Delivery Systems--Controlled Release Drug Delivery Systems

[View CAS Formulus® Detail](#)

Location: SI Page 3 Article Page 2 Figure 1S
Purpose: Drug delivery systems
Target: 5-aminosalicylic acid

Component	成分	Function	功能	Amount Reported	用量
Group: bioactive component-loaded microparticle core	5-Aminosalicylic acid	-	model active agent	-	20 %
Cellulose	-	additives	-	Ratio: 3	
Starch	-	excipients	-	Ratio: 1	
Group: RS3-based aqueous coating dispersion	-	coating materials	-	-	

Resistant Starch (RS 3)Film-Coated Microparticles: Drug Delivery Systems--Controlled Release Drug Delivery Systems

[View CAS Formulus® Detail](#)

Location: SI Page 3 Article Page 2 Figure 1S
Purpose: Drug delivery systems
Target: 5-aminosalicylic acid

实验方案检索小结

1. 利用 Synthetic Methods™ 查看文献中合成方法详情
2. 利用 CAS Analytical Methods 进行主题检索或分类浏览获得分析方法，或通过文献查看关联的分析实验及数据详情
3. 利用 CAS Formulus 检索原料、配方/制剂，或通过文献结果集获得关联的配方/制剂信息；利用配方设计工具启发产品配方的开发

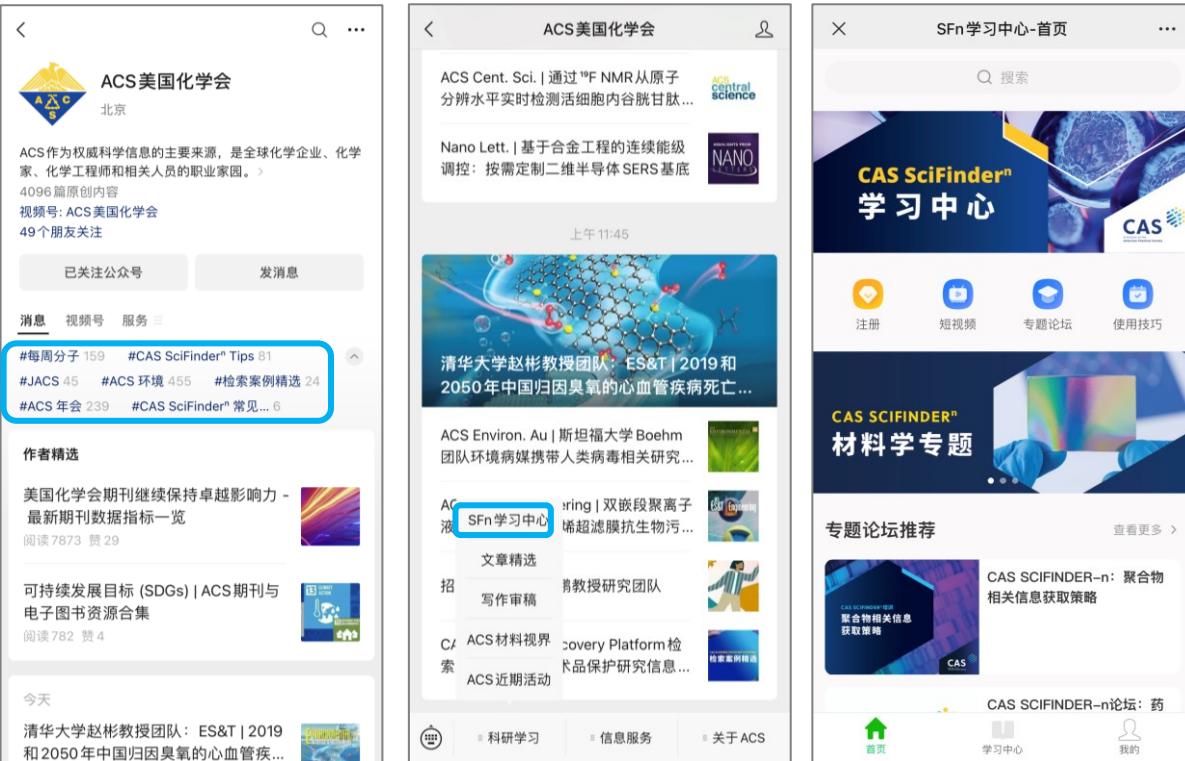
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运用化学的力量改善人们的生活

订阅号 服务号

CAS SciFinderⁿ 学习中心



ACS美国化学会 北京

ACS作为权威科学信息的主要来源，是全球化学企业、化学家、化学工程师和相关专业的职业家园。>

4096篇原创内容

视频号: ACS美国化学会

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#JACS 45 #ACS 环境 455 #检索案例精选 24
#ACS 年会 239 #CAS SciFinderⁿ 常见... 6

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美国化学会期刊继续保持卓越影响力 - 最新期刊数据指标一览 阅读 783 赞 29

可持续发展目标 (SDGs) | ACS期刊与电子图书资源合集 阅读 782 赞 4

今天 清华大学赵彬教授团队: ES&T | 2019 和 2050年中国归因臭氧的心血管疾病死亡...

ACS美国化学会

Nano Lett. | 基于合金工程的连续能级调控: 按需定制二维半导体 SERS 基底

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2023 CAS SciFinder Discovery Platform 论坛录课

日期	主题
3月1日	解锁CAS SciFinder Discovery Platform新功能
3月8日	巧用CAS SciFinder Discovery Platform文献检索快速进阶
3月15日	万物互联 CAS SciFinder Discovery Platform物质检索更高效
3月22日	CAS SciFinder Discovery Platform反应检索, 不止A to B
4月4日	不止化学: CAS SciFinder Discovery Platform序列检索技巧
4月12日	新手入门开题和文献综述? 巧用CAS SciFinder Discovery Platform事半功倍
4月19日	实验进展太慢? 巧用CAS SciFinder Discovery Platform寻找启发
5月10日	毕业季 CAS SciFinder Discovery Platform助力论文写作及答辩准备
5月24日	毕业季 巧用CAS SciFinder Discovery Platform 做足升学与择业准备



CAS SciFinder Discovery Platform 专题论坛时间表

2023 年 9 月 – 12 月

CAS SCIFINDER DISCOVERY PLATFORM专题论坛涵盖多个科学研究领域, 为您带来全面的检索思路和丰富的检索技巧。

直播时间为**周五14:00 - 15:00**。点击论坛主题即可注册、观看直播。

9月15日 | 专利专题论坛

9月22日 | 生物制药专题论坛

10月13日 | 高分子材料专题论坛

10月27日 | 金属有机与无机化学专题论坛

11月10日 | 食品与个人护理品专题论坛

11月24日 | 药物设计与合成专题论坛

12月8日 | 电子信息与能源材料专题论坛

如何获取 CAS SciFinderⁿ 账号

(登录贵校图书馆网站，查看注册相关的链接和说明)

--CONTACT INFORMATION--

First Name:

Last Name:

Email:

Confirm Email:

Phone Number:

Fax Number:

Area of Research:

Job Title:

--USERNAME AND PASSWORD--

Username:

>Password:

Re-enter Password:

Tips

--SECURITY INFORMATION--

Security Question:

Answer:

Why?

请注意：

- 必须输入真实姓名和学校邮箱
 - 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，并且至少包含三种以下字符：
 - 字母
 - 混合的大小写字母
 - 数字
 - 非字母数字的字符（例如 @、#、%、&、*）
- 例：abc@123
- 从下拉列表中选择一个密码提示问题并给出答案
单击 Register (注册)

Registration Already Complete

You have already completed your registration. For assistance with accessing SciFinder, consult the key contact for your organization.

点击激活链接后注册成功；之后直接点击 <https://scifinder-n.cas.org> 访问

CAS SciFinderⁿ 检索浏览器推荐

浏览器推荐：

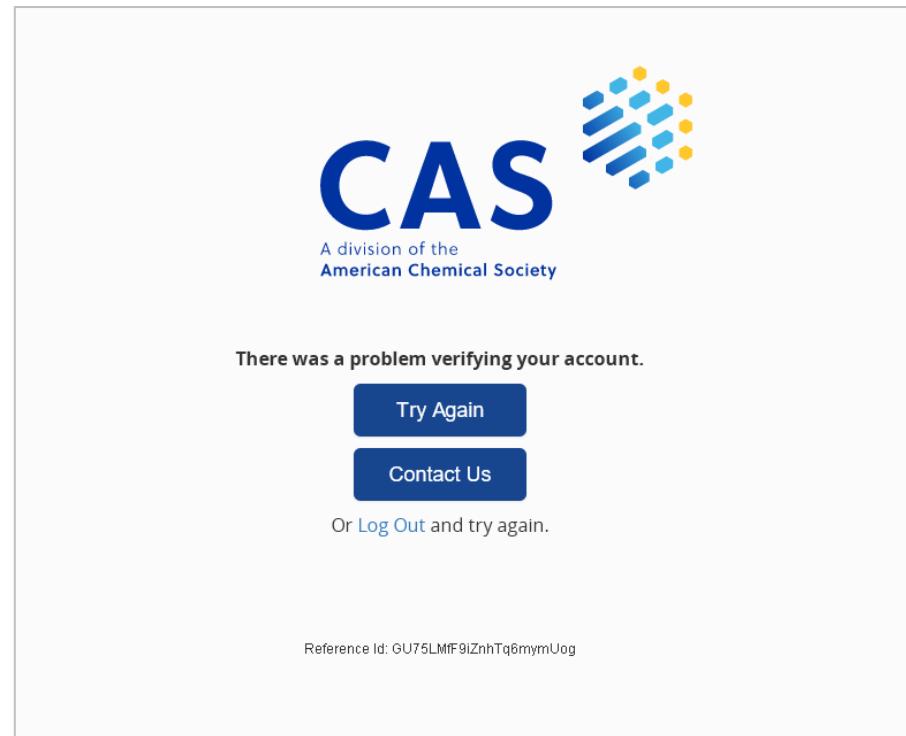
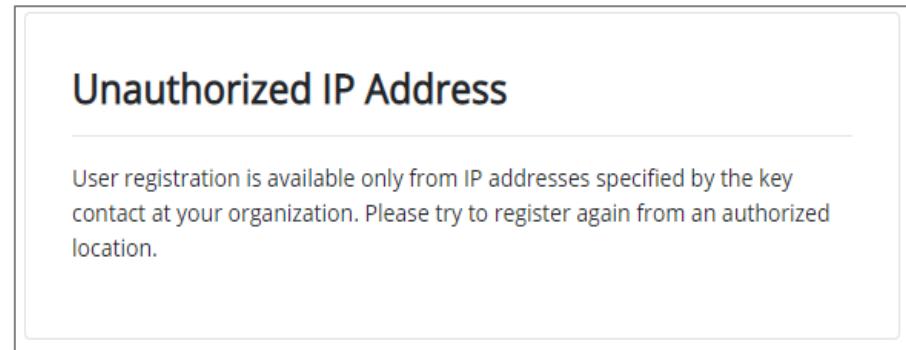
- Windows (7, 8.1, 10): Chrome 60 及更高版本, Firefox 55 及更高版本, Firefox 52 (ESR)、Edge 15 及更高版本
- Mac OS X (10.11, 10.12, 10.13): Safari 9.3 及更高版本, Chrome 60 及更高版本, Firefox 55 及更高版本, Firefox 52 (ESR)

不建议使用 360 浏览器，相关功能或插件会被自动拦截

使用注意事项

- 一人注册一个账号
- 实名注册, 请提供真实姓名信息 (中文名用汉语拼音全拼)
- 不得过量下载 (<https://www.cas.org/legal/infopolicy>)
- 不得账号分享
- 不得将账号用于非学术研究

常见问题



- 检查注册链接是否正确
- 确认连入校园网，且不是通过 VPN 连接
- 如果链接正确，且在校园内，请联系图书馆或 china@acs-i.org

- 确认账号密码是否正确
- 如果账号密码正确，请填写问题报告之后联系图书馆或 china@acs-i.org

校外访问CAS SciFinder Discovery Platform

欢迎使用工作台

默认分类

- 配置后台
- 智慧党建
- 资产处流媒体服务器
- zs.scau.edu.cn
- 学校官网

图书馆电子资源

- CA - SciFinder Scholar(化学文摘...)
- ProQuest期刊全文库
- 图书馆信息服务平台上办事大厅
- 知网测试
- 图书馆

校内远程

- 校内远程

- 登录VPN客户端
- 工作台进入CAS SciFinder Discovery Platform

THANK YOU!



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