

#### SciFinder Web使用介绍

刘衍兰

SciFinder培训专员

2014.10

#### 提纲



- 介绍
  - SciFinder Web中的内容
  - SciFinder Web中的新功能
- SciFinder Web中的检索和后处理
  - SciFinder Web中的文献记录及主题检索
  - SciFinder Web中的物质结果及物质检索技巧
  - SciFinder Web中的反应记录及反应检索技巧
- SciFinder Web的注册和常见问题



## 美国化学文摘社—Chemical Abstract Service

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



#### SciFinder的覆盖内容





### 提纲



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- SciFinder Web的注册和常见问题



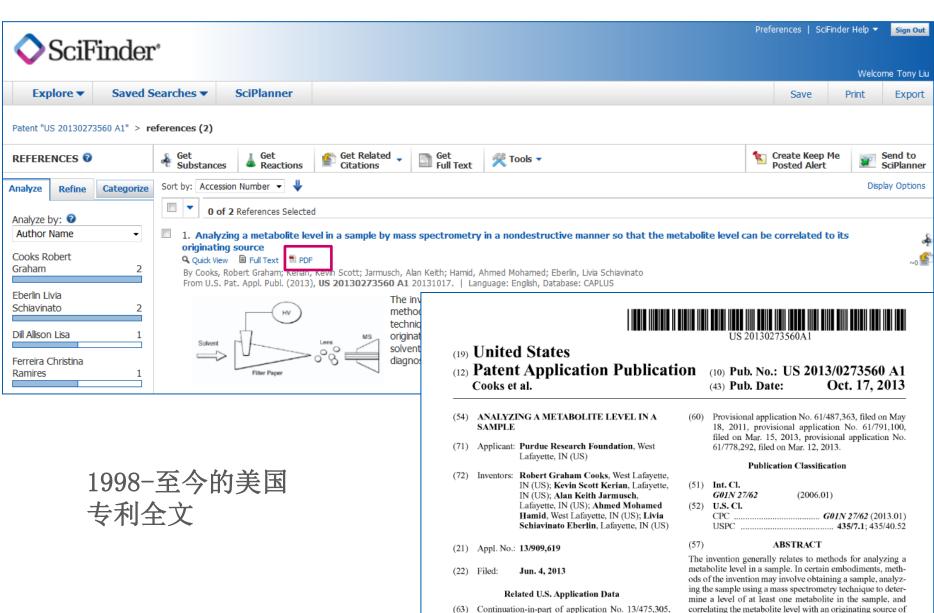




### 美国专利全文PDF链接



the sample, thereby analyzing the sample.

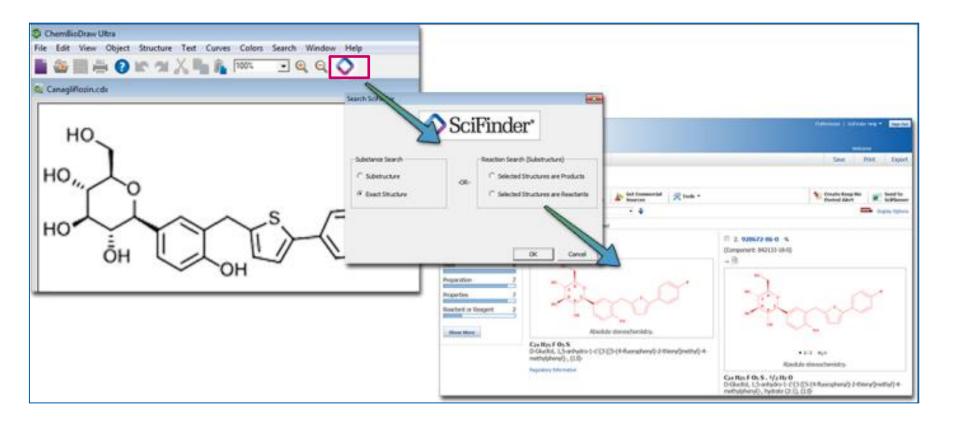


filed on May 18, 2012.

CAS is a division of the American Chemical Society.



### SciFinder和ChemDraw整合



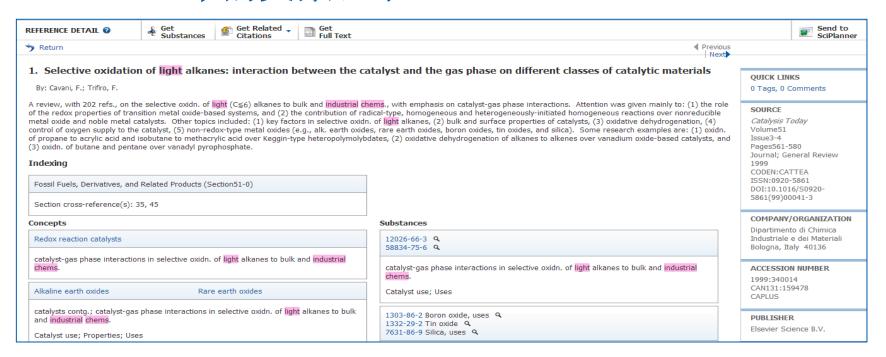
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- SciFinder Web的注册和常见问题

#### SciFinder中的文献记录





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

#### 一篇完整的文献界面包括:

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





#### • 功能方面

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

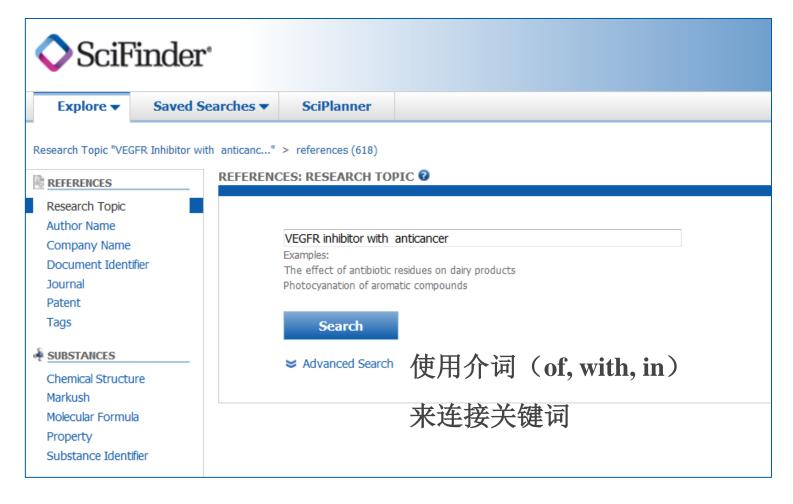
#### • 检索方法推荐

- 关注某特定领域的文献---主题检索
- 关注某科研人员的文献---作者名检索



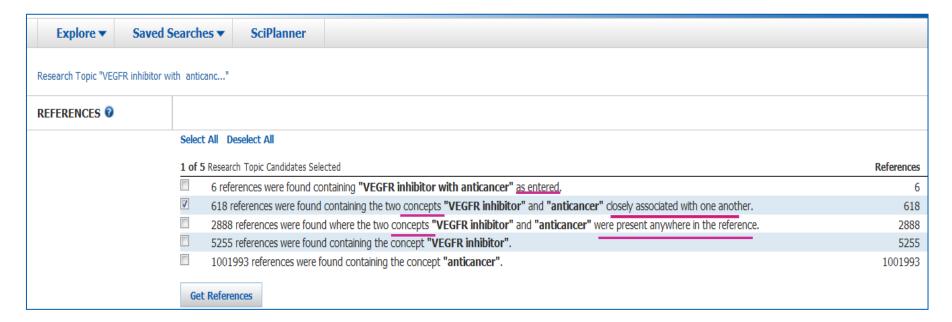
### SciFinder Web中的主题检索

主题: VEGFR inhibitor with anticancer(VEGFR抑制剂在抗肿瘤方面的研究进展)







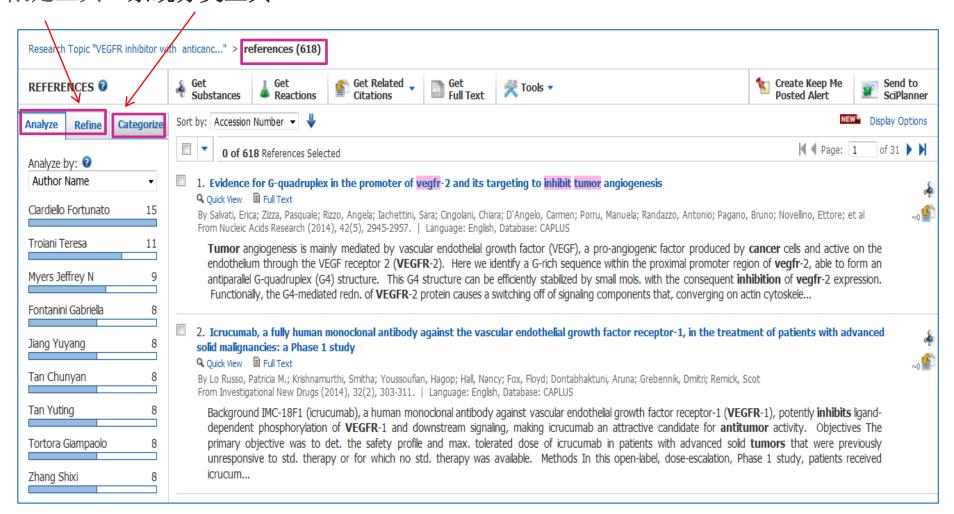


- ◆ "as entered"表示完全匹配
- ◆"concept"表示做了同意词的扩展
- ◆ "closely associated with one another"表示同时出现在一个句子中
- ◆ "present anywhere in the reference" 表示同时出现在一段话中



#### SciFinder 中的文献检索结果及后处理

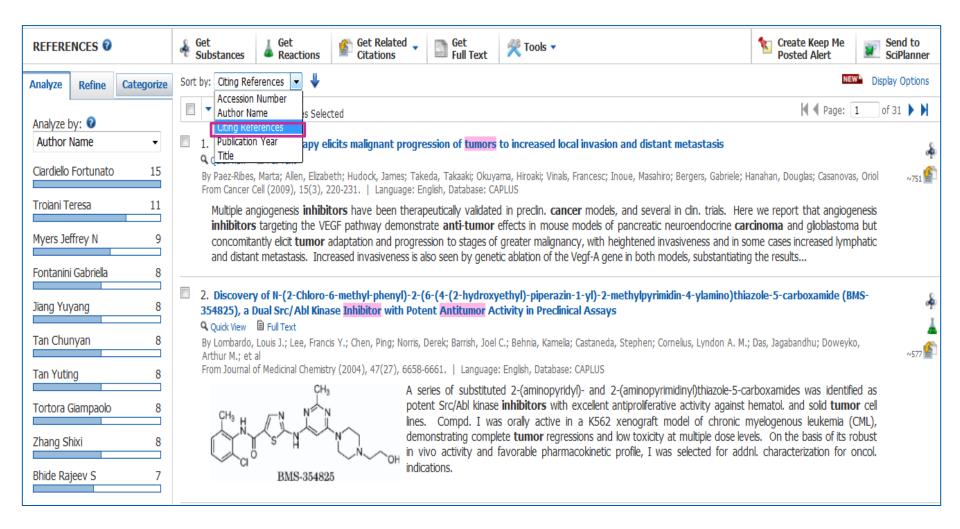
文献分析、 限定工具 系统分类工具



SciFinder提供强大的文献处理工具,帮助处理文献



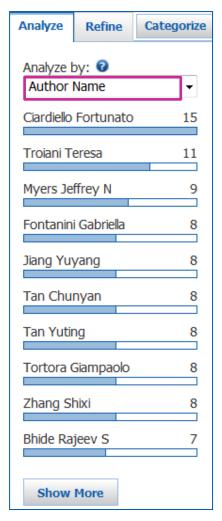
# SciFinder提供的引文排序— Citing Reference



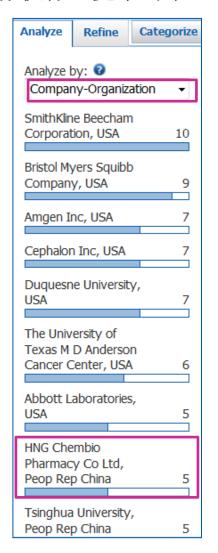




# 领域内主要研 究人员,专家



# 主要研究机构,合作伙伴,竞争对手

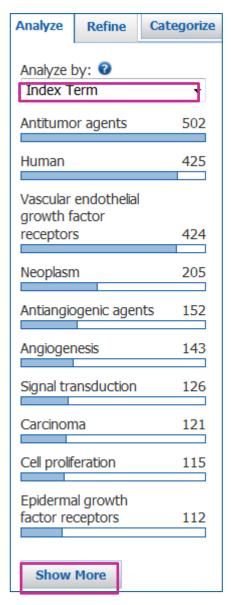


# 主要出版杂志,机构,潜在投稿期刊

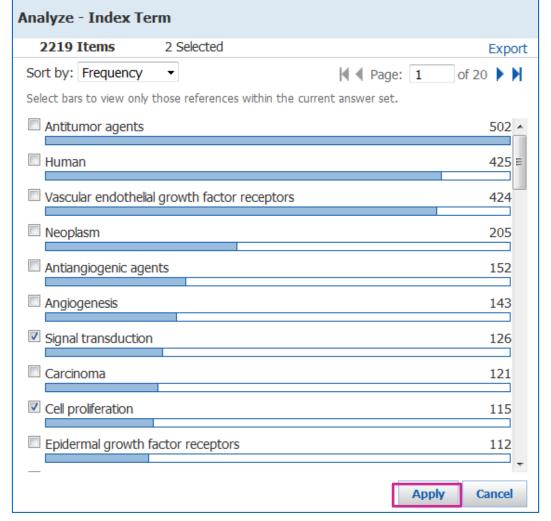




# SciFinder中的Analyze- Index Term



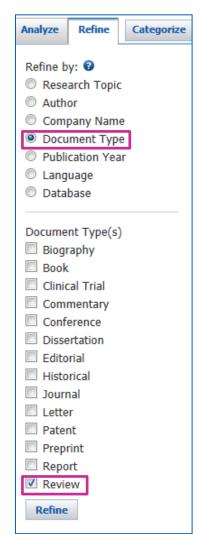
# 索引词(Index Term):可以帮助我们对文献的内容进行大致的了解

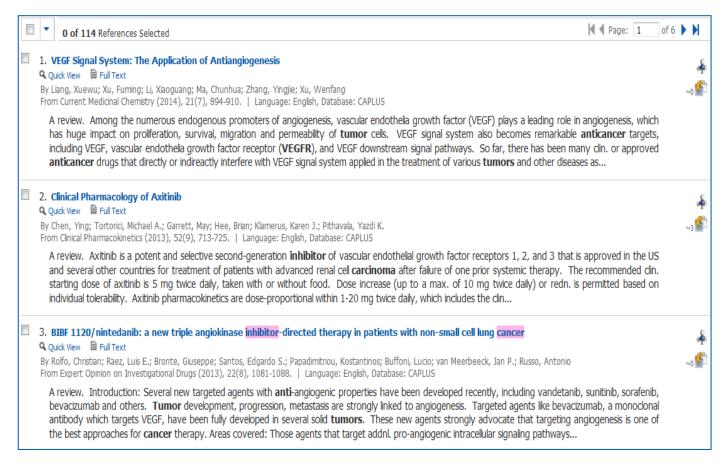




## SciFinder中的Refine

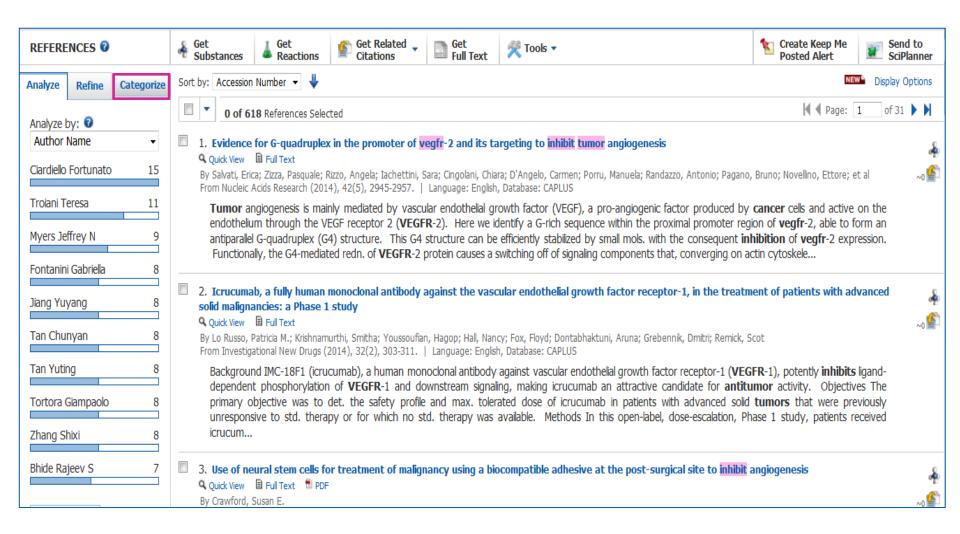
#### 文献类型限定: 获得最新综述类文献







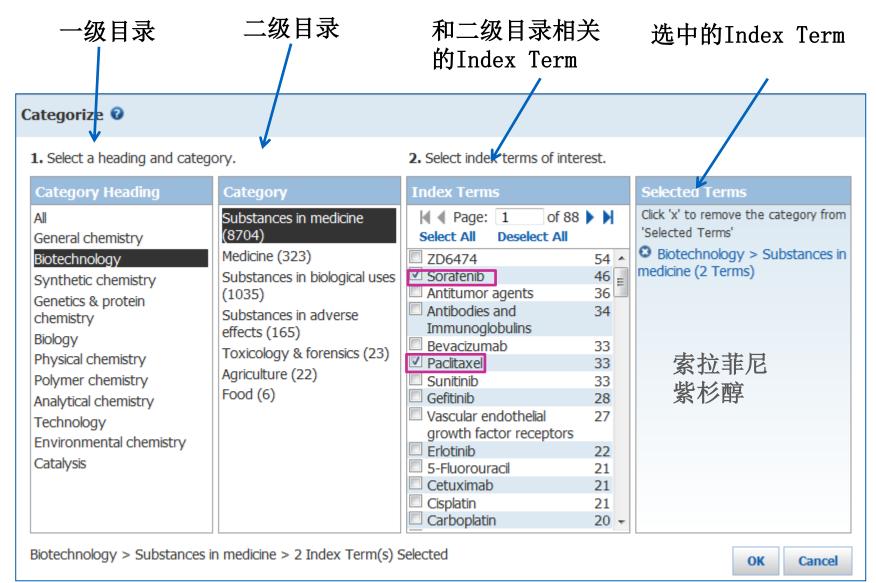




Categorize系统分类功能,基于Index Term,对文献依学科方向进行分类



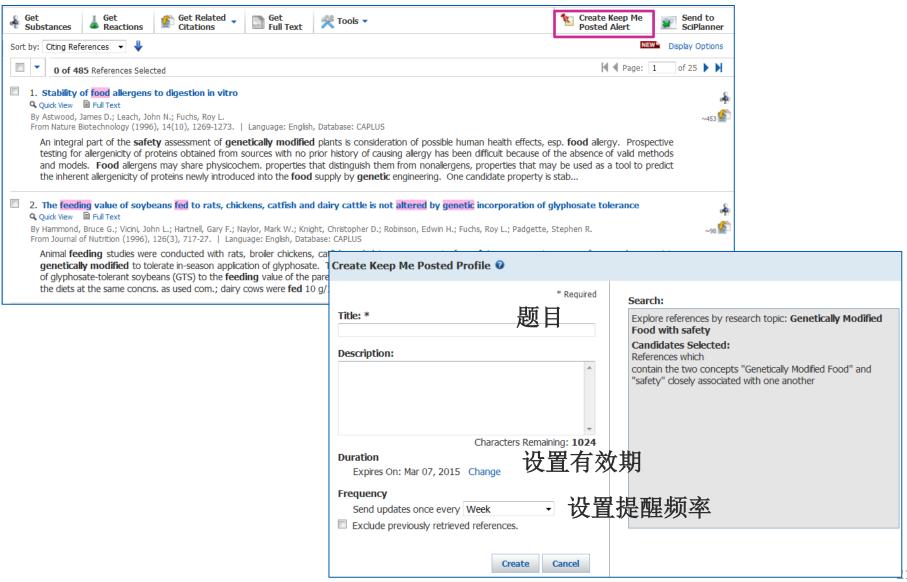
# SciFinder中的Categorize



#### SciFinder中的KMP

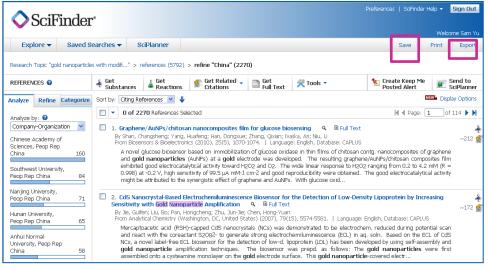


#### 随时跟踪科研最新进展



#### 结果集的保存

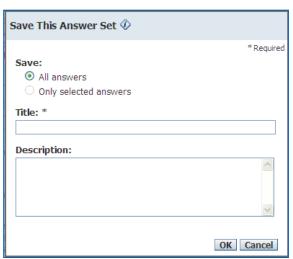




#### **Export:**

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

Offline Review:保存过成PDF,RTF 格式,用于脱机浏览



#### Export \* Required Details: Export: For: Citation Manager File Name: \* All Citation export format (\*.ris) Reference\_06\_26\_2012\_150931 Selected O Quoted Format (\*.txt) Range Tagged Format (\*.txt) Example: 2-20 Offline review O Portable Document Format (\*.pdf) Rich Text Format (\*.rtf) Answer Keys (\*.txt) Saving locally Answer Kev eXchange (\*.akx) Export Cancel

#### Save:

保存在服务器上,可登陆后查看

### SciFinder主题检索小结



- ◆关键词的选择以及关键词用介词连接
- ◆候选项选择含有concept和closed associated with 的选项
- ◆使用citing reference排序可以获得被引用次数最多的文献
- ◆使用KMP功能跟踪科研进展
- ◆使用Analyze, Refine和categorize进行后处理
- ◆结果集的保存

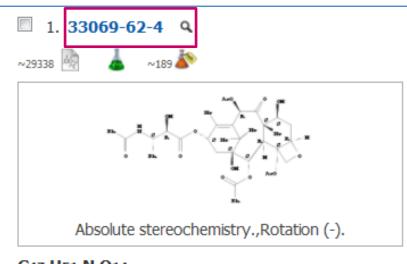
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## SciFinder中的物质结果界面



#### C47 H51 N O14

Benzenepropanoic acid,  $\beta$ -(benzoylamino)- $\alpha$ -hydroxy-, (2aR,4S,4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11, 12,12a,12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4] benz[1,2-D]oxet-9-yl ester, (aR,DS)-

Regulatory Information Spectra Experimental Properties

#### 紫杉醇的物质检索结果

#### 一个完整的物质结果 界面包含:

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



#### Substance Detail—查看物质详细信息

CAS Registry Number: 33069-62-4

C47 H51 N O14

Benzenepropanoic acid,  $\beta$ -(benzoylamino)- $\alpha$ -hydroxy-, (2aR,4S, 4aS,6R,9S,11S,12S,12aR,12bS)-6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a,12b-dodecahydro-4, 11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-B]oxet-9-yl ester, ( $\alpha R$ , $\beta S$ )-

Benzenepropanoic acid, β-(benzoylamino)-α-hydroxy-, 6,12b-bis(acetyloxy)-12-(benzoyloxy)-2a,3,4,4a,5,6,9,10,11,12,12a, 12b-dodecahydro-4,11-dihydroxy-4a,8,13,13-tetramethyl-5-oxo-7,11-methano-1H-cyclodeca[3,4]benz[1,2-b]oxet-9-yl ester, [2aR-[2aa,4β,4aβ,6β,9α(αR\*,βS\*),11α,12α,12aa,12ba]]-; Tax-11-en-9-one, 5β,20-epoxy-1,2a,4,7β,10β,13α-hexahydroxy-, 4, 10-diacetate 2-benzoate 13-ester with (2R,3S)-N-benzoyl-3-phenylisoserine (8CI); 7,11-Methano-1H-cyclodeca[3,4]benz[1,2-b]oxete, benzenepropanoic acid deriv.: (-)-Pacitiaxel: 5B.20-

物质的的CAS号、分子式、结构式、化学名、别名

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

CAS Role	Patents	Nonpatents	Nonspecific Derivatives from Patents	Nonspecific Derivatives from Nonpatents
Analytical Study	✓	✓	✓	✓
Biological Study	✓	✓	✓	✓
Combinatorial Study				✓
Formation, Nonpreparative	✓	✓	✓	✓
Miscellaneous	✓	✓	✓	✓
Occurrence	✓	✓	✓	✓
Preparation	✓	✓	✓	✓
Process	✓	1	✓	✓
Properties	✓	✓	✓	✓
Prophetic in Patents	✓		✓	
Reactant or Reagent	✓	✓	✓	✓
Uses	✓	✓	✓	✓



# 生物活性和靶点信息

▼ Bioactivity Indicators			
	References		
Antidiabetic agents	143		
Antifibrotic agents	67		
Anti-infective agents (all) >>> Antibacterial agents	155		
Anti-infective agents (all) >> Antibiotics	862		
Anti-infective agents (all) >>> Anti-HIV agents	94		
Anti-infective agents (all) > Anti-infective agents	94		
Anti-infective agents (all) >> Antimicrobial agents	122		
Anti-infective agents (all) >>> Antiviral agents	367		
Anti-infective agents (all) >> Fungicides	193		
Anti-inflammatory agents (all) > Antiarthritics	148		
Anti-inflammatory agents (all) > Anti-inflammatory agents	830		
Anti-inflammatory agents (all) > Antirheumatic agents	200		
Anti-inflammatory agents (all) > Nonsteroidal anti-inflammatory drugs	133		
Antiproliferative agents (all) > Antimitotic agents	164		
Antiproliferative agents (all) > Antiproliferative agents	501		
Antitumor agents (all) > Alkylating agents, biological	644		
Antitumor agents (all) > Antiangiogenic agents	1027		
Antitumor agents (all) > Antitumor agents 15182			

▼ Target Indicators			
	References		
Agglutinins and Lectins (all) > Galectins	10		
Albuminoids (all) > Fibrins	36		
Apoptosis-regulating proteins (all) > Apoptosis-inducing factors	13		
Apoptosis-regulating proteins (all) > Apoptosis-regulating proteins	52		
Apoptosis-regulating proteins (all) > Bad proteins	41		
Apoptosis-regulating proteins (all) > Bak proteins	27		
Apoptosis-regulating proteins (all) > Bax proteins	280		
Apoptosis-regulating proteins (all) > Bcl-2 proteins 548			
Apoptosis-regulating proteins (all) > Bcl-x proteins	180		
Apoptosis-regulating proteins (all) >> Inhibitor of apoptosis proteins	108		
Basigins	12		
Bid proteins	35		
Bim proteins	28		
Blood-coagulation factors (all) > Blood-coagulation factor Ⅲ 12			
Blood-coagulation factors (all) > Fibrinogens	21		



# Substance Detail—查看物质详细信息

				To	
Biological Properties	Value	Condition	Note		
Bioconcentration Factor	591	pH 1 Temp: 25 °C	(34)		
Bioconcentration Factor	591	pH 2 Temp: 25 °C	(34)		
Bioconcentration Factor	591	pH 3 Temp: 25 °C	(34)		
Bioconcentration Factor	591	pH 4 Temp: 25 °C	(34)		
Bioconcentration Factor	591	pH 5 Temp: 25 °C	(34)	4)	
lioconcentration Factor	591	pH 6 Temp: 25 °C	(34)	34)	
Bioconcentration Factor	591	pH 7 Temp: 25 °C	(34)	34)	
Bioconcentration Factor	591	pH 8 Temp: 25 °C	(34)	(34)	
Bioconcentration Factor	590	pH 9 Temp: 25 °C	(34)	(34)	
Sioconcentration Factor	582	pH 10 Temp: 25 °C	(34)		
				Т	
Chemical Properties	Value	Condition	Note		
(oc	3350	pH 1 Temp: 25 °C	(34)		
COC	3350	pH 2 Temp: 25 °C	(34)		
Сос	3350	pH 3 Temp: 25 °C	(34)		
Кос	3350	pH 4 Temp: 25 °C	(34)		
Density Properties	Value	Condition	Note		
ensity	1.39±0.1 g/cm3	Temp: 20 °C Press: 760 Torr	(34)		
10lar Volume	610.5±5.0 cm3/mol	Temp: 20 °C Press: 760 Torr	(34)		
Lipinski and Related Properties	Value	Condition	Note		
reely Rotatable Bonds	17		(34)		
l Acceptors	15		(34)		
Donors	4		(34)		
Donor/Acceptor Sum	19		(34)		
ogP	3.950±0.808	Temp: 25 °C	(34)		
Molecular Weight	853.91		(34)		

CAS is a division of the American Chemical Society.

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# Substance Detail—查看物质详细信息

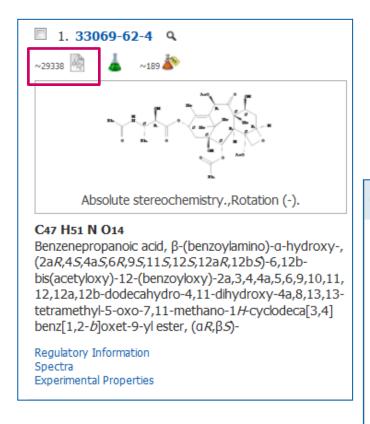
Biological Properties	Value	Condition	Note	Top
ADME (Absorption, Distribution, Metabolism, Excretion)	See full text	1 of 72	(1)CAS	
Half-Life (Biological)	See full text	1 of 37	(7)CAS	
LC50	See full text	1 of 2	(8)CAS	
LD50	See full text		(9)CAS	
Median Lethal Dose(LD50)	8.3 mg/kg	Organism: rat Route: intravenous	(14)CAS	
Chemical Properties	Value	Condition	Note	Тор
logD	See full text		(10)CAS	
logP	See full text	1 of 3	(11)CAS	
Potential of Electrode Reaction	See full text		(28)CAS	
Solubility	See full text	1 of 18	(30)CAS	
				Тор
Lipinski and Related Properties	Value	Condition	Note	
logP	See full text	1 of 3	(11)CAS	
				Тор
Optical and Scattering Properties	Value	Condition	Note	ТОР
Optical Rotatory Power	-48.4 °	Conc: 0.5 g/100mL; Solv: chloroform (67-66-3); Wavlen: 589.3 nm	(26)CAS	
Optical Rotatory Power	-49 °	Solv: methanol (67-56-1); Wavlen: 589.3 nm; Temp: 20 °C	(20)APC	
Optical Rotatory Power	-49 °	Solv: methanol (67-56-1); Wavlen: 589.3 nm; Temp: 20 °C	(21)NLM	
Optical Rotatory Power	-50 °	Conc: 1.0 g/100mL; Solv: chloroform (67-66-3); Wavlen: 589.3	(23)CAS	



ectra Properties	Value	Condition		Note	Тор
rbon-13 NMR Spectrum	See full text	1 of 5		(3)CAS	
Absorption Spectrum	See full text	1 of 6		(3)CAS	
ss Spectrum	See spectrum	10/0		(12)WSS	
s Spectrum	See full text	1 of 20		(13)CAS	
sphorus-31 NMR Spectrum	See full text	10/20		(27)CAS	
on NMR Spectrum	See full text	1 of 12		(17)CAS	
an Spectrum	See full text	1 of 2		(29)CAS	
Dimensional NMR Spectrum	See full text	10/2		(31)CAS	
d Visible Absorption Spectrum	See full text	1 of 3		(32)CAS	
Visible Absorption Spectrum	See full text	1013		(32)CA3	
ture-related Properties	Value	Condition		Note	Тор
Length	See full text			(2)CAS	
Diffraction Pattern	See full text	1 of 4		(33)CAS	
Dillactori l'attern	See full text	1014		(33)CA3	
					Top
nal Properties	Value	Condition		Note	
lpy	See full text			(4)CAS	
У	See full text			(4)CAS	
ree Energy	See full text	1 of 2		/E\CAC	
ransition Temperature	151 °C				
Point	228.6 °C	n-c			
Point	223 °C	- 22			
Point	216 °C	it s			
Point	213-217 °C	5			
		arbitrary units			
		o   11	80 120 160 2	200 240 28	<del></del>



### 物质有关的文献信息

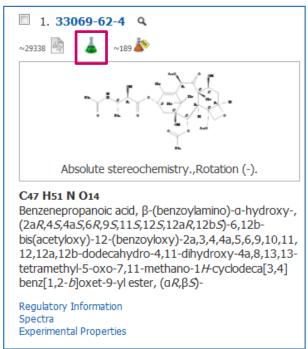


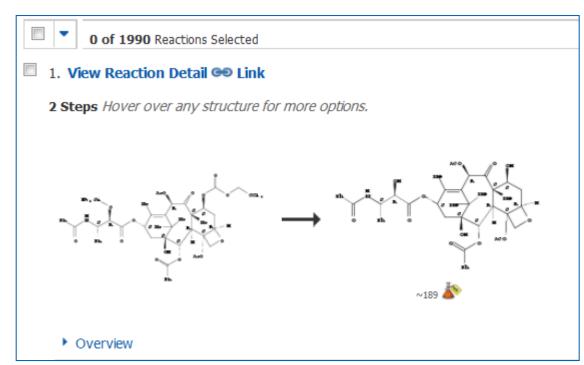
一键获得文献,可以获得全部,也可以勾选特别感兴趣的内容,不勾选,默认获得全部

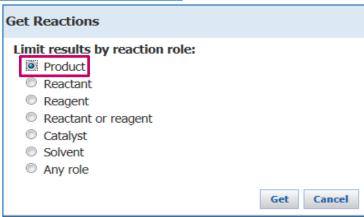
Get References				
Limit results to:				
Adverse Effect, including toxicity	Prophetics in Patents			
Analytical Study	Preparation			
Biological Study	Process			
Combinatorial Study	Properties			
Crystal Structure	Reactant or Reagent			
Formation, nonpreparative	Spectral Properties			
Miscellaneous	□ Uses			
Occurrence				
For each sequence, retrieve:  Additional related references, e.g., activity studies, disease studies.  Get Cancel				



### 物质有关的反应



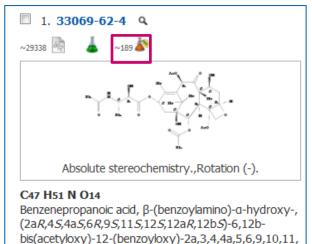






Preferences | SciFinder Help ▼

#### 物质有关的商品信息

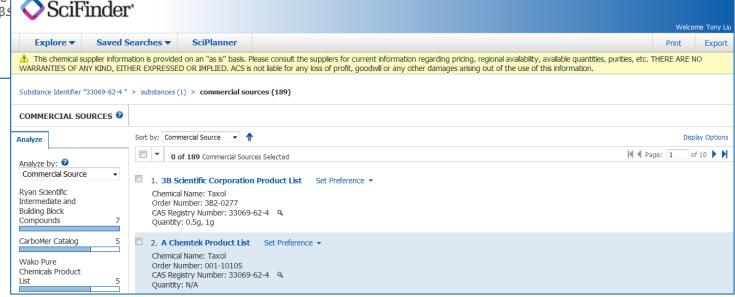


可以直接Export到Excel中,又或者使用分析工具, 对商业信息进行处理

12,12a,12b-dodecahvdro-4,11-dihvdroxv-4a.8.13.13-

tetramethyl-5-oxo-7,11-methanobenz[1,2-b]oxet-9-yl ester, (aR, $\beta$ 5

Regulatory Information Spectra **Experimental Properties** 







#### • 功能方面

- 物质名称,CAS No
- 分子式
- 结构式
- 理化性质

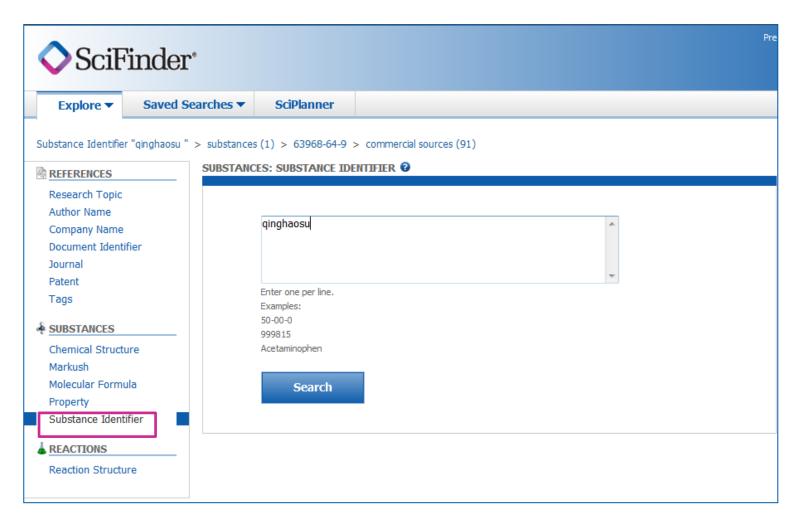
#### • 推荐的物质检索功能

- 有机物,天然产物及衍生物 ---结构比较方便
- 无机物

- ---分子式比较方便
- 高分子化合物
- ---首先分子式, 其次结构



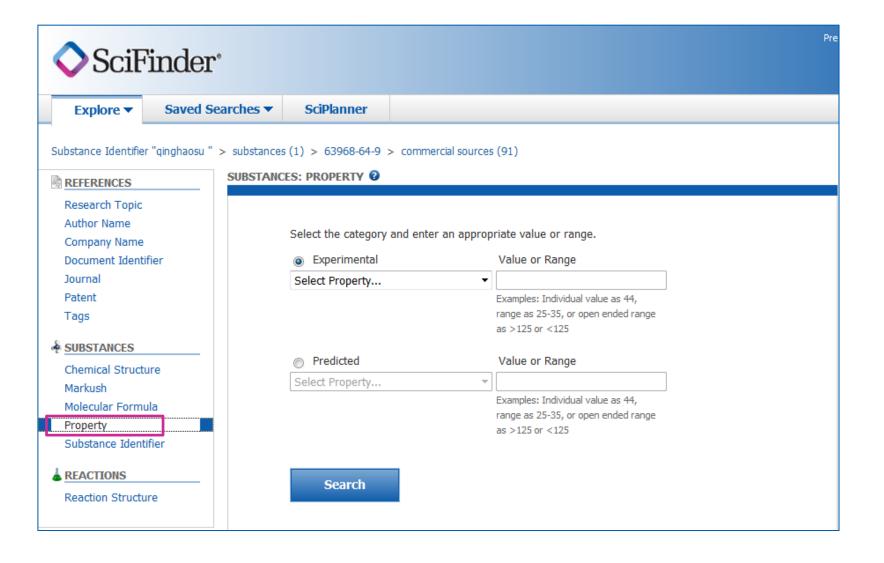




直接输入物质的名称,CAS No,俗名,都能检索,一次最多检索25个物质,用换行换开

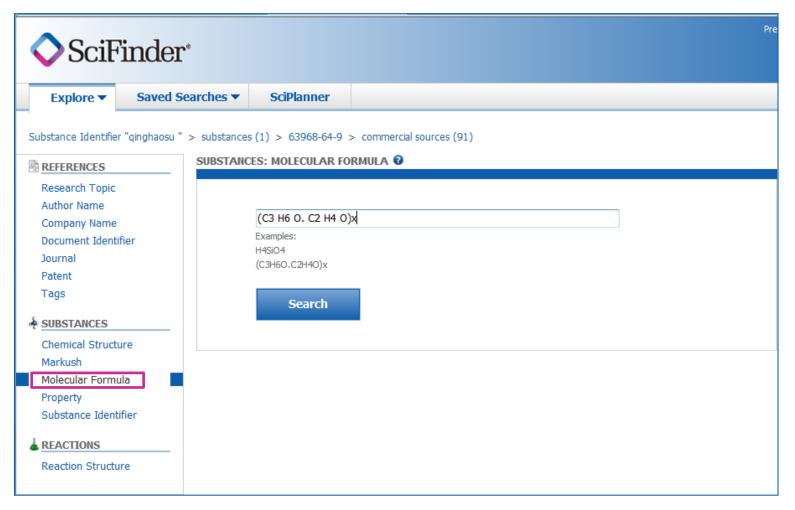








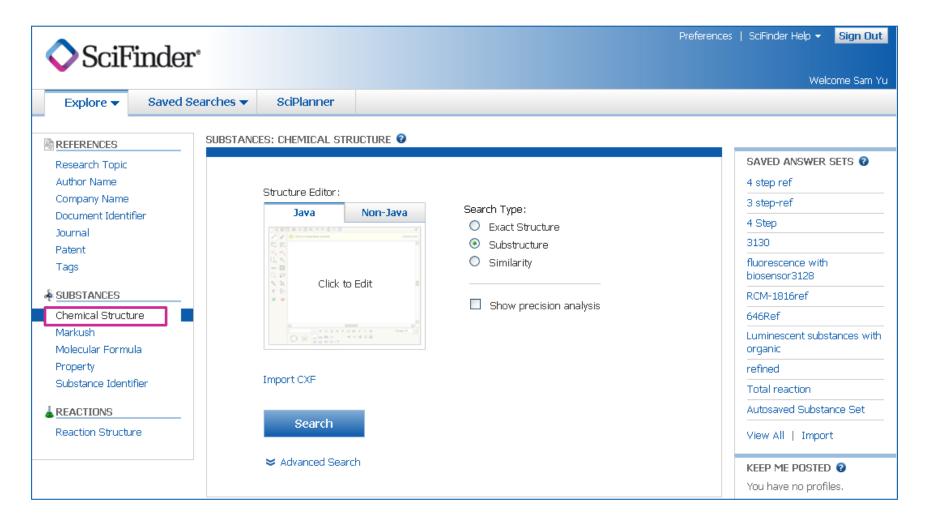




SciFinder中的分子式的检索,需要按照HILL排序方式输入,简单来说,CH写前面,其他的按照字母顺序写

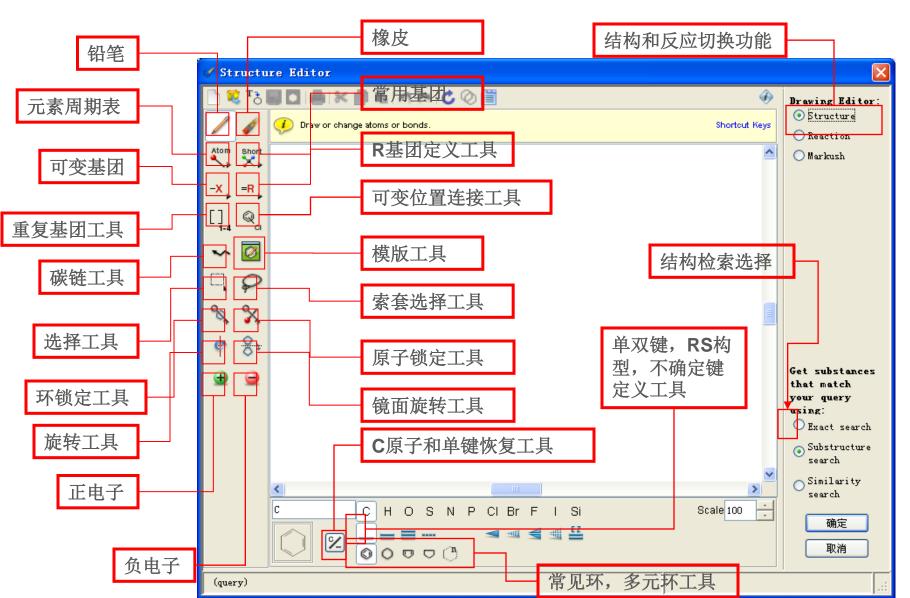








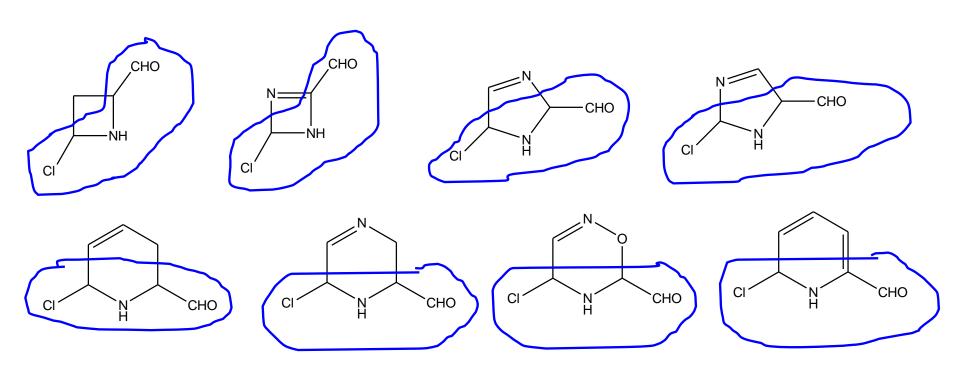
#### SciFinder结构绘制工具



39





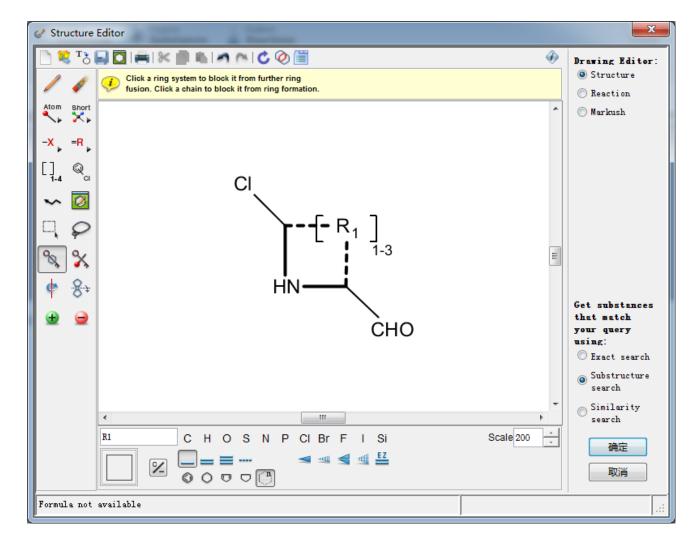


40

0

## 结构定义

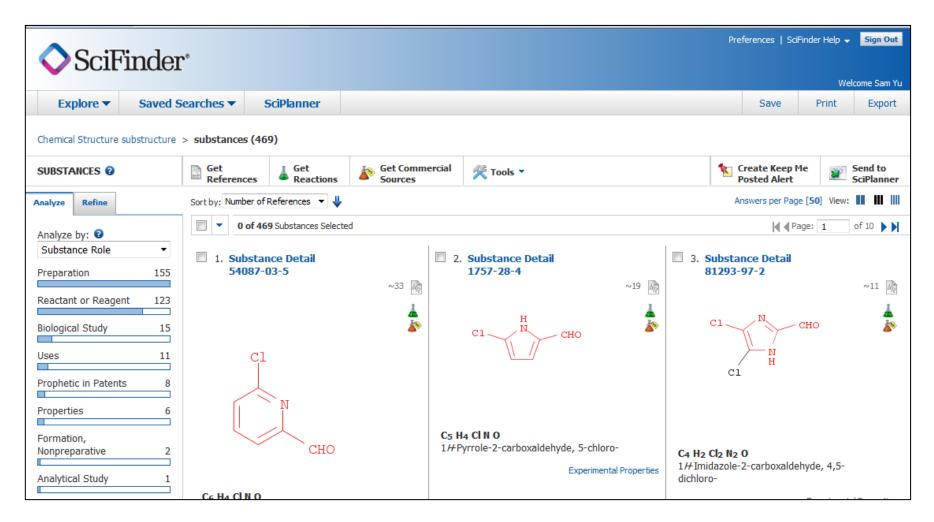




用亚结构检索获得所有的物质









## 案例研究

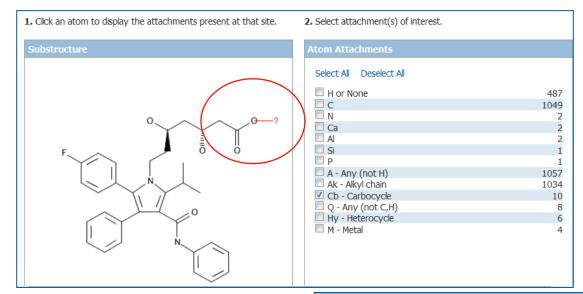
#### 对某一结构进行改造,看是否有更好的新结构



# Substructure Search—用于检索结构的修饰物



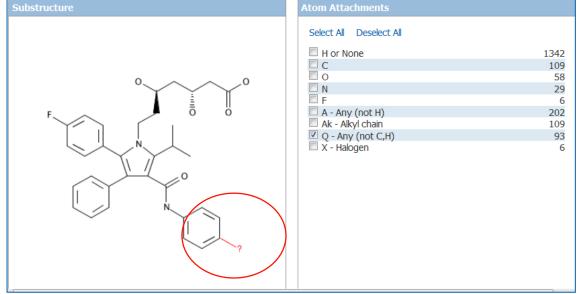
# Atom Attachment直接限定感兴趣的修饰位点



对支链0的修饰研究

对苯环对位修饰研究

对特定位点的修饰了解,帮助了解该位点都已经 有了解该位点都已经 有了什么类型的修饰研究,便于开创新的修饰 究,便于开创新的修饰 结构,也可配合文献调 研,获得与构效关系有 关的判断。





# Similarity Search—用于检索结构的类似物

1/2

结构都存在相似性, 但是又和原结构有 不同的地方

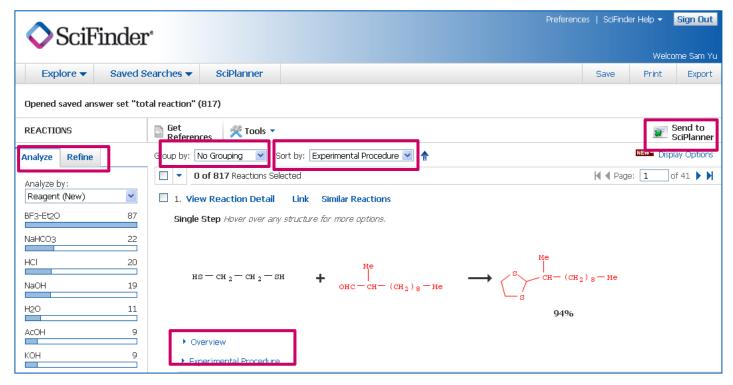
### 提纲



- 介绍
  - SciFinder Web中的内容
  - SciFinder Web中的新功能
- SciFinder Web中的检索和后处理
  - SciFinder Web中的文献记录及主题检索
  - SciFinder Web中的物质结果及物质检索技巧
  - SciFinder Web中的反应记录及反应检索技巧
- SciFinder Web的注册和常见问题



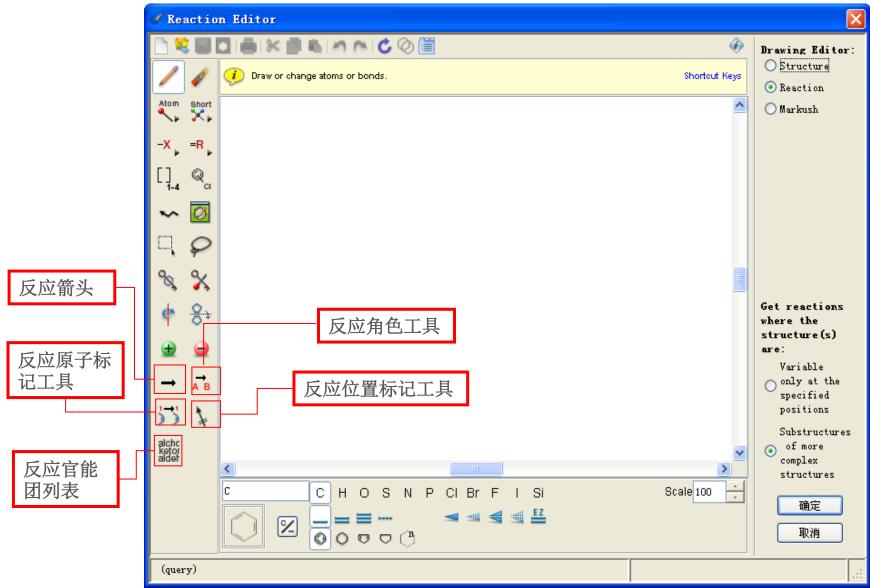
### SciFinder Web中的反应记录



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

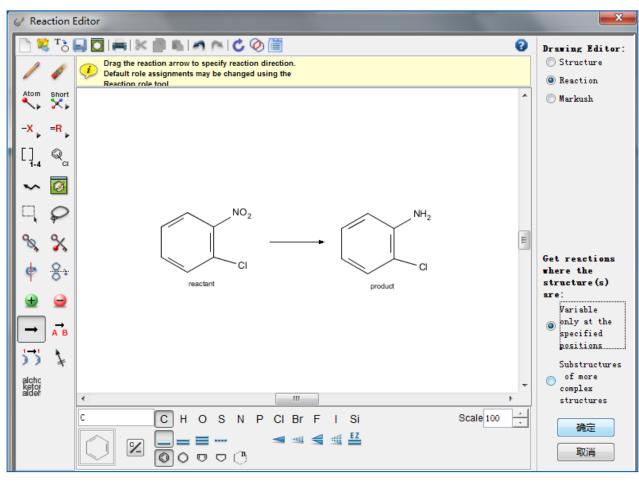


## SciFinder中的反应定义工具



## SciFinder反应检索





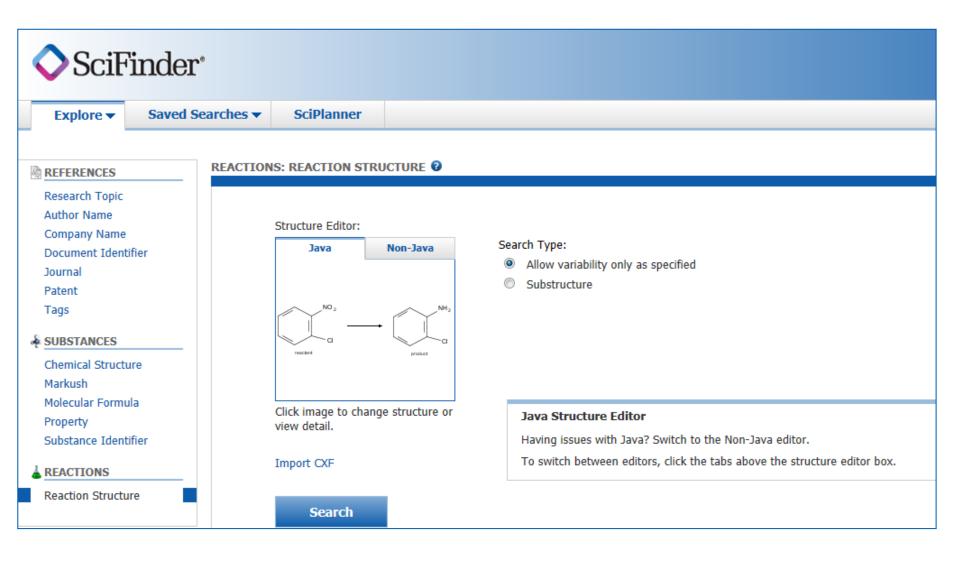
Allow variability only as specified: 仅在特定位点发生变化

Substructure:亚结构检索,

允许有更多取代情况

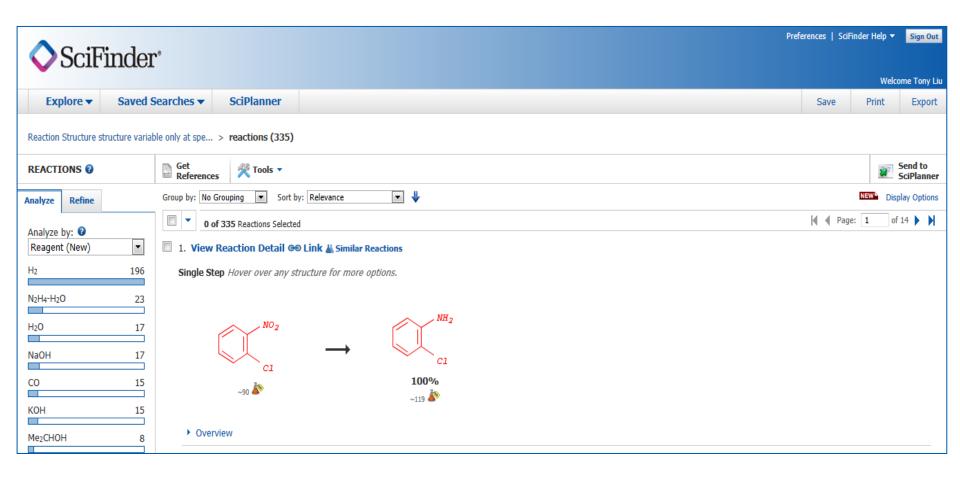
## 反应检索界面





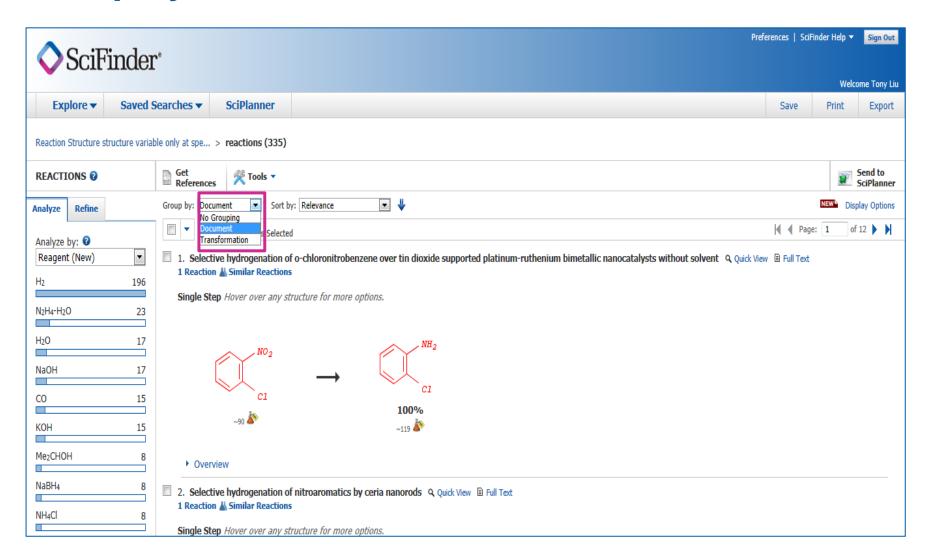








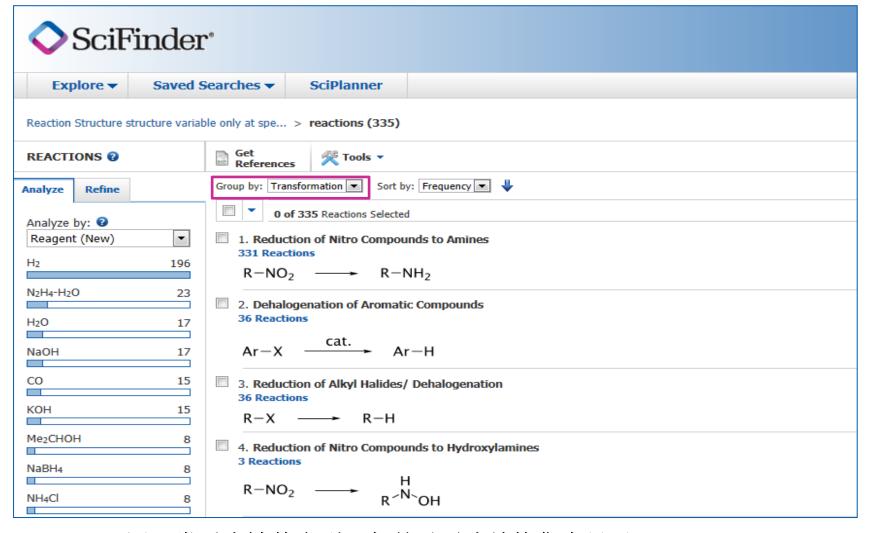
# Group by Document 按照出处文献分类显示



来自同一篇文献的反应都被整合到一起并集中显示



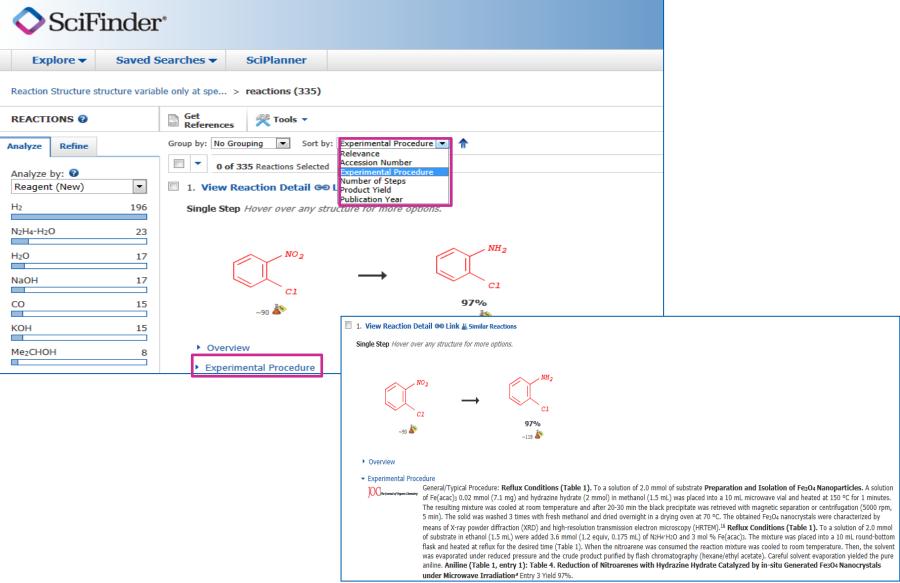
# Group by Transformation 按照反应类型分类显示



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

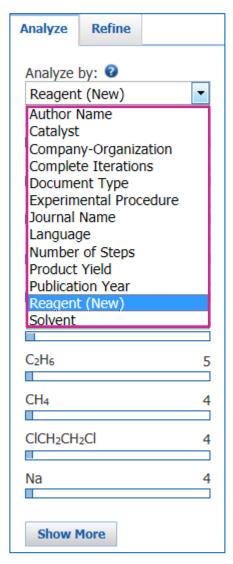


### 获得有实验步骤的反应结果集





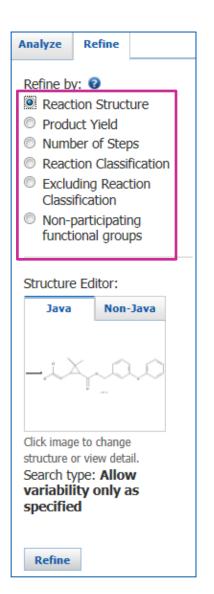
## 反应结果集的分析限定工具



反应分析类型:

作者姓名 出版语言 出版年代 化剂 上版年代 机构名称 反应步数 文献类型 产率 试剂 实验步骤 溶剂

反应的限定功能: 反应式 产率 反应步数 反应类型 排除的反应类型 排除与反应的基团



### 提纲



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  - SciFinder Web中的新功能
- SciFinder Web中的检索和后处理
  - SciFinder Web中的文献记录及主题检索
  - SciFinder Web中的物质结果及物质检索技巧
  - SciFinder Web中的反应记录及反应检索技巧
- SciFinder Web的注册和常见问题





SciFinder Web的系统要求

Windows用户支持IE 9. x或者FireFox 2. x

Mac 用户支持 Firefox 和 Safari

Java 安装(初次使用结构时自动安装,建议安装Java 7)

在图书馆相关页面上找到SciFinder Web注册用的网址

鉴于360浏览器以及360安全卫士会对SciFinder的使用造成一定的 影响,建议大家最好不要使用360浏览器。

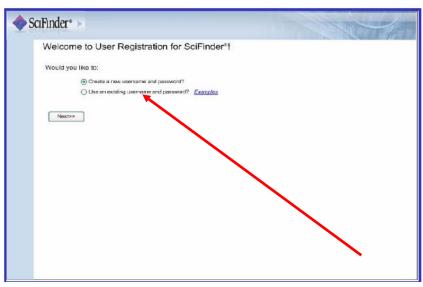






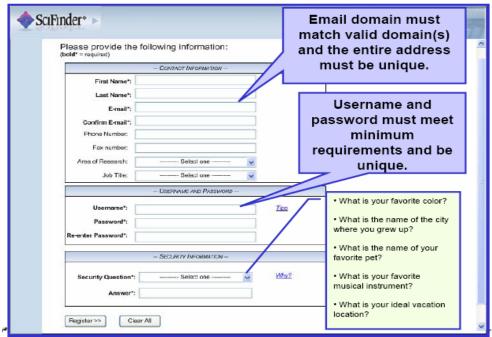
### 点击URL创建SciFinder Web账号





开始创建SciFinder Web帐号

#### 请用邮箱注册,一人只能注册一个账号







#### 用户名:

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

- (破折号)
- \_ (下划线)
- . (句点)
- @(表示 "at" 的符号)

#### 密码:

必须包含 7-15 个字符,并且至少包含三个以下字符:

字母

混合的大小写字母

数字

非字母数字的字符(例如 @、#、%、&、\*)

#### 密码设置小技巧:

- 1: 不要和账号中有重复的字符
- 2: 密码格式最好是abc@123

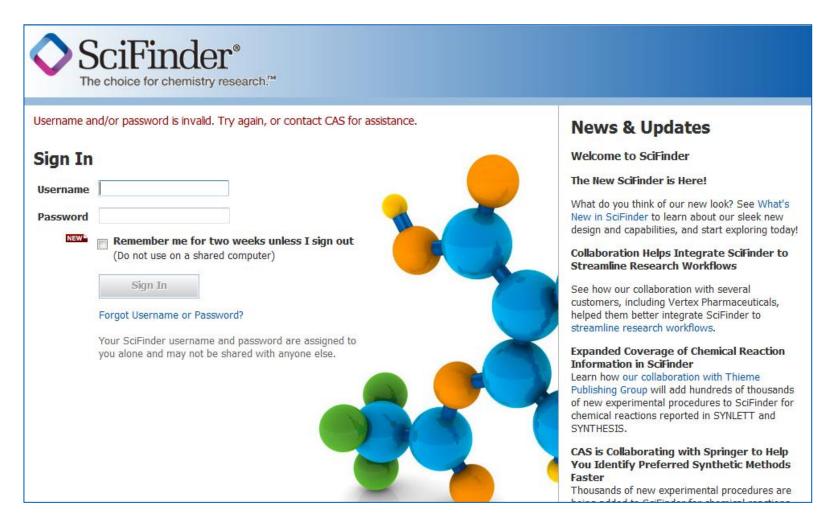












账号或密码错误,请在username处填写,截图,并与图书馆联系





#### 任何需要反馈给图书馆的问题,都请点击测试IP地址的链接

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



Your IP address comes across to CAS as: 210.32.9.45

将页面截图下来,一并发给图书馆



#### SciFinder Web网络在线资源平台

# www.igroup.com.cn/cas



资源下载: PDF文件

在线演示: Flash演示

网络培训:不定期的网络专题培训



## **Comprehensive Content**

Sophisticated Analysis

Unprecedented Results



#### Thank You

刘衍兰

SciFinder 培训专员

Mail: tony@igroup.com.cn

QQ答疑群: 275247551