# 化学及相关学科信息资源概览

林佳 清华大学图书馆

Jia-lin@lib.tsinghua.edu.cn

主要内容

化学及相关学科文献信息源的特点
 常用专业信息源概览
 信息资源的合理选择
 获取全文

□ 了解本学科领域高影响力期刊

# 1. 化学及相关学科文献信息源的特点

#### ①记录内容包含文献基本题录信息和化学特有信息

题录信息(基本同其他学科信息资源)
 标题、责任者、来源、文摘……
 反应信息

反应式(步骤、条件、中间体、产率……)、反应条件……

### ■化合物信息

结构式、名称(系统命名、商品名、俗名、药品 名……)、代码(CASRN……)、物理、化学、 药理学、生物性质、商业信息及化学品管制信息

### ②文献信息、化合物、反应之间无缝链接



CAS Solutions -		Ľ.	Preferences   SciFinder	Help ▼ Sign Out Welcome Lin Jia
Explore 🔻	Saved S	Searches  SciPlanner	Save	Print Export
Research Topic "ana	alyses of macro	olide antibiot" > references (9)		
REFERENCES 😨		Get Substances Get Reactions Get Related Related Reactions	Create Keep Me Posted Alert	Send to SciPlanner
Analyze Refine	Categorize	Sort by: Accession Number V		Display Options
Analyze by: 📀		0 of 9 References Selected		
Author Name	•	1. Simultaneous determination of tylosin and josamycin residues in muscles, liver, eggs and milk by MLC with a monolithic column and time-programmed UV baby food and formulae	detection: application	to 🖕
Leung Daniel	4	Quick View Other Sources By Nasr, Jenny Jeehan; Shalan, Shereen; Belal, Fathalla		~1 😭
Wang Jian	4	From Chemistry Central Journal (2014), 8, 37/1-37/9.   Language: English, Database: CAPLUS		
Bogialli Sara	2	Background: Tylosin and Josamycin are <b>macrolide antibiotics</b> . They are used in the treatment of pneumonia, arthritis and mastitis in cattle, and mycoplase incorrect use of <b>antibiotics</b> has lead to the presence of <b>antibiotic residues</b> in foods. The <b>residues</b> cause toxic effects on consumers. Results: A simp optimized and validated for the <b>anal</b> . of tylosin and josamycin <b>residues</b> in food samples. <b>Anal</b> . sepn. was performed in less than 10 min using a RP C18	le and sensitive metho	od was
Butterworth Fred	2	programmed UV detection at 287 nm and 232 nm and a micella		
Ciampanella Cecilia	a 2	<ul> <li>2. Development and validation of a multiclass method for the analysis of antibiotic residues in eggs by liquid chromatography-tandem mass spectrometry</li> </ul>		ھ
Curini Roberta	2	Quick View       If Other Sources         By Jimenez, V.; Rubies, A.; Centrich, F.; Companyo, R.; Guiteras, J.		~36 😭
Di Corcia Antonio	2	From Journal of Chromatography A (2011), 1218(11), 1443-1451.   Language: English, Database: CAPLUS A multiclass method for the <b>anal</b> . of <b>residues</b> , in <b>egg</b> matrixes, of 41 antimicrobial <b>agents</b> belonging to seven families (sulfonamides, diaminopyr	idine derivates, quinol	ones,
Lagana Aldo	2	tetracyclines, macrolides, penicillins and lincosamides) was developed and validated according to the requirements of European Commission Decision 2002 with a pressurized liq. extn. (PLE) technique using a 1:1 mixt. of acetonitrile and a succinic acid buffer (pH 6.0) at 70 °C. As this resulted in clear ext	1	
Belal Fathalla	1	necessary. Analytes were <b>detd</b> . by ultra-high-pressure liq. chroma		
Centrich F	1	3. Development and validation of a rapid assay based on liquid chromatography-tandem mass spectrometry for determining macrolide antibiotic residues in	<mark>eggs</mark>	ako
		Quick View Other Sources By Bogialli, Sara; Ciampanella, Cecilia; Curini, Roberta; Di Corcia, Antonio; Lagana, Aldo Fram Jauraal of Chramatography A (2000) 1212(40) (210 - 11 Japanaga Faalish, Database (ADI US)		~28 😭
Show More		From Journal of Chromatography A (2009), 1216(40), 6810-6815.   Language: English, Database: CAPLUS A simple and rapid method able to <b>det</b> . <b>residues</b> of erythromycin A, tylosin and tilmicosin in whole <b>eggs</b> is presented here. The <b>anal</b> . protocol involves a or		
		chromatog. (LC)-tandem mass spectrometry. Analytes were extd. from 1 g of egg spiked with an internal std. (josamycin) with acetonitrile. In terms of acc signal stability, no ext. cleanup was found to be necessary. After partial solvent removal, the final ext. was injected into the LC column. Extn. was effective analyte in egg at their max. residue lim	curacy, matrix effect ar e, since abs. recovery ( <b>3截屏</b>	id ion of the
		4. Analyses of macrolide antibiotic residues in eggs, raw milk, and honey using both ultra-performance liquid chromatography/quadrupole time-of-flight mas	ss spectrometry and hi	gh-

SUBSTANCES 😧	Get <u>I Get</u> References Actions Sour	Commercial 🕺 Tools 🔹	Create Keep Me Posted Alert SciPlanner
Analyze Refine	Sort by: Similarity Score		Display Options
Analyze by:Image: Substance RoleSubstance RoleImage: PropertiesProperties115Biological Study86Preparation83Uses50Formation, Nonpreparative42Reactant or Reagent37Process30Analytical Study16Miscellaneous3Occurrence3	■ • 0 of 244 Substances Selected Score: ≥ 99 ■ 1. 50-72-6 • $\sim_5$ · $\sim_5$ ·	Score: $\geq$ 99 a 2. 65-46-3 a 1000 $100$ $10$	Page: 1 of 17 ► ► Score: ≥ 99 3. 69-74-9 (Component: 147-94-4) 217 • 98 • 98 • 98 • 98 • 98 • HCl Absolute stereochemistry. C, H <sub>13</sub> N <sub>3</sub> O <sub>5</sub> . Cl H 2(1/h)-Pyrimidinone, 4-amino-1-β-D- arabinofuranosyl-, hydrochloride (1:1) • Key Physical Properties Regulatory Information Spectra Experimental Properties
Show More	<i>Score:</i> ≥ 99 □ 4. <b>147-94-4 9</b>	<i>Score:</i> ≥ 99 5. <b>3083-52-1 </b>	<i>Score:</i> ≥ 99 6. <b>3258-11-5 </b>

REACTIONS 📀	Get References Tools •	Send to SciPlanner
Analyze Refine	Group by: No Grouping <ul> <li>Sort by: Relevance</li> </ul>	Display Options
Sample Analysis: 😨	2 of 62248 Reactions Selected	▲ ● Page: 1 of 4150 ►
Reagent <b>v</b>	I. View Reaction Detail Go Link L Similar Reactions	
$Et_3N \ge 8241$	Single Step Hover over any structure for more options.	点击了解化
NH <sub>3</sub> ≥ 5817		合物详情
1H-Tetrazole ≥ 4844		ОН ОН
$C_5H_5N \geq 4241$	Si CH <sub>3</sub>	
NH <sub>4</sub> OH ≥ 3968	$\bigcap_{R=R}^{O} \bigvee_{R=R}^{N} \bigvee_{R$	
$EtN(Pr-\prime)_2 \geq 3883$		
AcOH ≥ 3537	NH <sub>2</sub> CH <sub>3</sub>	<b>97</b> %
<i>t</i> -BuOOH ≥ 3409		
1H-Imidazole ≥ 3366	<ul> <li>Overview</li> <li>Steps/Stages</li> </ul>	Notes
POCl <sub>3</sub> ≥ 3342	1.1 R:Amberlite, S:PhMe, 3.5 h, rt $\rightarrow$ 100°C	Amberlite IRA 900 fluoride form resin used, Reactants: 1, Reagents: 1, Solvents: 1, Steps: 1, Stages: 1, Most stages in any one step: 1
STOWPOLE		References

The "Speedy" Synthesis of Atom-Specific 15N Imino/Amido-





#### ③丰富实用的检索途径、检索字段和检索限定

题录信息(基本同其他学科信息资源)
 主题、人名、来源……

■ 反应信息

反应式(完整/部分)、反应条件、产率、反应步骤……

■ 化合物信息

结构式、名称、代码、物理化学性质

不同数据库有各自不同的检索字段,检索时可辅以多种限定条件

## ③丰富实用的检索途径、检索字段和检索限定



## ③丰富实用的检索途径、检索字段和检索限定

		Solvents	Select Solvents
Characteristics	<ul> <li>Single component</li> <li>Commercially available</li> <li>Included in references</li> </ul>	Non-participating Functional Groups Number of Steps	Select Groups Examples: 1, 1-3, 1-, -3
Classes	<ul> <li>Alloys</li> <li>Coordination compounds</li> <li>Incompletely defined</li> <li>Mixtures</li> <li>Polymers</li> <li>Organics, and others not listed</li> </ul>	Classifications	BiotransformationNon-catalyzedCatalyzedPhotochemicalChemoselectiveRadiochemicalCombinatorialRegioselectiveElectrochemicalStereoselectiveGas-phase
Studies	<ul> <li>Analytical</li> <li>Biological</li> <li>Preparation</li> <li>Reactant or reagent</li> </ul>	Sources Publication Years	<ul> <li>Any source</li> <li>Patents only</li> <li>Sources other than patents</li> </ul> Examples: 1995, 1995-1999, 1995-, -1995
	化合物限定	化学	经历应限定

化学反应限定



# 化学及相关专业信息源

- ► SciFinder——可检索研究进展及化学反应和化合物信息
- ▶ Reaxys——包含丰富的理化数值、化学反应等信息
- DII之Chemicals——专利信息
- ► ACS Publications ——美国化学学会出版物
- ► RSC Publishing——英国皇家化学学会出版物
- Knovel-Chemistry & Chemical Engineering——交互式参考工具
- ▶ ICSD(Inorganic Crystal Structure Database)——世界上丰富的无机晶体结构数据
- ► CSD(Cambridge Structure Database)——全球小分子有机物和金属有机物晶体结构数据
- ▶ 网络免费资源



- Web of Science
- Engineering Village
- Scopus
- ProQuest

. . . . . .

- Elsevier ScienceDirect
- SpringerLink
- Wiley Online Library







# Content of SciFinder<sup>n</sup>

SciFinder<sup>n</sup> provides access to the world's most comprehensive and reliable collection of scientific research information. A global network of expert scientists curate and aggregate the world's scientific patent and journal content daily and make it fully discoverable through the advanced technology contained in SciFinder<sup>n</sup>. This ensures researchers have the most current and accurate substance, reaction, reference and commercial sourcing information available to quickly and confidently inform your critical research activities.





- ACS-Chemical Abstracts Service出版发行的基于网络的信息检索系统
- 及时报道最新研究动态,具有丰富的化学反应、化合物信息,商业信息,药品管制信息....,可用题录信息、结构式、反应信息、化合物性质检索
- 需要注册个人账号(须用.....tsinghua.edu.cn邮箱,且在校园网内注册,参见<u>http://www.lib.tsinghua.edu.cn/database/scifinder.htm</u>)
- ►访问入口: https://scifinder.cas.org

### 统一平台上的多个数据库

- CAPLUS (reference)
- ► MEDLINE (reference, NLM出版)
- REGISTRY (substance)
- CASREACT (reaction)
- CHEMLIST (regulated chemicals)
- CHEMCATS (chemical suppliers)
- MARPAT (patents by Markush structure)

### 检索实例 利用SciFinder检索关于青蒿素制备的文献





#### Exact Search vs Similarity Search

<b>1 of 5</b> S	tereo Candidates Selected		Substances
	Absolute stereo match		57
	Absolute stereo mirror image		1
	Relative stereo match		1
	Stereo that doesn't match query		6
	No stereo in answer structure	Evact Soarch	8
		Exact Search	
1 of 9	Similarity Candidates Selected		Substances
	≥ 99 (most similar)		73
	95-98		15
	90-94		94
	85-89		167
	80-84		216
	75-79	Similarity Search	364
	70-74	Similarly Search	704
	65-69		1995
	0-64 (least similar)		8472





EXPERIMENTAL PROPERTIES

EXPERIMENTAL SPECTRA

PREDICTED PROPERTIES

PREDICTED SPECTRA

REGULATORY INFORMATION

BIOACTIVITY INDICATORS

TARGET INDICATORS

CAS REFERENCE ROLES

ADDITIONAL DETAILS

#### Limit results to:

- Adverse Effect, including toxicity
- Analytical Study
- **Biological Study**
- Combinatorial Study
- Crystal Structure
- Formation, nonpreparative
- Miscellaneous
- Occurrence

#### For each sequence, retrieve:

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

#### Get References

- -Preparatio
  - Process
  - Properties
  - Prophetic in Patents
  - Reactant or Reagent
  - Spectral Properties
  - Uses

#### 201903截屏



Preferences | SciFinder Help 🔻 Sign Out

÷

~0 😰

A CAS SOLL									
									come Lin Jia
Explore 🔻	Saved S	earches 🔻	SciPlanner				Save	Print	Export
Chemical Structure e	Chemical Structure exact > substances (58) > get references (1205)								
REFERENCES @		of Get Substand	ces Get Reactions	Get Related 🗸	Tools 🔻		Create Keep Me Posted Alert		end to ciPlanner
Analyze Refine	Categorize	Sort by: Acces	ssion Number 🔻 🦊					Displ	ay Options
Analyze by: 🛛		<b>•</b> • • • •	of 1205 References Select	ed			A A Page:	1 of	61 🕨 🗎
Author Name	•		k" Singlet Oxygen Mad	e Easy					
Jia Pengfei	32		View 🗹 Other Sources	Rudolf K.; Wirth, Thomas					~0 🚱
Jiang Hongge	32				iguage: English, Database: CAPLUS lark" singlet oxygen was developed.  The singlet oxygen was efficiently reacted with several chen	n trans to give the corresponding	a overappated products	in high	<b></b>
					was successfully applied in the synthesis of the antimalarial drug artemisinin.	n. daps to give the corresponding	y oxygenated products	minign	
Wang Chenglong	32			-					
Guo Jianzhao	31		Nod for locating synthe View PATENTPAK *	tic terpenoids by utiliz	'ersinia lipolytica pathway				÷
Shen Tao	31		ngsheng; Hou, Jin; Jiang, X ning Zhuanli Shenqing (201		Language: Chinese, Database: CAPLUS				~0 🚰
Tang Kexuan	22	() 0	120 FP1 CP1		ion discloses a method for locating synthetic terpenoids by using the Yarrowia lipolytica pathwa. The synthesis method disclosed by the invention comprises the following steps: overexpress				
Avery Mitchell A	20	atod (m		reduc	of a mevalonic acid synthesis pathway in Yersinia lipolytica and positioning the enzyme to a pero	xidase body to obtain engineering			
		tene/Lin	60 - 3	farne	to obtain engineering bacteria FP1, expressing $\beta$ -carotene to obtain engineering bacteria CP1, or e	2			
Haynes Richard K	17	n/b-Caro	40						
O Neill Paul M	15	meseme	20-						
Ouyang Fan	14	-0 -0	Oleic acid Triolein Soybe	an oil Paim oil					
		3. Tota	l synthesis of complex	natural products: con	tion of chemical synthesis and biosynthesis strategies				2
Show More			View C Other Sources	Shuanhu		901000 <del>#</del>			~0 6
		From You	uji Huaxue (2018), 38(9), 2	185-2198.   Language: (		201909截		<u> </u>	- <u>-</u>
		discov		sis of natural products	t important field in org. chem. Natural products and derivs., contg. complex structures and po ugh the combination of chem. synthesis and biosynthesis strategies is reviewed. The main contr				
1		4. Com	position for preventing	and treating skin infl	ation				8

4. Composition for preventing and treating skin inflammation Quick View PATENTPAK

By Yu, Jie; Wang, Gang From Faming Zhuanli Shenqing (2019), CN 110013495 A 20190716. | Language: Chinese, Database: CAPLUS

The invention belongs to the field of medicines and cosmetics. The tech. problem to be solved by the invention is to provide a compn. for preventing and treating skin inflammation. The title compn. for preventing and treating skin inflammation comprises the following raw materials in parts by wt.: 0.05-10 parts of dihydroartemisinin, artesunate, artemisinin or Artemisia annua ext. contg. artemisinin and 0.10-5.00 parts of

# 方法2:从化合物名称入手

CAS Solutions  CAS Solutions  SCIFINDER  CAS SOLUTION  Explore  Saved S	earches  SciPlanner	CAS Solutions
Chemical Structure exact > substate REFERENCES Research Topic Author Name Company Name Document Identifier Journal Patent Tags SUBSTANCES Chemical Structure Markush Molecular Formula Property Substance Identifier REACTIONS Reaction Structure	ances (56) > 63968-64-9 > get references (1145) SUBSTANCES: SUBSTANCE IDENTIFIER	SUBSTANCES ●       ● Get References       ● Get References       ● Get Commercial Sources       ♥ Tools ●         Analyze Refine       Sort by: CAS Registry Number ●       ●         Analyze by: ●       ●       0 of 1 Substance Selected         Substance Role       ●       1. 63968-64-9 ●       ●         Analytical Study       1       ●       0 of 1 Substance Selected         ■       1. 63968-64-9 ●       ●       >         >Stis6       ●       ~114 ●       ① ① ① ① ① ① ① ① ① ① ① ① ① ① ① ① ①         Proparative       1       ●       ●       ●         Nonpreparative       1       ●       ●       ●         Properties       1       Properties       1       Absolute stereochemistry.         Prophetic in Patents       1       C15 H22 O5       3,12-Epoxy-124 Pyrano[4,3-f]-1,2-benzodioxepin-10(3 //)-one, octahydro-3,6,9-tritriethycloge SeR8a5.98,125,12a/P.         Necy Physical Properties       Regular Of IOTIMATION       Spectra         Spectra       Experimental Properties       Regular Properties
		Show More

# 方法3:从化学物质登记号入手

#### SUBSTAI

NCES: SUBSTANCE IDENTIFIER 😨	SCIFINDER' A CAS SOLUTION
	Explore     Saved Searches     SciPlanner       Substance Identifier "qinghaosu " > substances (1)
63968-64-9	SUBSTANCES @
	Analyze by: Substance Role Analytical Study Biological Study Biological Study Substance Role Analytical Study Biological Study Analytical Study Substance Role Substance Role
Enter one per line. Examples: 50-00-0 999815 Acetaminophen	Formation, Nonpreparative 1 Miscellaneous 1 Occurrence 1 Preparation 1
Search	Process       1         Properties       1         Prophetic in Patents       1         Reactant or Reagent       1         Absolute stereochemistry.         C15 H22 O5         3,12-Epoxy-12/+pyrano[4,3-j]-1,2-benzodioxepin-10(3/h)-one, octahydro-3,6,9-trimethyl-, (3R,5a,5,6R,8a,5,9R,12,5,12a,R)-         • Key Physical Properties         Regulatory Information         Spectra         Experimental Properties
	Show More

# 方法4: 从研究主题入手

Explore 🔻

Saved Searches

SciPlanner

#### Research Topic "preparation of artemisinin"

#### REFERENCES

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

Chemical Structure Markush

#### **REFERENCES: RESEARCH TOPIC**

#### preparation of artemisinin

Examples:

The effect of antibiotic residues on dairy products Photocyanation of aromatic compounds

#### Search

Search Search

SCI A CAS SO	FINDER <sup>®</sup>		Welcome Lin Jia
Explore <b>•</b>	Saved Searches -	SciPlanner	

#### Research Topic "preparation of artemisinin"

REFERENCES 😨	
	Select All Deselect All

1 of 5 Research Topic Candidates Selected						
	39 references were found containing "preparation of artemisinin" as entered.					
	2239 references were found containing the two concepts "preparation" and "artemisinin" closely associated with one another.	2239				
	3710 references were found where the two concepts "preparation" and "artemisinin" were present anywhere in the reference.	3710				
	13132690 references were found containing the concept "preparation".	13132690				
	13617 references were found containing the concept "artemisinin".	13617				

Get References





#### 4. Synthesis, antimalarial activities and cytotoxicities of amino-artemisinin-1,2-disubstituted ferrocene hybrids

#### Quick View 🛛 🖉 Other Sources

By de Lange, Christo; Coertzen, Dina; Smit, Frans J.; Wentzel, Johannes F.; Wong, Ho Ning; Birkholtz, Lyn-Marie; Haynes, Richard K.; N'Da, David D. From Bioorgania & Medicinal Chemistry Letters (2018), Ahead of Print. | Language: English, Database: CAPLUS

**Artemisinin**-ferrocene conjugates incorporating a 1,2-disubstituted ferrocene analogous to that embedded in ferroquine but attached via a piperazine linker to C10 of the **artemisinin** were **prepd**. from the piperazine **artemisinin** deriv., and activities were evaluated against asexual blood stages of chloroquine (CQ) sensitive NF54 and CQ resistant K1 and W2 strains of Plasmodium falciparum (Pf). The most active was the morpholino deriv. 5 with IC<sub>50</sub> of 0.86 nM against Pf K1 and 1.4 nM against Pf W2. The resistance indexes were superior to those of current clin. artemisinins. Notably, the compds. w...

#### 5. Method for preparing artemisinin analogue using petroleum ether Q Quick View PATENTPAK

By Hu, Guoyuan; Xu, Jie; Li, Weiwei; Cheng, Chuanke; Zhang, Qian From Faming Zhuanli Shenqing (2018), CN 108484634 A 20180904. | Language: Chinese, Database: CAPLUS



The present invention relates to an **artemisinin** analog **prepn**. method comprising the following steps: (1) extg. the artemisia plant with petroleum ether to obtain a crude plant ext.; and (2) subjecting the crude plant ext. to chromatog. to isolate the final product. The **artemisinin** analog **prepn**. method has high sepn. yield, low cost, can be used for extg. crude drug with low drug content and silica gel, and is suitable for industrial produ.

自动执行概念检索

#### 6. Artemisinin-anilinoquinazoline derivative, its preparation method and application in treating tumor Q Ouick View PATENTPAK

By Zuo, Zhili; Zhang, Shuqun; Liu, Hui; Li, Yan; Zhang, Yunqin; Wang, Liangliang From Faming Zhuanli Shenqing (2018), CN 108484632 A 20180904. | Language: Chinese, Database: CAPLUS

An **artemisinin**-anilinoquinazoline deriv. having good inhibitory effect on human colon cancer cells (HCT116) and melanoma cells (WM-266-4) by in vitro anti-tumor cell activity assay, and use for the **prepn**. of antitumor drugs is provided. The **prepn**. method comprises the following steps: dissolving dihydroartemisinin and anilinoquinazolinol in dichloromethane, protecting by argon, slowly adding  $BF_3.Et_2O$ , after the reaction, carrying out thin layer chromatog., dilg. with methylene chloride, washing with satd. aq. sodium hydrogen carbonate, drying over anhyd. sodium sulfate, purifying to obtain is...

	Explore Refer	rences				
	<b>Research Topic</b> Author Name Company Name Document dentifier	Research T	opic 🕈	<mark>bird flu virus</mark> Examples: The effect of antibiotic residues on dairy products Photocyanation of aromatic compounds	Search	
	Journal Patent Tags <sub>New</sub>		By Ts From [M ina ina	ne mask and the graft polymer extract utsumi, Kazuhiro Jpn. Kokai Tokkyo Koho (2009), JP 2009225930 A 20 achine Translation of Descriptors]. The activation of the bird influenza virus, the activation of the Norovirus is provided. It we	0091008. Language: Japanese, Datab e mask which carries out e cat, the dog, and the human ears in the face part, and it is t	inactivation of Calicivirus and the mask which
			do ma cel <b>∛</b> St	ries out inactivation of inactivation of the g, and the human Calicivirus, and inactiv- iterial 2 formed with the cellulose nonwove lulose with which the sulfonic group or the a ubstances Areactions fCiting DFull Text of	ation of the Norovirus, and t en fabric is equipped. The wat amino group was b PLink <b>@</b> 0 Comments <b>D</b> 0 Ta	the mask base ter ext. of graft gs
自动执	行概念检	索	dete By Zh From A (Ni de: ani de: de: of ↓	evelopment of a diagnostic test system ection of avian influenza A virus emaeva, L. V.; Kozlov, A. Yu.; Yamnikova, S. S.; Kal'ne Voprosy Virusologii (2009), 54(4), 45-49. Language: P panel of hybridomas producing monoclona P) of avian influenza A virus was obta signed an antigen-bound ELISA (sandwich tigen-bound antibodies and NP MAbs conjug tection antibodies. The specificity of the t td. The developed test system was ascerta all study subtypes and to yield no cross reac ubstances Areactions Citing DFull Text of	ov, S. L.; Verkhovskii, O. A.; Aliper, T. Russian, Database: CAPLUS I antibodies (MAbs) to nucleo ined. On the basis of 2 MAb ELISA), in which NP3 MAbs jated with horse radish peroxic test system to <b>avian influer</b> ined to specifically detect <b>influ</b> tions with other tested <b>virus</b> p <b>Cink 0</b> Comments <b>0</b> Ta	I. bocapsid protein bs, the authors were used as lase as antigen <b>nza virus</b> as <b>uenza</b> A <b>virus</b> bathogen
				nosphoantigen-expanded human γδT c locyte derived macrophages infected v		



REFERENCES 😧		
	Select All Deselect All	
	1 of 16 Research Topic Candidates Selected	References
	2370 references were found containing the concept "preparation", and at least one of the concepts "artemisinin", "qinghaosu", "artemisinine" or "arteannuin". The concepts found were closely associated with one another.	2370
	3810 references were found containing the concept "preparation", and at least one of the concepts "artemisinin", "qinghaosu", "artemisinine" or "arteannuin". The concepts found were present anywhere (perhaps widely separated) within the reference.	3810
	2239 references were found containing the two concepts " <b>preparation</b> " and " <b>artemisinin</b> " closely associated with one another.	2239
	3710 references were found where the two concepts "preparation" and "artemisinin" were present anywhere in the reference.	3710
	943 references were found containing the two concepts " <b>preparation</b> " and " <b>qinghaosu</b> " closely associated with one another.	943
	2298 references were found where the two concepts " <b>preparation</b> " and " <b>qinghaosu</b> " were present anywhere in the reference.	2298
	899 references were found containing the two concepts "preparation" and "artemisinine" closely associated with one another.	899
	2262 references were found where the two concepts "preparation" and "artemisinine" were present anywhere in the reference.	2262
	972 references were found containing the two concepts "preparation" and "arteannuin" closely associated with one another.	972
	2324 references were found where the two concepts " <b>preparation</b> " and " <b>arteannuin</b> " were present anywhere in the reference.	2324
	13132690 references were found containing the concept " <b>preparation</b> ".	13132690
	13862 references were found containing at least one of the concepts "artemisinin", "qinghaosu", "artemisinine" or "arteannuin".	13862
	13617 references were found containing the concept "artemisinin".	13617
	7710 references were found containing the concept "qinghaosu".	7710
	7616 references were found containing the concept "artemisinine".	7616
	7689 references were found containing the concept "arteannuin".	7689
	Get References 20190312截屏	

٠

#### Get References

## 检索方法 (Research Topic)

#### entering a phrase or sentence in English

- Specify several concepts using plain English.
- Include prepositions and articles to connect the concepts.
- Place acronyms or synonyms in parentheses after the synonymous concept.
- Use "not" or "except" to exclude a particular term.

Note: SciFinder automatically searches related terms and considers alternate spellings and word endings when retrieving results.

### 检索方法 (Research Topic)

Intramolecular hydroamination of aminoalkenes • reaction kinetics of oxyphosphoranes with alcohols • I am interested in the milk production of cows (检索时系统自动匹配bovines/calf/cattle) • human immunodeficiency virus (检索时系统自动匹配HIV)



### ► Elsevier出版发行的网络数据库

- ■丰富的化学反应和化合物信息,汇集所有化合物之物理、化学、生物、药理学数据,所有数据经过实验验证.....
- 可用题录信息、结构式、反应信息、化合物性质进行检索
- ►访问入口: https://www.reaxys.com
- ■参见: http://www.lib.tsinghua.edu.cn/database/reaxys.htm
#### Reaxys



Copyright © 2018 Elsevier Life Sciences IP Limited.

*RELX* Group<sup>™</sup>

	<b>artemether</b> C <sub>16</sub> H <sub>26</sub> O <sub>5</sub> 298.379 6569878 Identification	71963-77-4 Bioactivity - 312	Preparations - 17
	Physical Data - 25	Other Data - 108	Reactions - 29 >
	Spectra - 21		Documents - 204
artemether			×
✓ Identification			
<ul> <li>Physical Data - 25</li> </ul>		Reaxys中物质(此例为蒿甲醚)	
✓ Spectra - 21		的所有性质集中呈现	
A Bioactivity - 312			
✓ Pharmacological Data	- 311		
✓ Ecotoxicology - 1			
✓ Other Data - 108			



## The Nobel Prize in Chemistry 2019







III. Niklas Elmehed. © Nobel Media. M. Stanley Whittingham Prize share: 1/3 III. Niklas Elmehed. © Nobel Media.

Akira Yoshino Prize share: 1/3 Fe1.5Lio.5MnO4的红 外光谱数据及导电率

The Nobel Prize in Chemistry 2019 was awarded jointly to John B. Goodenough, M. Stanley Whittingham and Akira Yoshino "for the development of lithium-ion batteries."

Reaxys°	Quick search Query builder Results Synthe	esis planner History	Register > Sign in	?
	Search in: Reactions	> Substances > Documents >	Find search fields and forms	a
▶ 🖳 🏷 🛍 Import Save Reset form Delete all		Cture Molecular Formula CAS RN TI, AB & KW	Fields Forms History	
			◇ Titles, Abstracts & Keywords	**
♦ Structure		×	< > All Keywords	* * * * * * * *
	Create Structure / Reaction Drawing		Identification	^
AND 🗇 Molecular Formula	is 🗸 FeLiMnO4			* * * * * * * *
				* * * * * * * *
			✓ Molecular Formula	0 0 0 0 0 0 0 0 0 0
				0 0 0 0 0 0 0 0 0 0
			Preferred CAS Registry Number	0 0 0 0 0 0 0 0 0 0
				0 0 0 0 0 0 0 0 0 0
			Bioactivity Presence	0 0 0 0 0 0 0 0 0 0
			🛇 Catalyst Investigation	0 0 0 0 0 0 0 0
			♦ Charge	
			Feedback	Ģ

Reaxys®

Register > Sign in 🛛 🗇

•

104	Filters		104 9	Substances out of 38 Docum	ents containing 102 Reactions	Reaxys -	104 🗸
Query	Limit to > Exclude	>	0	↓ . Limit To Exclude Export Prep	A arations	Q <b>○</b>	s ↓ ∨ Grid 🛄
	By Structure	$\sim$	_	Ennicito Exclude Export Trep			
	Substances Classes	$\sim$	1		<b>Reaxys ID: 17537476</b> LiMn <sub>1.5</sub> Fe <sub>0.5</sub> O <sub>4</sub> 181.269 17537476		
	Molecular Weight	$\sim$		Fe <sub>0.5</sub> LiMn <sub>1.5</sub> 0 <sub>4</sub>	Identification		Preparations - 7 >
	Number of Fragments	$\sim$			Physical Data - 28		Reactions - 7 ゝ
	Availability	$\sim$			Spectra - 3		Documents - 12 >
	Availability in other databases	$\sim$			Other Data - 3		
	Available Data	~	-		Reaxys ID: 17256402		
	Document Type	$\sim$	2		Li <sub>0.5</sub> Fe <sub>1.5</sub> Mn <sub>1.0</sub> O <sub>4</sub> 206.177 17256402		
	Publication Year	$\sim$		Fe <sub>1.5</sub> Li <sub>0.5</sub> MnO <sub>4</sub>	Identification		Preparations - 4 >
					Physical Data - 21		Reactions - 4 >
					Spectra - 3		Documents - 7 >
			3		<b>Reaxys ID: 17031235</b> LiMn <sub>1.9</sub> Fe <sub>0.1</sub> O <sub>4</sub> 180.905 17031235		
				Fe <sub>0.1</sub> LiMn <sub>1.9</sub> O <sub>4</sub>	Identification		Preparations - 6 ゝ
					Physical Data - 6		Reactions - 7 ゝ
					Spectra - 1		Feedback 💭

✓ Identification

#### Physical Data - 21

- Density 2
- ✓ Crystal Phase 3
- ✓ Crystal System 1
- Electrical Data 2

Spectrum

not given

Show/Hide columns 🗸

Description (Electrical Data)	Comment (Electrical [	Data) Reference										
Electrical conduction mechanism	Electrical conduction mechanism Hankare; Patil; Sankpal; Jadhav; Mulla; Jadhav; Chougule[Journal of Magnetism and Magnetic Materials, 2009, vol. 321, # 19, p. 3270 - 3273] Full Text 7 Cited 69 times 7 Details > Abstract >											
Electrical conductivity	Electrical conductivity diagram Hankare; Patil; Sankpal; Jadhav; Mulla; Jadhav; Chougule[Journal of Magnetism and Magnetic Materials, 2009, vol. 321, # 19, p. 3270 - 3273] Full Text 7 Cited 69 times 7 Details > Abstract >											
✓ Magnetic Data - 10	<ul> <li>Magnetic Data - 10</li> <li>Load More</li> </ul>											
<ul> <li>Spectra - 3</li> </ul>												
IR Spectroscopy - 2			Show/Hide columns 🗸									
Description (IR Spectroscopy)	Solvent (IR Spectroscopy)	Comment (IR Spectroscopy)	Reference									
Bands	potassium bromide	350 cm**-1 - 1000 cm**-1	Hankare; Patil; Sankpal; Jadhav; Lokhande; Jadhav; Sasikala[Journal of Solid State Chemistry, 2009, vol. 182, # 12, p. 3217 - 3221] Full Text 🗍 Cited 53 times 🎵 Details 🔪 Abstract 🗲									

Full Text 🏹 Details 🗲 Abstract 🗲

Bonsdorf, G.; Schaeffer, K.; Langbein, H.[European Journal of Solid State and Inorganic Chemistry][1997, vol. 34, p. 1051 - 1062]

300 cm\*\*-1 - 1000 cm\*\*-1

## 练习:利用Reaxys查找-250℃时液态氢的密度?

## **Derwent Innovation Index-Chemicals**

Clarivate Analytics出品

■世界上最大的专利索引和引文数据库

►基于Web of Science信息平台提供服务

▶用题录信息检索或结构式检索

## ●参见:

http://www.lib.tsinghua.edu.cn/database/WOK.htm



## Web of Science

Select a database	Derwent Innovations Index			P Claim your publications Track your citations
	All Databases Web of Science Core Collection	Derwent Innovations Index (1963-present) Combines unique value-added patent information		
Basic Search C	BIOSIS Previews	indexed from over 50 patent issuing authorities in the Derwent World Patent Index (1963-present) with patent citations indexed from the Derwent Patents Citation Index		
Example: rechar	Chinese Science Citation Database SM Derwent Innovations Index	<ul> <li>(1973-present).</li> <li>Search across clearly written patent titles and</li> </ul>	Search	Search tips
	Inspec	<ul><li>abstracts that highlight the novelty, use, advantage, and claims of each invention.</li><li>Search precisely using international patent</li></ul>		
Timespan All years (1963 - 2019	KCI-Korean Journal Database ® MEDLINE	<ul> <li>classification codes or unique Derwent Class Codes.</li> <li>Combines patents from multiple patent issuing authorities into a single patent family for easy and</li> </ul>		
More settings 🔺	Russian Science Citation Index	complete discovery of each invention.		
Citation Indexes	Default Number of Search Fi	elds to Display		

Electrical and Electronic Section --1963-present

Engineering Section --1963-present

1 field (Topic)	•
	Save Settings

Data last updated: 2019-10-08

 $\checkmark$ 

## **ACS** Publications

美国化学学会电子出版物
清华大学订购了期刊部分
浏览或用书目信息检索
访问入口: http://pubs.acs.org/

▶参见: http://www.lib.tsinghua.edu.cn/database/acs.htm





Publications

=



## **RSC Publishing**

■RSC出版电子出版物

- 清华大学用户可访问订购的电子期刊全文和部分题录数据库

▶ 访问入口http://pubs.rsc.org/



http://www.lib.tsinghua.edu.cn/database/RSC.htm

Network access provided by: Tsinghua University

## The Royal Society of Chemistry's **Journals, Books and Databases**



#### Search our journals

Q

eg Journal title, search term, author, DOI

#### Jump straight to a journal

#### Analyst

1876 - Present

#### About our publications

The Royal Society of Chemistry publishes 44 peerreviewed journals, around 2,000 book titles and a collection of online databases and literature updating services.

Our international publishing portfolio covers the core chemical sciences including related fields such as biology, biophysics, energy and environment, engineering, materials, medicine and physics. As a notfor-profit publisher, we reinvest surplus funds back into the global scientific community, supporting our mission to advance excellence in the chemical sciences.

#### Open access

We provide authors with the option to make their article

ROYAL SOCIETY

OF CHEMISTRY

## Knovel——Chemistry & Chemical Engineering

▶ Elsevier出版的基于网络的交互式参考工具 ■可以按主题、按出版物进行浏览 ■可以在全文中进行主题检索和特性检索 部分图表具有交互式功能 支持大量的方程式计算 部分数据内容已生成模拟方程(标绘器) 访问入口: <u>http://app.knovel.com</u> 参见 http://www.lib.tsinghua.edu.cn/database/knovel.htm



合 Home > 今 Browse > Chemistry & Chemical Engineering > All Topics

Q

Login

All Content

My Subscription

Sorted by A - Z -



公 My

Knovel

G

Browse

## Chemistry & Chemical Engineering

References (736) Equations (269)

#### **TECHNICAL REFERENCES**

#### All Topics (736)

Knovel<sup>®</sup>

Analytical Chemistry (42)

Electrochemistry (14)

Dispersion & Aggregation (3)

Environmental Chemistry (19)

Industrial Chemistry & Chemicals

General References (213)

Catalysis (42)

Σ Equations

₽ Unit Converter



Industrial Safety (23)

(104)

NIST Thermodynamics Pure Compounds (1)

Physical Chemistry (93)



Covers both chemical processes and product development, including plant design and operation, as well as analytical chemistry, catalysis, separation, and synthesis used in the creation of new products... More  $\checkmark$ 



22nd Annual Conference of the German Crystallographic Society, March 2014, Berlin, Germany De Gruyter (2014)

This supplement Volume presents the complete abstracts of all contributions to the 22nd Annual Conference of the German Crystallographic Society in Berlin 2014.



METALS

 $D_{1} = \frac{1}{2} \frac{1}$ 

23rd Annual Conference of the German Crystallographic Society, March 16-19, 2015, Göttingen, Germany (2015)

This Supplement Volume 35 presents the complete Abstracts of all contributions to the 23rd Annual Conference of the German Crystallographic Society in Göttingen (Germany) 2015: Plenary Talks; Mic... More V

#### A Manual for the Chemical Analysis of Metals: (MNL 25)



检索实例: 查找-250℃时液态氢的密度



Knovel

## 查找—250℃时液态氢的密度



### SNCBI Resources 🗹 How To 🗹

How Io 🗹		Sign in to NCBI
	PubCnem	
All Databases 🔻		Search
MedGen		
MeSH		
	S	Quick Linko
C C		Quick Links
	Downloads Submissions Tools How To	BioSystems
PMC		PubChem BioAssay
PopSet	国外免费资源	PubChem Compound
Probe Protein		PubChem Substance
Protein Clusters		PubChem Structure
PubChem BioAssay	snips.	Search
PubChem Substance	from NCBI's Structure Group	
PubMed	BI Computational Biology Branch (CBB). These	
Sparcle	s and tools to help in the study of macromolecular	
SRA	•	
Structure	ogical pathways and systems.	
Taxonomy	•	
<u>https://w</u>	<u>ww.ncbi.nlm.nih.gov/</u>	
	stances contained in the roadoute (biggetivity lovels) are sific	
	All Databases         MedGen         MeSH         NCBI Web Site         NLM Catalog         Nucleotide         OMIM         PMC         PopSet         Probe         Protein         Protein Clusters         PubChem BioAssay         PubChem Substance         PubMed         SNP         Sparcle         SRA         Structure         Taxonomy	All Databases          MedGen       MesH         McBI Web Site       NLM Catalog         Nucleotide       OMIM         PMC       PopSet         Probe       Protein         Protein Clusters       PubChem BioAssay         PubChem Substance       nedical literature, small molecules, and sequence data in ships.         from NCBI's Structure Group       ng access and links to resources developed by the BI Computational Biology Branch (CBB). These s and tools to help in the study of macromolecular ains and protein classification, small molecules and their ogical pathways and systems.

וttps://www.ncbi.nlm.nih.gov/pcsubstance "

including descriptions of the conditions and the readouts (bioactivity levels) specific to the screening procedure.



# 3. 信息资源的合理选择

✔ 覆盖学科领域 综合、学科大类或单一学科 ✔覆盖地域 全球、某个国家…… ✓收录质量标准 高质量 vs 尽可能丰富

数据库选择要素

√源文献语种

✔ 源文献出版类型

期刊、图书、专利、技术报告、学位论文、会议论文、技术标准 ……

✓文献内容

研究论著、数据与事实、新闻报导……

✓数据时效性

✓ 对原始文献揭示深度

全文、题录

✓可访问性

正式订购(纸介+电子,本机构+公共文献机构……)、免费、试用

✓ 界面友好

同一个数据库可能在多个平台上提供服务, 增值功能不尽相同



✓ 平台内跨库检索 (Web of Science, .....)

✓ 基于元数据集成的一站式跨库检索 (Google Scholar、 水木搜索、……)





## 下面这篇文章可否在线阅读全文?

Asymmetric domino reactions. Part B: Reactions based on the use of chiral catalysts and biocatalysts By: Pellissier, Helene Source: Tetrahedron, Volume: 62, Issue: 10, Pages: 2143-2173, Journal; General Review, 2006, CODEN: TETRAB, ISSN: 0040-4020 DOI: 10.1016/j.tet.2005.10.041 ■全文链接服务 ✓ SFX ✓Kopernio ■电子期刊导航 ■电子图书导航 ■全文数据库 http://dx.DOI.org/..... ■水木搜索 ■馆际互借与文献传递





图书馆 检索首页 数据库 电子





## 获取单册 (引文链接器)

按引用信息查找特定的期刊文章、期刊或书籍。 为了获得最准确的结果,请包括题名、国际标准刊号、国际标准书号、DOI或PMID在内。

<ul><li>文章</li><li>〇 图书</li></ul>	○ 期刊		
文章题名	期刊题名		
月 ▼			
卷	期		
起始页	结束页		
ISSN	DOI	PMID	
作者姓	作者名	作者称谓	
出版商	出版日期		
C 重置			▶提交







# 清华大学电子期刊导航系统

期刊导航首页 核心期刊查询 图书馆主页 数据库导航

●期刊检索:			Q査找				
● 模糊查询	○精确匹配	○ 前方一致	○ ISSN	● 全部期刊	○中文刊	○外文刊	○免费刊

#### ❷按字顺浏览期刊:

中文刊:	<u>0-9</u> <u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	E	E	<u>G</u>	Н	1	Ţ	K	L	M	N	<u>0</u>	<u>P</u>	Q	<u>R</u>	<u>S</u>	Ι	<u>U</u>	V	W	X	Y	Ζ	全部
外文刊:	<u>0-9</u> <u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	E	E	<u>G</u>	Н	1	Ţ	<u>K</u>	L	M	<u>N</u>	<u>0</u>	<u>P</u>	Q	<u>R</u>	<u>S</u>	Ι	<u>U</u>	V	W	X	Y	Ζ	全部
免费刊:	<u>0-9</u> <u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	E	E	<u>G</u>	Н	1	Ţ	K	L	M	<u>N</u>	<u>0</u>	<u>P</u>	Q	<u>R</u>	<u>S</u>	Ι	<u>U</u>	V	W	X	Y	Ζ	<u>全部</u>

#### ● 按分类浏览:

医学、卫生和保健	总论	化学工程	艺术和人文
工程学	新教化学 11 合成	毒物学 分析化学	材料科学与冶金
环境科学	应用化学	药品化学	农业科学
地球科学	植 核化学 结晶学 · · · · · · · · · · · · · · · · · · ·	物理化学 无机化学	化学
信息技术	生物化学 临床化学	有机化学电化学	数学
社会科学	高分子塑胶	石油	生命科学
商业、经济和管理	环境化学 动力学	辐射化学	法律
通信技术			图书馆与情报学
物理			

清华大学图书馆 portal@mail.tsinghua.edu.cn Tsinghua Electronic Journals Service 2019年08月14日

## & 电子图书导航系统也期待同你的约会~~~~



## 5. 了解某学科领域高影响力期刊



•

- 《中文核心期刊要目总览》
- **JCR** (https://jcr.incites.thomsonreuters.com/)
- 中外文核心期刊查询系统 (http://coreej.cceu.org.cn/)

# 谢谢! & 问题?

## 请填写问卷调查,谢谢!



## 课件下载

