



# SciFinder<sup>®</sup>

The choice for chemistry research.<sup>™</sup>

2015



CAS representative / Shinwon datanet

Mina Kim





# Reference Searching

# 문헌 검색 첫 화면

The screenshot displays the SciFinder search interface. At the top, the SciFinder logo is visible. Below it, there are navigation tabs: 'Explore', 'Saved Searches', and 'SciPlanner'. The main search area shows a search topic: "Research Topic 'silver nanoparticles and nanow...'". A red box labeled '1' highlights the 'REFERENCES' section in the left sidebar, which includes options like 'Research Topic', 'Author Name', 'Company Name', 'Document Identifier', 'Journal', 'Patent', and 'Tags'. A red box labeled '2' highlights the search input field containing the text 'silver nanoparticles and nanowires'. Below the input field, there are examples of search results: 'The effect of antibiotic residues on dairy products' and 'Photocyanation of aromatic compounds'. A blue 'Search' button is present, along with an 'Advanced Search' link. A red box labeled '3' highlights the advanced search filters on the right, which include 'Publication Years', 'Document Types' (with checkboxes for Biography, Book, Clinical Trial, Commentary, Conference, Dissertation, Editorial, Historical, Journal, Letter, Patent, Preprint, Report, Review), 'Languages' (with checkboxes for Chinese, English, French, German, Italian, Japanese, Polish, Russian, Spanish), 'Author' (with fields for Last Name, First, and Middle), and 'Company' (with a text input field and examples like 'Minnesota Mining and Manufacturing' and 'DuPont').



# 검색 결과 분석

**REFERENCES** ?

Analyze Refine **Categorize**

Analyze by: ?

**Author Name** ▾

Ranjan Mukesh	4
Facsko Stefan	3
Akil S	2
Bachelot R	2
Balan L	2
Barboza Flores Marcelino	2
Chen Bin	2
Hong Franklin Chau Nan	2
Hong Seung Hyun	2
Jiang Chaoyang	2

Show More

**Categorize** ?

1. Select a heading and category.

Category Heading	Category
All	Substances (210)
Biotechnology	Topics (2)
General chemistry	
Technology	
Physical chemistry	
Polymer chemistry	
Synthetic chemistry	
Catalysis	
Analytical chemistry	
Biology	
Genetics & protein chemistry	
Environmental chemistry	

2. Select index terms of interest.

Index Terms	Count
<input checked="" type="checkbox"/> Silver	14
<input checked="" type="checkbox"/> Nanoparticles	12
<input checked="" type="checkbox"/> Nanowires	11
<input checked="" type="checkbox"/> Silver nitrate	4
<input type="checkbox"/> Ethylene glycol	3
<input type="checkbox"/> Polyvinylpyrrolidone	3
<input type="checkbox"/> Anisotropy	2
<input type="checkbox"/> Diffusion	2
<input type="checkbox"/> Electrodes	2
<input type="checkbox"/> Electron beam evaporation	2
<input type="checkbox"/> Gold	2
<input type="checkbox"/> Nanostructures	2
<input type="checkbox"/> Oxidation	2
<input type="checkbox"/> Particle shape	2
<input type="checkbox"/> Rhodamine 6G	2
<input type="checkbox"/> SERS (Raman scattering)	2

Selected Terms

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

**All > Substances (4 Terms)**

All > Substances > 4 Index Term(s) Selected

OK Cancel

**Author Name**

CAS Registry Number

CA Section Title

Company-Organization Database

Document Type

Index Term

CA Concept Heading

Journal Name

Language

Publication Year

Supplementary Terms

- Categorize:** 관심분야를 제한하여 결과 추출
- Analyze:** 검색결과 분류  
(저자명, 색인, 문서종류, 언어, 출판연도 별)

# 결과 내 재검색

Analyze **Refine** Categorize

Refine by: ?

Research Topic  
 Author  
 Company Name  
 Document Type  
 Publication Year  
 Language  
 Database

**Research Topic**

Examples:

*The effect of antibiotic residues on dairy products*

*Photocyanation of aromatic compounds*

**Refine**

**1. Refine:** 결과 내 재검색  
(주제어, 저자명, 기관명, 문서종류, 출판연도, 언어)

Author Name

\_\_\_\_\_

Last \*

\_\_\_\_\_

First

\_\_\_\_\_

Middle

Company Name

\_\_\_\_\_

Examples:

*3M*

*DuPont*

Publication Year(s)

\_\_\_\_\_

Examples: *1995, 1995-1999, 1995-, -1995*

Database

CAPLUS  
 MEDLINE

Language(s)

Chinese  
 English  
 French  
 German  
 Italian  
 Japanese  
 Polish  
 Russian  
 Spanish

Document Type(s)

Biography  
 Book  
 Clinical Trial  
 Commentary  
 Conference  
 Dissertation  
 Editorial  
 Historical  
 Journal  
 Letter  
 Patent  
 Preprint  
 Report  
 Review

REFERENCE DETAIL   Get Substances  Get Related Citations  Link to Other Sources **4**  Send to SciPlanner

**1** [Return](#) [Previous](#) [Next](#) **2**

### 1. Multifunctionalized nano- or microparticles joined to PNA/DNA chains with attached biomolecules

By: Del Pino Gonzalez de la Higuera, Pablo Alfonso; Grazu Bonavia, Maria Valeria; Martinez de la Fuente, Jesus; Santos Martinez de Laguna, Ruben; Sanchez Espinel, Christian  
Assignee: Universidad de Zaragoza, Spain; Fundacion Agencia Aragonesa para la Investigacion y el Desarrollo (ARAID); Nanoimmunotech, Srl

The present invention relates to prepn. of a multifunctionalized nanoparticle comprised of a core particle conjugated to a DNA or PNA chain and a mol. of interest conjugated to another complementary DNA or PNA chain. The hybridization of the complementary DNA/PNA "NIT zipper" results in a multifunctionalized nanoparticle. Examples discuss prepn. of several types of particles and their functionalization.

#### Patent Information

Patent No.	Kind	Language	Date	Application No.	Date
ES 2397909	A1		Mar 12, 2013	ES 2011-30713	May 5, 2011
WO 2012150373 	A1	Spanish	Nov 8, 2012	WO 2012-E570318	May 4, 2012
EP 2706354 	A1	English	Mar 12, 2014	EP 2012-731017	May 4, 2012

#### Priority Application

ES 2011-30713	A	May 5, 2011
WO 2012-E570318	W	May 4, 2012

#### Indexing

Biochemical Methods (Section9-2)

Section cross-reference(s): 3, 14, 63

#### Concepts

Magnetic resonance

agents of contrast of; prepn. m... incorporating PNA/DNA NIT zipper markers/labels or other coatings

#### Functional groups

alkyne; prepn. multifunctionalized NIT zipper linked to biomols., th... of interest, and uses

#### Substances

**3** 7440-21-3 Silicon, biological studies 

#### QUICK LINKS

0 Tags, 0 Comments

#### PATENT INFORMATION

Mar 12, 2013  
ES 2397909  
A1

#### APPLICATION

May 5, 2011  
ES 2011-30713

#### PRIORITY

May 5, 2011  
ES 2011-30713  
May 4, 2012  
WO 2012-E570318

#### SOURCE

Span.  
19pp.; Chemical Indexing  
Equivalent to 157:702505  
(WO)  
Patent  
2013  
CODEN:SPXXAD

- 해당 문헌의 제목, 저자명, 초록
- 해당문헌의 추가 정보: 서지정보, 출처, 언어 등
- Indexing, Concepts, Substance, Citation: 색인, 연구주제, 물질 및 인용정보 확인
- 물질, 인용정보, 원문링크

# Link, Save, print or export

1

Export

For:

Citation Manager

- Citation export format (\*.ris)
- Quoted Format (\*.txt)
- Tagged Format (\*.txt)

Offline review

- Portable Document Format (\*.pdf)
- Rich Text Format (\*.rtf)
- Answer Keys (\*.txt)

Saving locally

- Answer Key eXchange (\*.akx)

Details:

File Name: \*

Reference\_04\_29\_2014\_115908

Export Cancel

1. Multifunctionalized nano- or microparticles

By: Del Pino Gonzalez de la Higuera, Pablo Alfonso; Grazu B...  
Sanchez Espinel, Christian

Assignee: Universidad de Zaragoza, Spain; Fundacion Agenc...

The present invention relates to prepn. of a multifunction...  
and a mol. of interest conjugated to another complemen...  
zipper" results in a multifunctionalized nanoparticle. Exa...

Patent Information

Patent No.	Kind	Language
ES 2397909	A1	
WO 2012150373 <a href="#">PatentPak</a>	A1	Spanish
EP 2706354 <a href="#">PatentPak</a>	A1	English

Priority Application

ES 2011-30713	A	May 5, 2011
---------------	---	-------------

QUICK LINKS

0 Tags, 0 Comments

PATENT INFORMATION

Mar 12, 2013  
ES 2397909  
A1

APPLICATION

May 5, 2011  
ES 2011-30713

PRIORITY

May 5, 2011  
ES 2011-30713  
May 4, 2012  
WO 2012-ES70318

1. 해당화면 링크생성, 저장, 인쇄, 다운로드



# Substance Searching

# 물질 검색

The screenshot displays the SciFinder interface. On the left, a sidebar menu is highlighted with a red box and a yellow '1' in a box, showing the 'SUBSTANCES' section with options: Chemical Structure, Markush, Molecular Formula, Property, and Substance Identifier. Below this is the 'REACTIONS' section with 'Reaction Structure'. The main content area is titled 'SUBSTANCES: CHEMICAL STRUCTURE' and features a 'Structure Editor' window highlighted with a red box and a yellow '2' in a box. The editor window has tabs for 'Java' and 'Non-Java' and contains the text 'Click to Edit'. To the right of the editor, there are search type options: 'Exact Structure', 'Substructure' (selected), and 'Similarity'. Below these are checkboxes for 'Show precision a' and 'Java Structure Ed'. A 'Search' button and an 'Advanced Search' link are also visible.

## 1. SUBSTANCES: 물질 검색

- Chemical Structure: 구조식
- Markush: 마커시 구조
- Molecular Formula: 분자식
- Property: 물성
- Substance Identifier: 물질명, CAS번호

## 2. Structure Editor: 구조식 tool

# 구조식 검색: Structure Editor

Structure Editor

Draw or change atoms or bonds. [Shortcut Keys](#)

Atom Short

-X =R

1-4 Cl

Scale 100

C(O)CH3 C H O S N P Cl Br F I Si

C<sub>9</sub> H<sub>8</sub> O<sub>4</sub> (query) 180, 16

**Drawing Editor:**

- Structure
- Reaction
- Markush

**Get substances that match your query using:**

- Exact search
- Substructure search
- Similarity search

확인  
취소

## 1. 검색 옵션

- **Exact search:**  
똑같은 구조
- **Substructure search:**  
하부 구조
- **Similarity search:**  
유사 구조

# 물질 상세 정보

Substance Identifier "aspirin" > substances (1) > 50-78-2

SUBSTANCE DETAIL [?](#)

 Get References

 Get Reactions

 Get Commercial Sources

 Send to SciPlanner

[Return](#)

CAS Registry Number 50-78-2

~36,068   ~163 

**C<sub>9</sub> H<sub>8</sub> O<sub>4</sub>**  
Benzoic acid, 2-(acetyloxy)-

**Molecular Weight**  
180.16

**pKa (Predicted)**  
Value: 3.48±0.10 | Condition: Most Acidic Temp: 25 °C

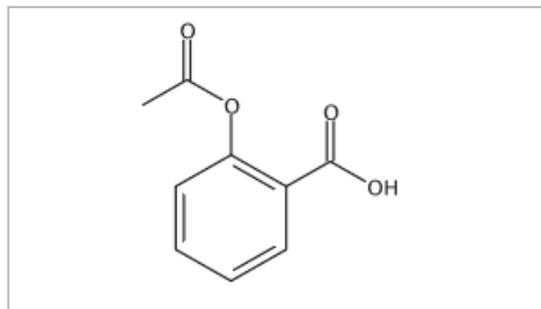
**Melting Point (Experimental)**  
Value: 135 °C

**Boiling Point (Experimental)**  
Value: 197-200 °C | Condition: Press: 7 Torr

**Density (Experimental)**  
Value: 1.40 g/cm<sup>3</sup>

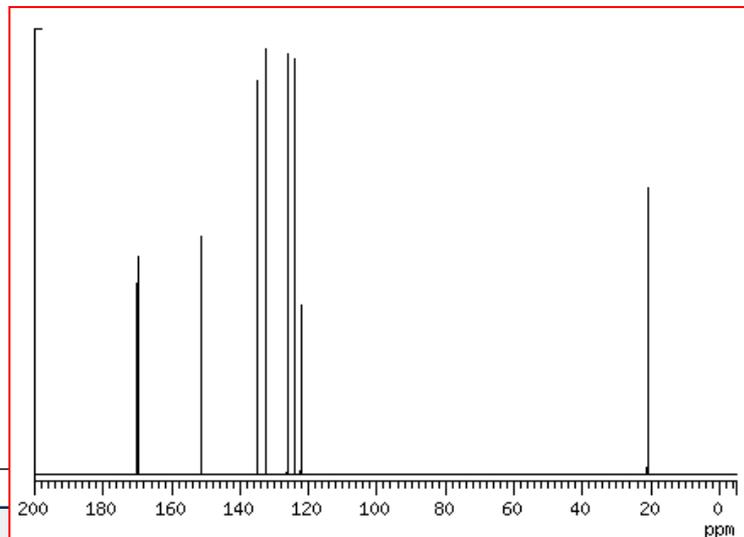
**Other Names**  
Rhodine (7CI)  
Salicylic acid acetate (8CI)  
2-(Acetyloxy)benzoic acid  
2-Acetoxybenzoic acid  
2-Carboxyphenyl acetate

[View more...](#)



1. Get References: 문헌 정보
2. Get Reactions: 반응 정보
3. Get Commercial Sources: 공급업체 정보 보기
4. Send to SciPlanner: SciPlanner 로 보내기

# 물질 상세 정보



▶ EXPERIMENTAL PROPERTIES

▶ EXPERIMENTAL SPECTRA

▶ PREDICTED PROPERTIES

▶ PREDICTED SPECTRA

▶ REGULATORY INFORMATION

▶ BIOACTIVITY INDICATORS

▶ TARGET INDICATORS

▶ CAS REFERENCE ROLES

▶ ADDITIONAL DETAILS

1. Experimental Properties
2. Experimental Spectra
3. Predicted Properties
4. Predicted Spectra
5. Regulatory Information
6. Bioactivity Indicators
7. Target Indicators
8. CAS Reference Roles
9. Additional Details

2

3

1,2. 실측치

3,4. 예측치

5. 규제정보

6,7. 생화학 정보

# 반응식 검색 결과

Chemical Structure substructure > substances (2335) > get reactions (140)

REACTIONS ? Get References Tools Send to SciPlanner

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

Analyze by: Reagent 0 of 140 Reactions Selected Page: 1 of 10

1. **View Reaction Detail** Link Similar Reactions 1

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

2 ~193

~94

**1. View details**

- View Reaction Detail
- Link
- Similar Reactions

**2. 공급업체 정보**

by one step: 1

**Overview**

**Steps/Stages**

1.1 C:H<sub>2</sub>SO<sub>4</sub>, rt; rt → 85°C; 15 min, 85°C

Show More



# Reaction Searching

# 반응식 검색

**REFERENCES**

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

**SUBSTANCES**

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

**REACTIONS**

- Reaction Structure

**REACTIONS: REACTION STRUCTURE**

**Structure Editor:**

Java Non-Java

Click to Edit

Search Type:

- Allow variability only as specified
- Substructure

Import CXF

**Search**

[Advanced Search](#)

**ChemDraw**

Launch a SciFinder substance or reaction search directly from ChemBioDraw Ultra 14. [Learn More](#)

# 반응식 검색: Reaction Editor

The screenshot displays the Reaction Editor window with a toolbar on the left and a central workspace. Two chemical structures are present: a reactant (Me-NH-O-H) and a product (a five-membered ring with a carbonyl group). A yellow instruction box at the top reads: "Click a reaction participant. A list of roles appears. Click a reaction role and click OK." A red box highlights the 'A B' button in the toolbar, with a red arrow pointing to it. A 'Reaction Roles' dialog box is open, showing the following options:

- product
- reactant
- reagent
- reactant/reagent
- any role

On the right side of the interface, the 'Drawing Editor' panel has 'Reaction' selected. Below it, the 'Get reactions where the structure(s) are:' panel has 'Substructures of more complex structures' selected. The status bar at the bottom shows the chemical formula C H5 N O . C5 H8 O and the reaction number 47,06,84,12.

## 반응식 검색 결과

Explore ▾ Saved Searches ▾ SciPlanner Save Print Export

Reaction Structure substructure > reactions (595)

REACTIONS ⓘ Get References Tools ▾ Send to SciPlanner

Analyze Refine

Group by: No Grouping ▾ Sort by: Relevance ▾ ↓

0 of 595 Reactions Selected

Analyze by: ⓘ  
 Reagent ▾

H <sub>2</sub> O	431
TiCl <sub>4</sub>	420
NaOMe	378
Cs <sub>2</sub> CO <sub>3</sub>	207
NaH	191
NaHCO <sub>3</sub>	78
Et <sub>3</sub> N	77
C <sub>5</sub> H <sub>5</sub> N	56
H <sub>2</sub> O <sub>2</sub>	56
HCl	54

[Show More](#)

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

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

▼ Overview

Steps/Stages	Notes
1.1 R:Disodium carbonate, R:Na <sub>2</sub> SO <sub>4</sub> , 10 min, rt	green chemistry, no solvent, solid state, Reactants: 2, Reagents: 2, Steps: 1, Stages: 1, Most stages in any one step: 1

**References**

Fast method for synthesis of alkyl and aryl-N-methylnitrones  
 Quick View Full Text  
 By Yavuz, Serkan et al  
 From Molecules, 16, 6677-6683; 2011



## Other functions

# 공급업체 검색 결과

SciFinder®

Explore | Saved Searches | SciPlanner

⚠ This chemical supplier information is provided on an "as is" basis. Please consult the suppliers for current information regarding pricing for any loss of profit, goodwill or any other damages arising out of the use of this information.

Substance Identifier "salicylic acid" > **1** Sources (1) > commercial sources (211)

**COMMERCIAL SOURCES**

Analyze by: Commercial Source

Commercial Source	Substance
1. <b>3B Scientific Corporation Product List</b> United States Set Preference	69-72-7 2-Hydroxybenzoic acid
2. <b>3B Scientific Corporation Product List</b> United States Set Preference	69-72-7 Salicylic acid
3. <b>A Chemtek Product List</b> United States Set Preference	69-72-7 Salicylic acid
4. <b>AAA Chemistry Stock Product List</b> Hong Kong Set Preference	
5. <b>AB Chem Product List</b> Canada Set Preference	
6. <b>Abblis Chemicals Product List</b> United States Set Preference	
7. <b>ABCR Product List</b> Germany Set Preference	

Analyze by:

- Crescent Chemical Product List: 11
- Fluka: 7
- Ryan Scientific Intermediate and Building Block Compounds: 7
- Spectrum Chemicals Product List: 6
- Reagent World Product List: 5
- SIAL: 5
- Wako Pure Chemicals Product List: 5
- Acros Organics: 4
- Chem Service Product List: 3

**SIGMA-ALDRICH**

206,000+ PRODUCTS | 500+ SERVICES | Featured INDUSTRIES

Hello, Sign in ACCOUNT | 24/7 SUPPORT | 0 Items ORDER

Korea (South) Home > S5922 - Salicylic acid

S5922 SIGMA  
**Salicylic acid**  
BioXtra, ≥99.0%  
Synonym: 2-Hydroxybenzoic acid

MSDS | SIMILAR PRODUCTS

CAS Number 69-72-7 | Linear Formula 2(HO)C<sub>6</sub>H<sub>4</sub>CO<sub>2</sub>H | Molecular Weight 138.12  
Beilstein Registry Number 774890 | EC Number 200-712-3 | MDL number MFCD00002439  
PubChem Substance ID 24899681

POPULAR DOCUMENTS: SPECIFICATION SHEET (PDF) | FTNMR (PDF)

구매 | Safety & Documentation | Protocols & Articles 2 | Peer-Reviewed Papers 115

**속성**

Related Categories	Acids, Acids & Bases, Aromatic Compounds, Bioactive Small Molecules, Cell Biology, 추가 사항
vapor density	4.8 (vs air)
vapor pressure	1 mmHg (114 °C)

**가격 및 재고여부**

SKU-Pack Size	확인가능여부	가격 (KRW)	수량
S5922-100G	배송 가능 30.04.2014 - FROM	124,000	0
S5922-500G	재고없음 Estimated delivery date 28.05.2014	285,000	0

## 1. 분류

- CAS번호
- 공급업체
- 판매 국가
- 공급업체 선호도
- 공급업체 web 지원 및 가격

## 2. 공급업체 정보

Bulk	Typically in stock	2 weeks
	Synthesis on demand	2 weeks
	Order from Source 500g, \$50	
	500g, EUR14.10	

# 알림기능: Keep Me Posted alerts

The screenshot shows the SciFinder interface for a search on "Duloxetine". The main interface includes navigation tabs (Explore, Saved Searches, SciPlanner), search results (0 of 1459 References Selected), and various tool buttons (Get Substances, Get Reactions, Get Related Citations, Get Full Text, Tools). A pink box highlights the "Create Keep Me Posted Alert" button. An arrow points from this button to a red-bordered dialog box titled "Create Keep Me Posted Profile".

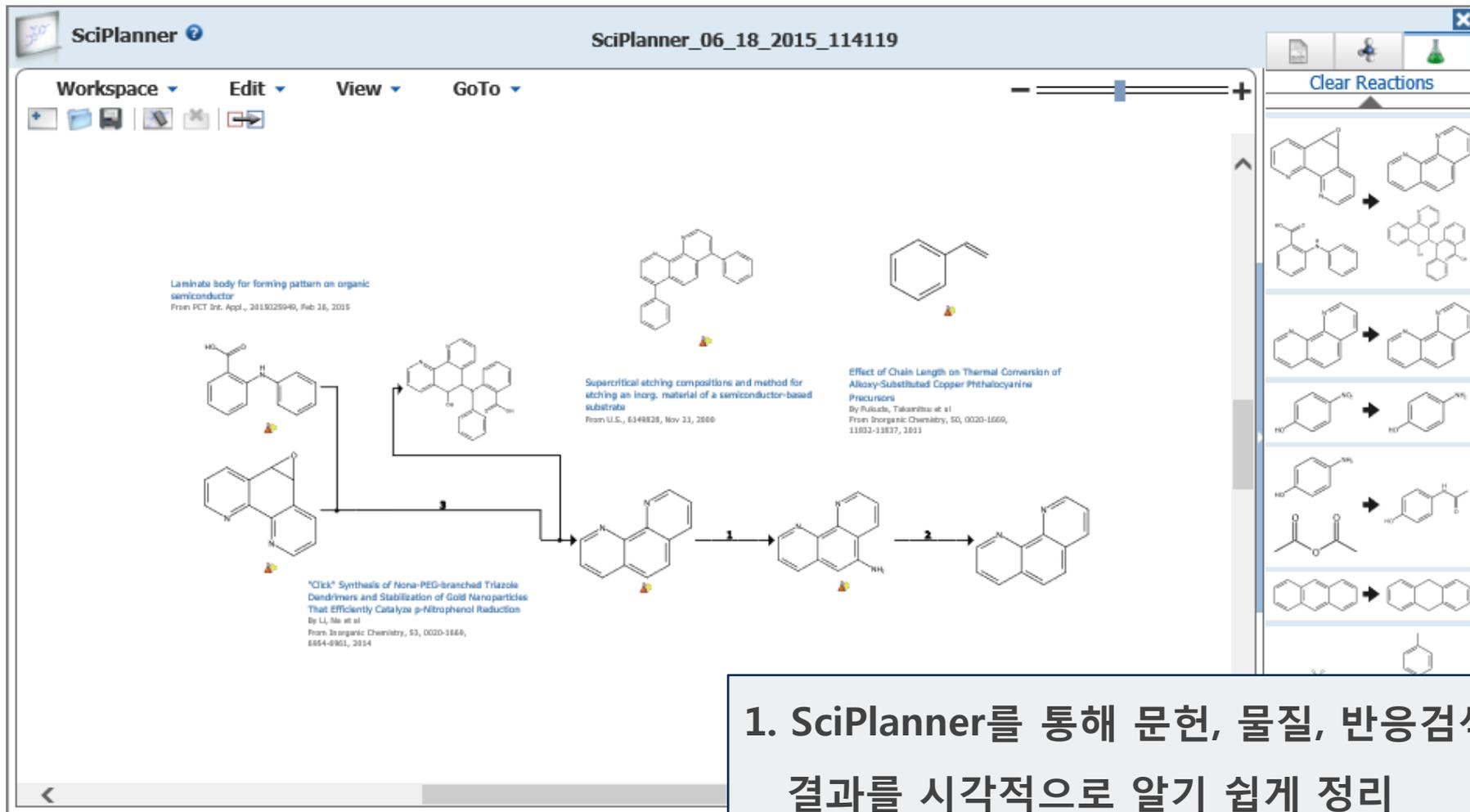
The "Create Keep Me Posted Profile" dialog box contains the following fields and options:

- Title:** \* Required (Duloxetine references)
- Description:** (Empty text area, Characters Remaining: 1024)
- Duration:** Expires On: May 14, 2014 (Change)
- Frequency:** Send updates once every (Week)
- Exclude previously retrieved references.
- Buttons:** Create, Cancel

A blue box in the bottom right corner contains the following Korean text:

**CAS 데이터베이스에  
관련정보가 업데이트되면  
자동으로 저장**

# 나만의 연구실 구현 : SciPlanner



1. SciPlanner를 통해 문헌, 물질, 반응검색 결과를 시각적으로 알기 쉽게 정리
2. Retro-Synthesis 가능

## CAS SciFinder 인허 계약

- ▶ 나는 고유한 로그인 ID 및 비밀번호를 다른 사람과 공유하지 않겠습니다.

\*MACid (Media Access Control identifier): 컴퓨터의 물리적 주소

- ▶ 나는 최대 5 천 개의 기록만 저장하겠습니다.

- ▶ 나는 타 기관의 연구를 위해 검색 결과를 제공하거나,  
대신하여 연구를 수행하지는 않을 것입니다.

- ▶ CAS 정보 사용 정책 더 보기

<http://www.cas.org/legal/infopolicy.html>

# Thank you!



**CAS Representative\_신원데이터넷**

Tel : 02) 326-3535

Mail to : [cas@shinwon.co.kr](mailto:cas@shinwon.co.kr)