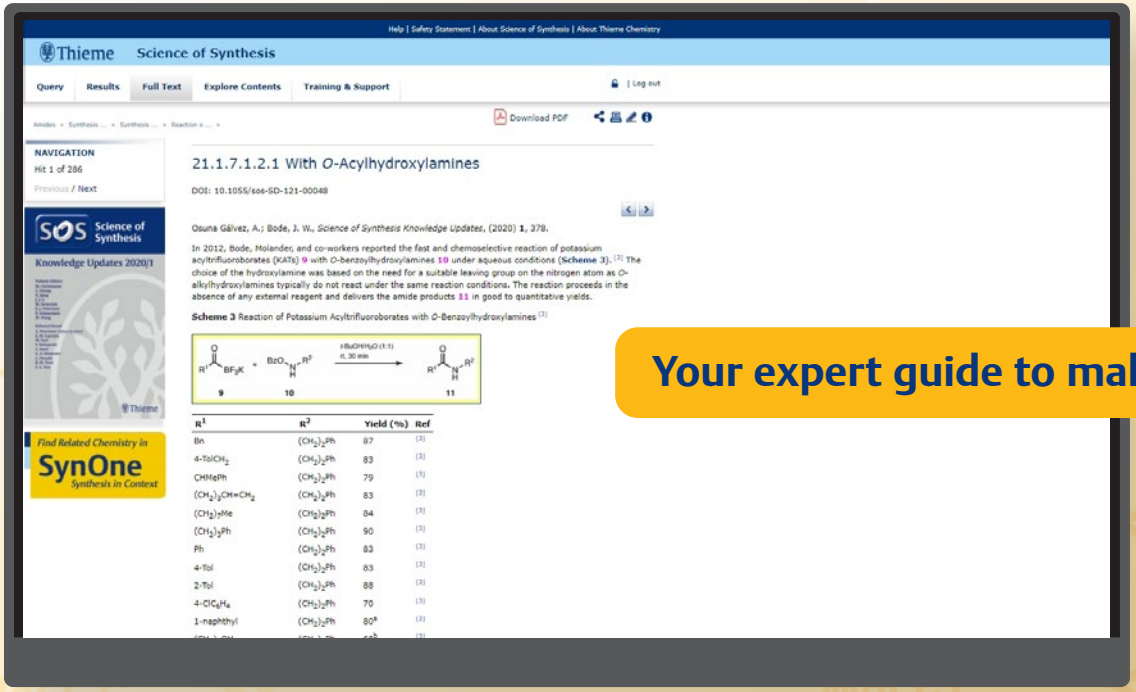
Science of Synthesis

Quick Start Guide



Your expert guide to making molecules

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Query

Navigation

Query
Search SOS

Results
Hitlist of search results

Full Text
Descriptions of transformations with experimental procedures

Explore Contents
Overview of all transformations by functional group

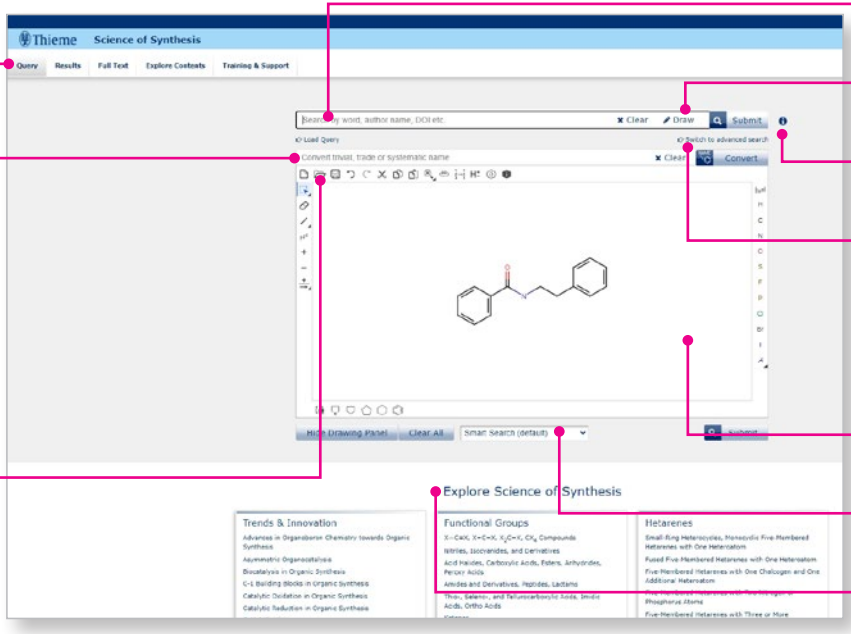
Training & Support
Training materials, general information and news

Name to structure tool

Simply type a name, click convert, and the structure appears ready for searching

Upload

Load an existing structure/ reaction
(e.g. from a ChemDraw file)



Text search

Open/close the drawing panel

Information on search options

Citation search

Search for a Science of Synthesis article by bibliographic information, author name, etc.

Structure and reaction search

Search type for structure/reaction searches

Explore SOS by topic

To start a search, please go to

sos.thieme.com

Science of Synthesis is accessible with an institutional license by IP authorization or username and password.
If you cannot access Science of Synthesis, please contact your librarian or information manager.

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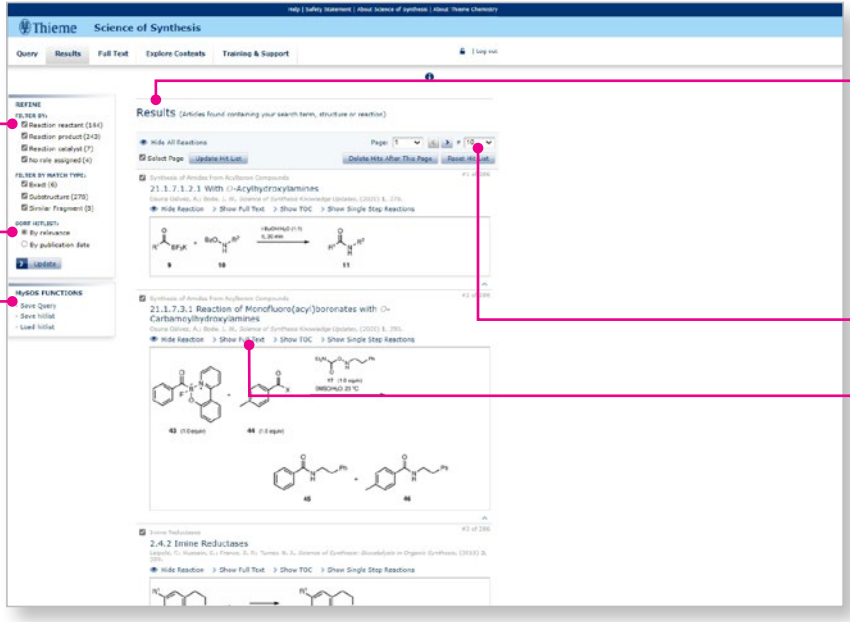
Results

Filter results

Sort hitlist

Save/load hitlist

Only available if logged in to MySOS.



Ranked search results

After structure or reaction searches, a scheme showing the hit is displayed. Text searches show text snippets displaying the search term in context.

Navigate within hitlist pages

Show full-text review

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Full Text

Show context of method in breadcrumb navigation

Navigation within hitlist

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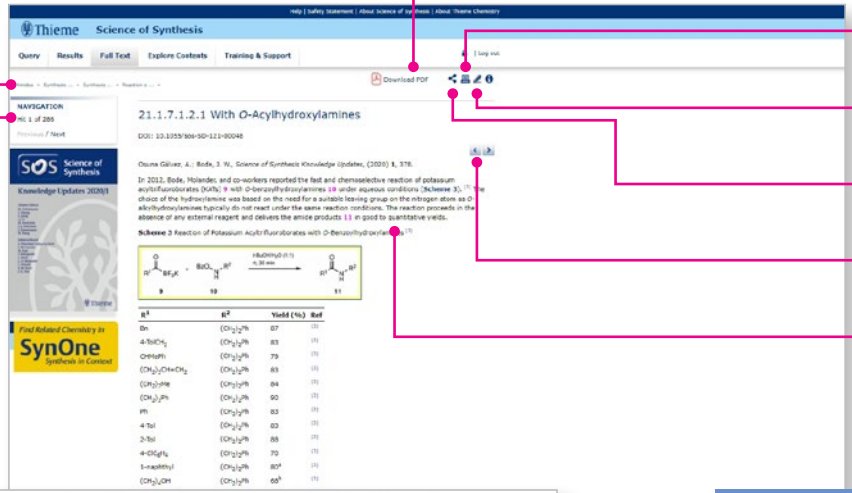
Print page or chapter

Cite article

Share article

Navigation within the article or volume

Discussion of method, including reaction scheme and scope



Selected experimental procedures

***N*-(2-Phenylethyl)-4-phenylbutanamide [11, $R^1 = (CH_2)_3Ph$; $R^2 = (CH_2)_2Ph$]; Typical Procedure:** [3]

O-Benzoyl-*N*-(2-phenylethyl)hydroxylamine [**10**, $R^2 = (CH_2)_2Ph$; 26.1 mg, 0.11 mmol, 1.1 equiv] was dissolved in H_2O/*t*-BuOH (1:1; 1 mL) in a glass vial at rt. Potassium (4-phenylbutanoyl)trifluoroborate [**9**, $R^1 = (CH_2)_3Ph$; 25.4 mg, 0.10 mmol, 1.0 equiv] was added and the mixture was shaken until the starting materials had dissolved. After standing for 30 min, the mixture was diluted with EtOAc (20 mL), washed with sat. aq $NaHCO_3/H_2O$ (1:1; 2 × 5 mL) and brine (5 mL), and then dried (Na_2SO_4), filtered, and concentrated. The crude material was triturated with hexanes (2 mL), the hexanes were decanted, and the residue was dried to give the amide product as a white solid; yield: 24 mg (90%).

Links to primary literature

References

[3] Dumas, A. M.; Molander, G. A.; Bode, J. W., *Angew. Chem. Int. Ed.*, (2012) **51**, 5683.

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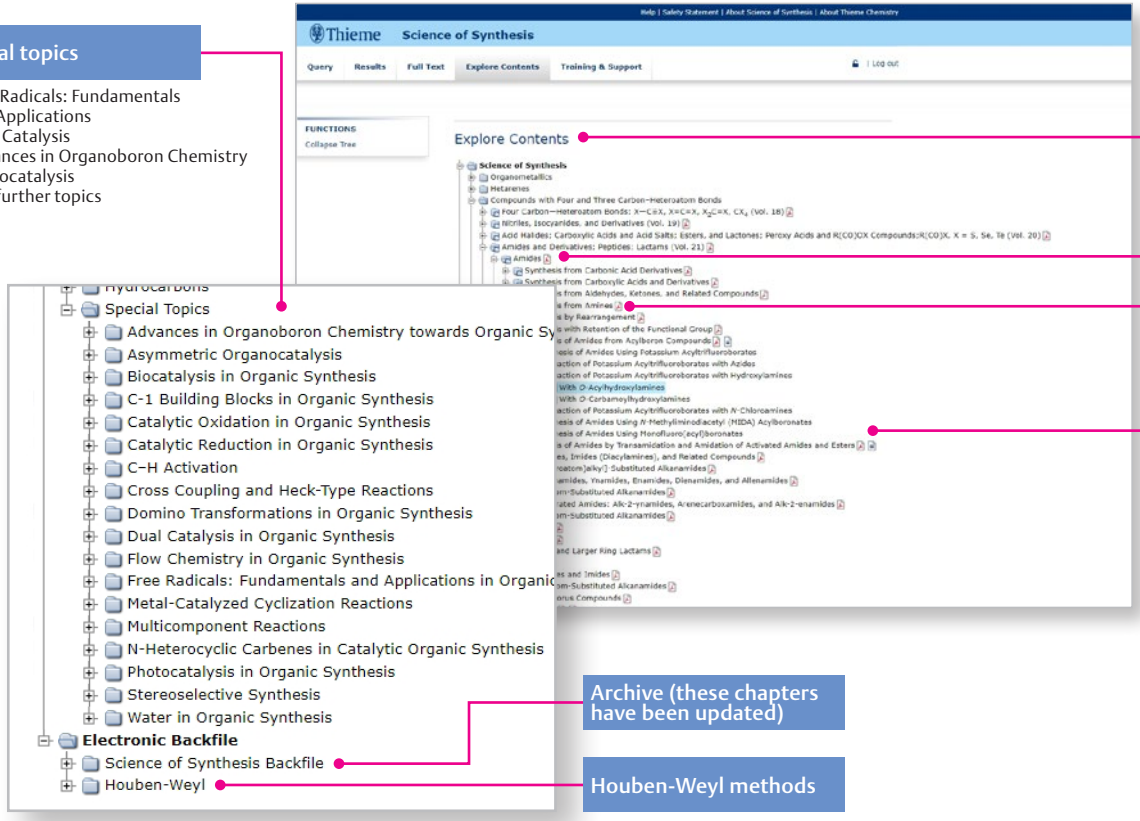
Explore Contents

Special topics

- Free Radicals: Fundamentals and Applications
- Dual Catalysis
- Advances in Organoboron Chemistry
- Photocatalysis
- and further topics



Logical organization of content

Compound class introduction

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Archive (these chapters have been updated)

Houben-Weyl methods

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Training & Support

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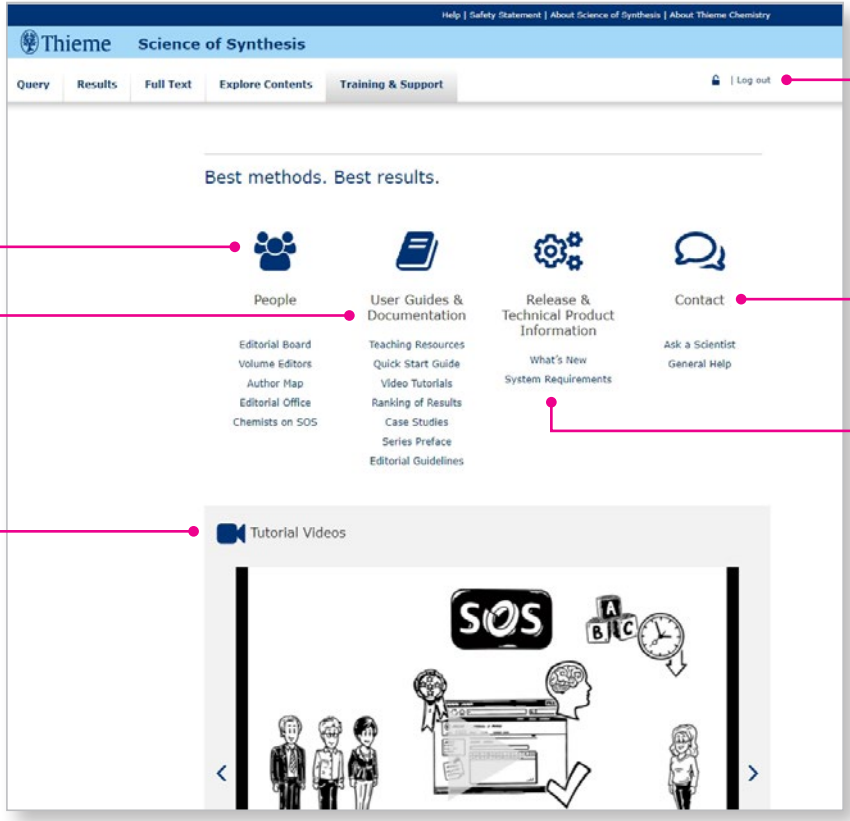

Login to MySOS

Within Science of Synthesis you can register for a MySOS personal account. This allows you to login to SOS from outside your institution as well as save and load queries and hitlists.

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Having problems with login or finding what you want in SOS? No problem! Please get in touch and we'll help, whether it be with a technical issue or if you need personalized help in constructing a specialized search.

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Science of Synthesis provides a critical review of synthetic methodology developed to-date in the fields of organic and organometallic chemistry.

Features include

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- Full-text descriptions of synthetic methods with practical experimental procedures that are immediately applicable in the lab
- Community of over 2,500 experts involved in the review and updating of methods
- Logical organization of the synthetic methods for each functional group allowing rapid route optimization
- Intuitive search functions giving quick access to relevant, high-quality content
- Definitive overviews of some of the hottest areas in synthetic chemistry, covering basic concepts as well as practical aspects

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Science of Synthesis helps you get up to speed on a chosen field of research quickly and complete the design of your synthetic strategy. It helps you answer questions such as:

- **What is the best synthetic strategy to use?**
- **Which experts work in this field?**
- **What is the background and context to the field of research I am interested in?**
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- **What should I avoid based on the experience of other chemists working in the field?**

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