SpringerMaterials User Guide

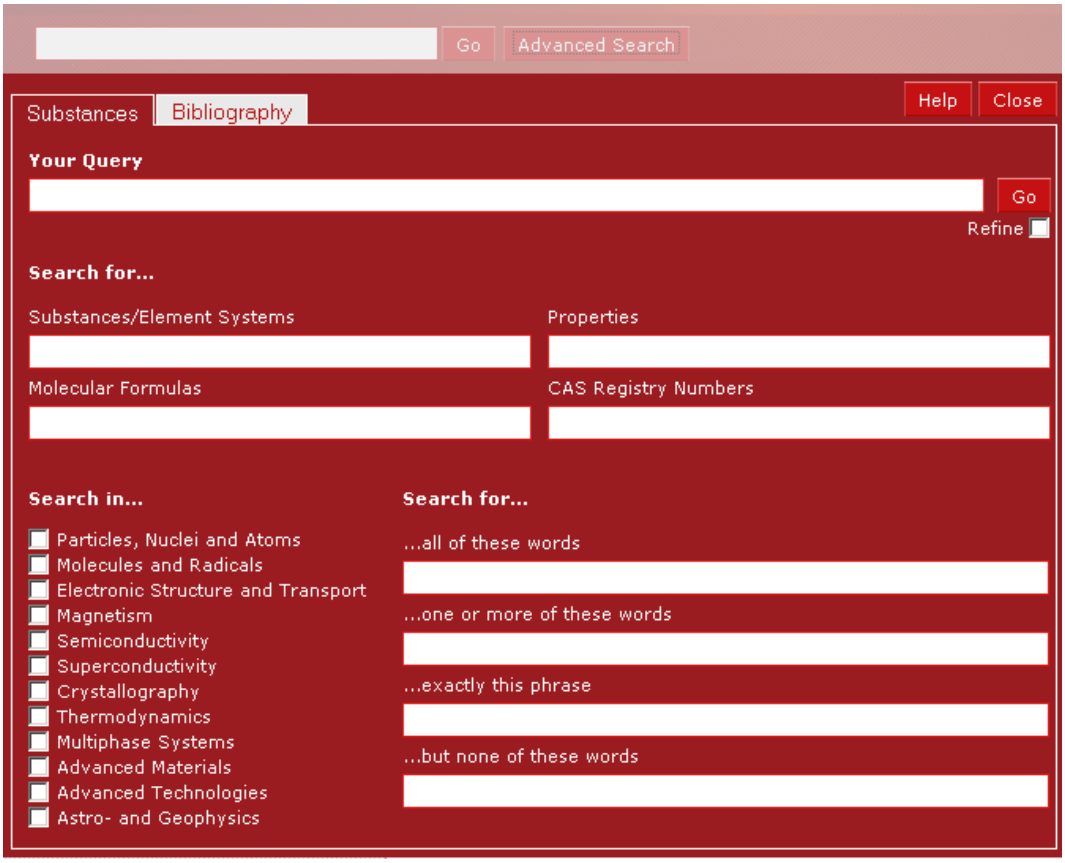
Advanced Search

Allows specified searches for Substances/Element Systems, Properties, Molecular Formula, CAS Registry Numbers in the relevant fields. Typing effort for query formulation is reduced by suggestions of terms (Speed Typing) showing available content.

Substances/Element Systems field: The speed-typing list also offers CAS Registry Number and Molecular Formula next to Substance Name in brackets. Element Systems need to be typed with dashes between the individual elements.

The Molecular Formulas field is case sensitive; please use capital letters where appropriate.

Your Query combines all simple search strings typed in any of the other fields of the Advanced Search page into a Boolean query that you can either submit as is or adapt to your needs before submitting to the search engine.



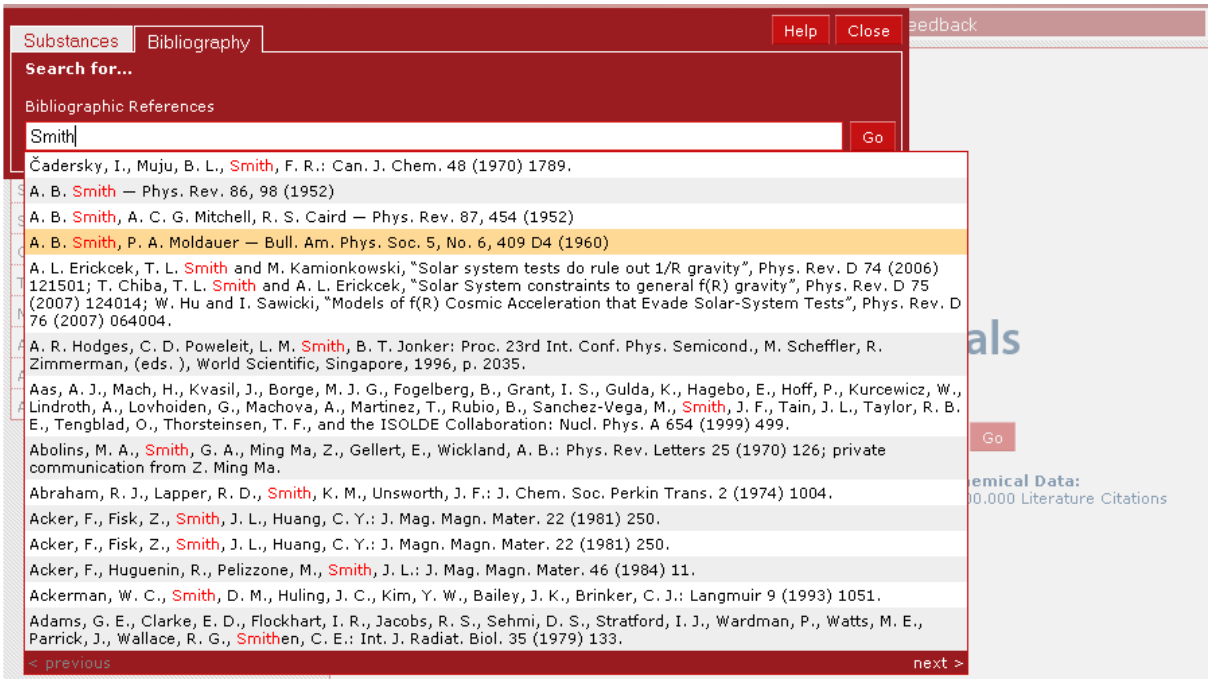
Bibliography

SpringerMaterials contains over 1 million references to primary literature (over 8000 journals referenced).

A full-text search performed on the reference collection will immediately deliver authors, editors, publications if referenced in the database.

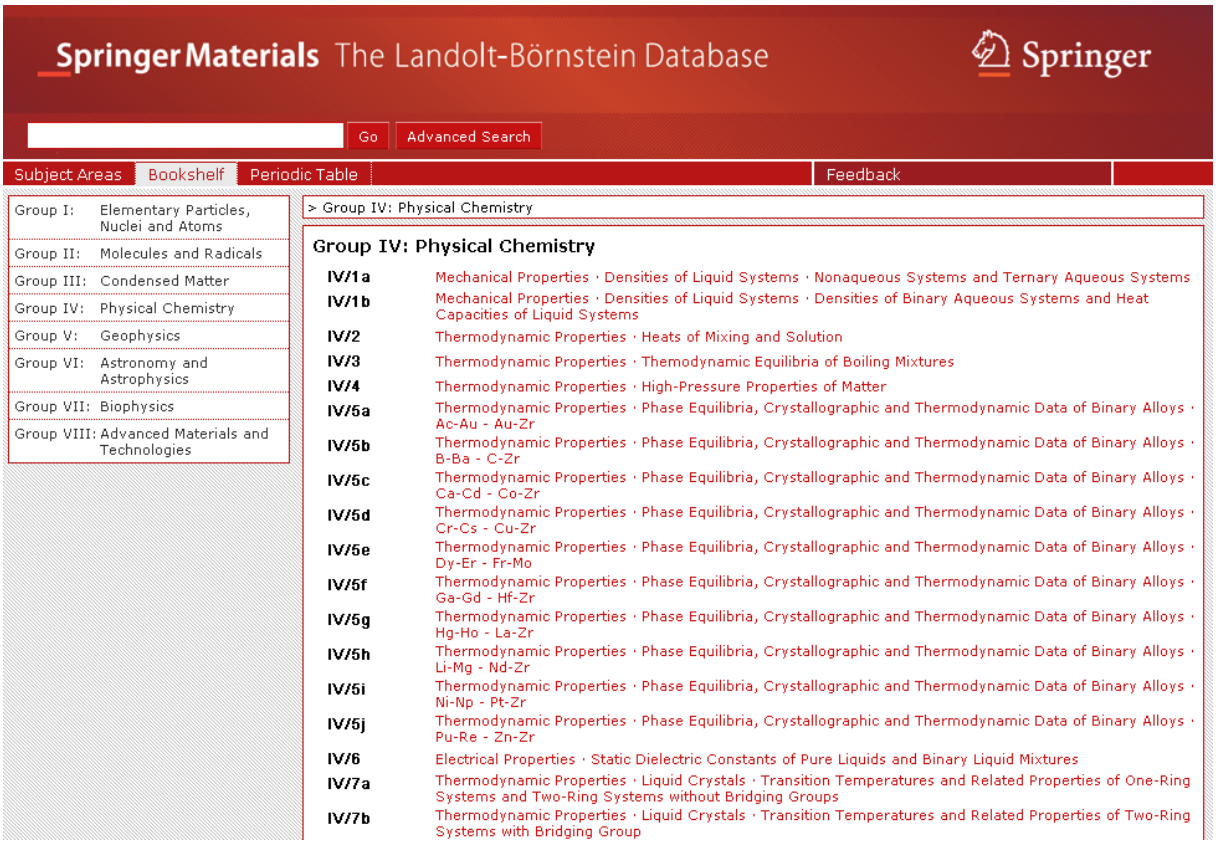
Typing effort for query formulation is reduced by suggestions of terms (Speed Typing) showing available content.

A click on one of the references leads to documents citing this literature.



Bookshelf Navigation

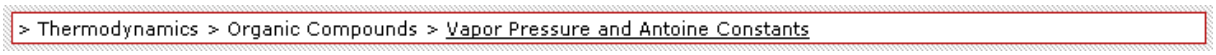
Mirrors the organization of the Landolt-Börnstein New Book Series in Groups (I to VIII), Volumes and Sub-volumes as on a bookshelf in the library. Click on one of the Groups to move to the content level, a list of available volumes will open in the main window. A click on the volume will show the Table of Contents as in the printed Landolt-Börnstein Volume. A pdf icon ( ) shows that you have reached the content level; the adjacent "i"-icon ( ) opens an InfoPage.



Breadcrumb Trail

Appears horizontally at the top of a Search Hit, is dynamic and provides a trail for the user to follow back to the starting or entry point. It is a click-able navigation and provides links back to each parent level of the current one. ">" serves as a hierarchy separator.

Typical Breadcrumb Trail:



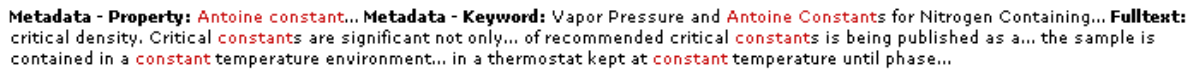
Contents

The world's largest resource for critically evaluated physical & chemical data; comprises the contents of the Landolt-Börnstein New Book Series (> 400 volumes) plus its electronic supplementary material and REACH Data.

Context

Appears horizontally below a Search Hit and displays the surrounding in which the searched string occurs. Indicated bold is whether the searched string (in red) is found in Metadata or full-text.

Typical Context:



Feedback

A click on the Feedback button activates your email program. Some brief information on your name, profession, affiliation and address is required for us to answer your query more quickly. "Referral" gives us information on your last search.

Full-text Document

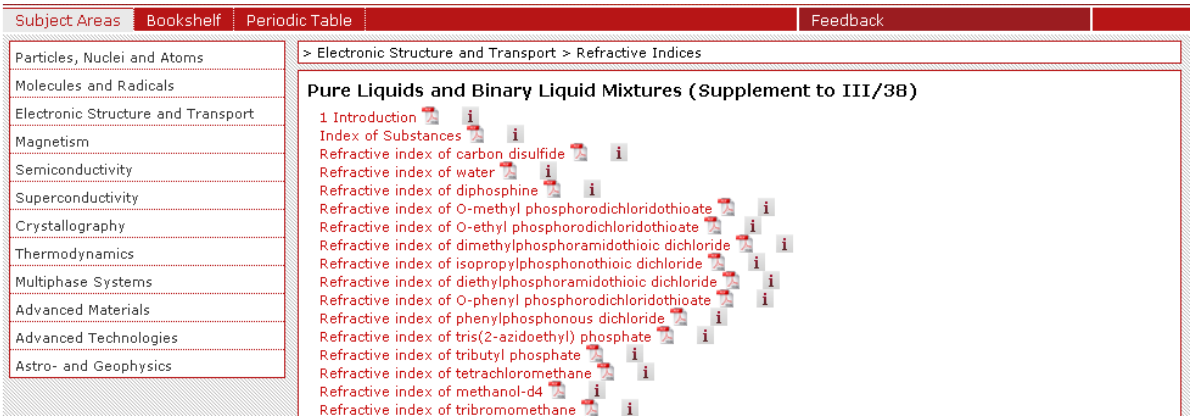
Results shown as display-optimized PDF. REACH Data and InfoPage are offered in HTML.

Help

Help in the Advanced Search explains the syntax of the Boolean search operators.

InfoPage

Marked with an "i"-icon (i) in the list of documents. Provides bibliographic information: "How to cite the document", DOI, title, editor, author, publication date, and references. Also contained is a link-out into its location in the Bookshelf.



Landolt-Börnstein New Book Series

The latest edition of this brand and the first one to be published in the English language. Started as an open series in 1961, it comprises to date > 400 volumes. To see how it is organized click Bookshelf.

Metadata

SpringerMaterials provides the following metadata extracted in an editorial process: Substance, Element System, CAS Registry Number, Properties, Keywords, Main Subject, Secondary Subjects, and Bibliographic Information.

Navigation

SpringerMaterials offers two different views of the same content: By Subject Areas and, for aficionados of the Landolt-Börnstein New Book Series, the Bookshelf Navigation.

Periodic Table Search

Supports a search by element systems of substances and materials.

You can select elements by clicking on the symbols of the Periodic Table. Chosen elements are highlighted by an orange frame and also displayed in the central Your Selection string.

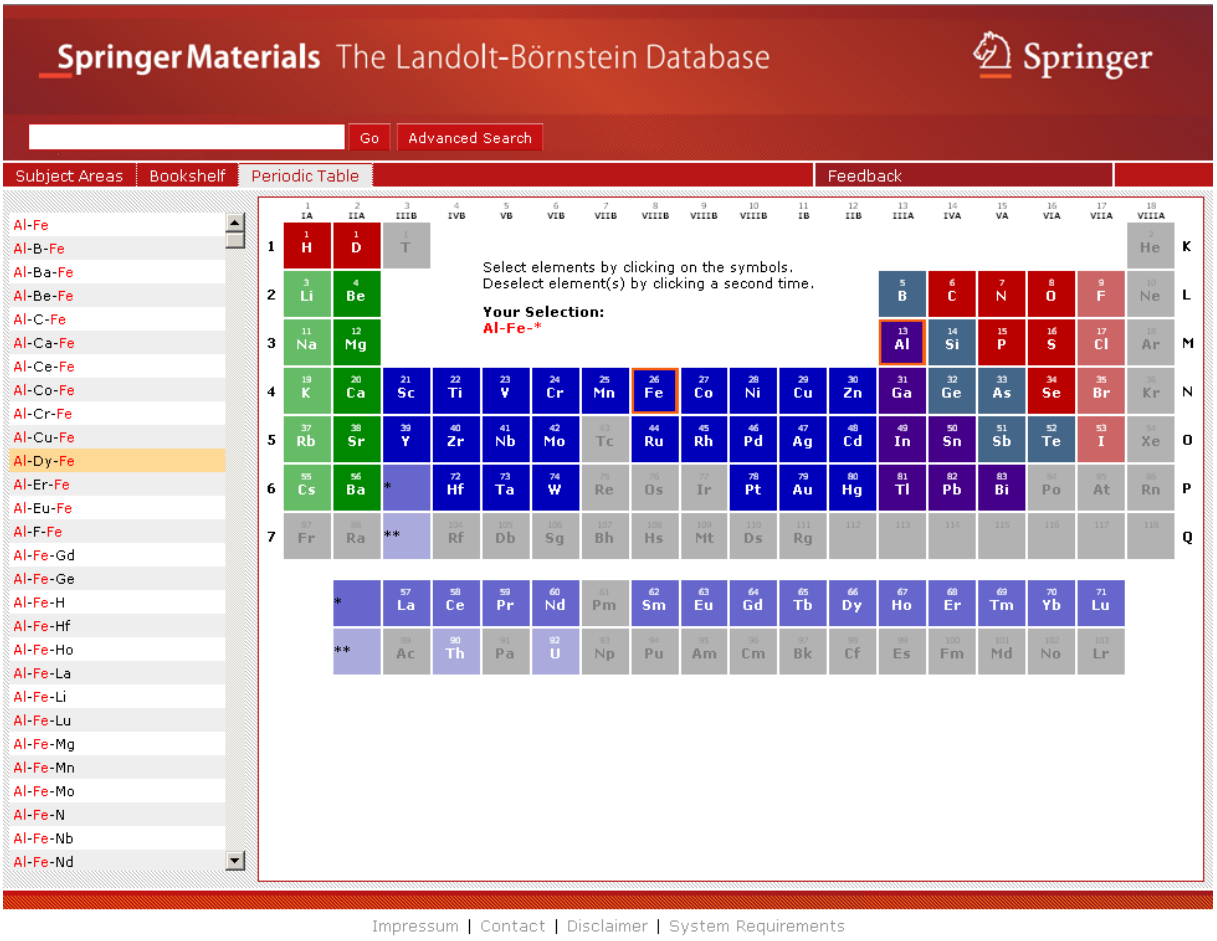
You can deselect elements by clicking on them a second time either in the Periodic Table or in the Your Selection string.

Chosen elements are highlighted by an orange frame; elements not available for further combinations are grayed-out in the Periodic Table.

Speed-typing: A list of available element systems opens. Chosen elements are marked red, black elements show further possible combinations.

Click on a possible combination from the list, available documents are shown.

To add any other search criteria, click Refine.



Ranking

The ranking of the displayed documents is performed according to a scoring algorithm. Relevance is calculated by location and frequency of, and conformity with the search term within the document. A hit in the Metadata is scored higher than one occurring in the full-text. Exact matches are preferred over substring matches.

REACH

Part of the Advanced Search. It enables finding REACH-relevant (Registration, Evaluation, Authorization and Restriction of Chemicals) information on the substances (alternatively CAS-Registry Numbers, Molecular Formula) included in SpringerMaterials. Also described, where applicable, are the GHS (Classification of Hazardous Substances), RoHS (Restriction of Hazardous Substances), and WEEE (Waste from Electrical and Electronic Equipment).

Refine

To select or deselect subject areas, or to add any other search criteria, click Refine. You will be automatically directed to the Advanced Search, where you can narrow down your results with more specialized queries; then click Go.

Search

SpringerMaterials offers Simple Search, the Periodic Table Search and the Advanced Search.

A query is always case insensitive and substring matching. E.g.,"crystal" produces the same results as "Crystal" or "CRYSTAL" and also return hits in "crystalline", "nanocrystalline", etc.

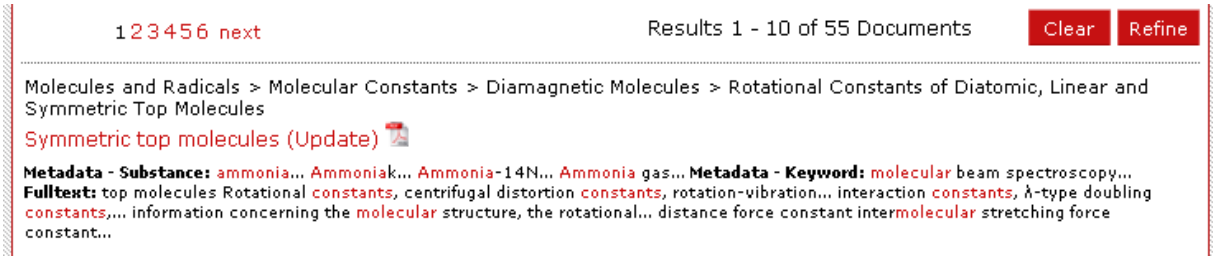
Typing effort for query formulation is reduced by suggestions of terms (Speed Typing) showing available content.

You can either type your query, then click Go or select a term from the speed-typing list and click Go.

Search Hit

Each Search Hit shows the following three lines from top to bottom: Breadcrumb Trail, Full-text Document, Context.

Typical Search Hit (search for "ammonia molecular constants"):



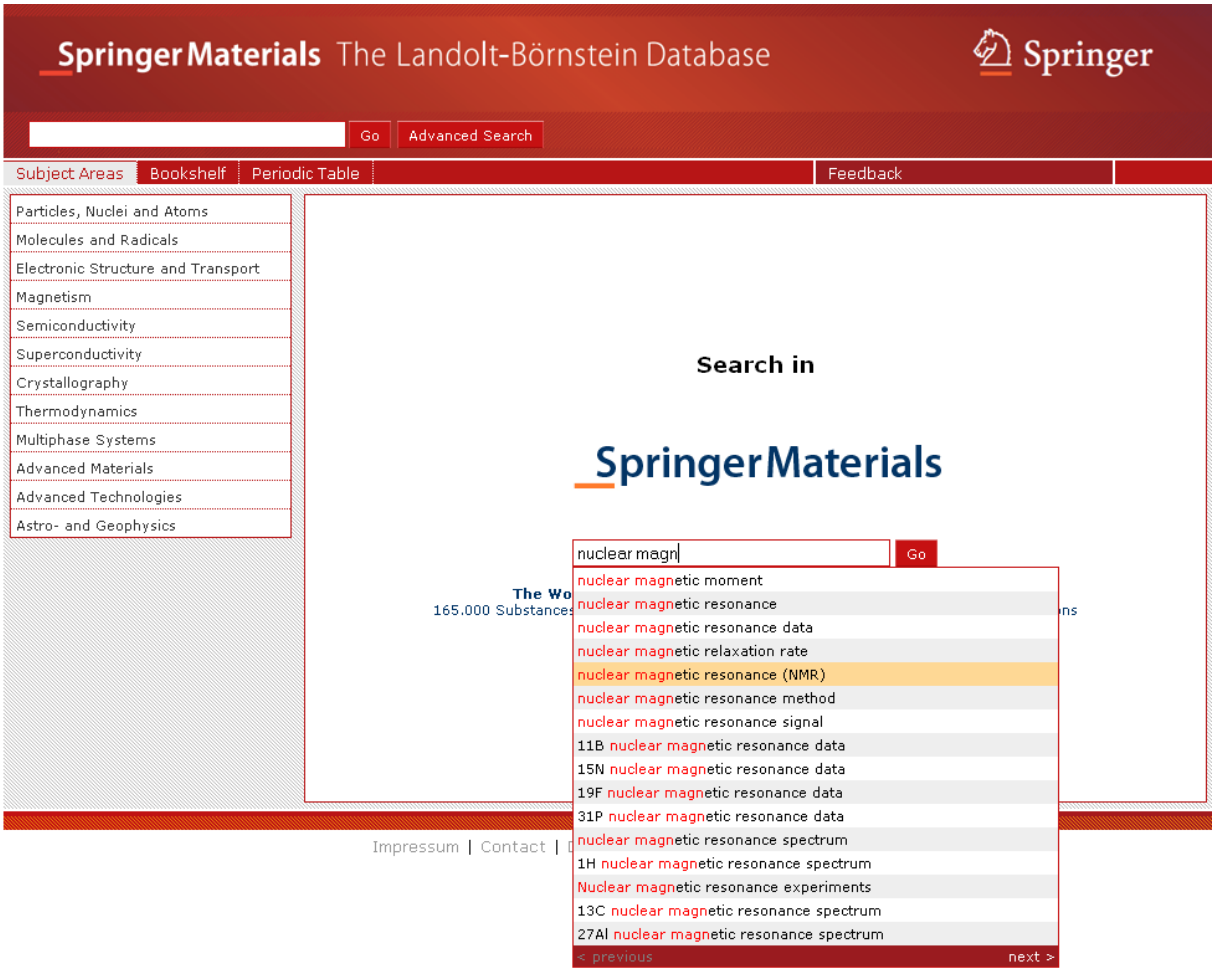
Simple Search

The Simple Search field is found in the center of the SpringerMaterials homepage and replicated as such in a field below the SpringerMaterials logo. This field will always display the latest query independently of further steps taken.

Typing effort for query formulation is reduced by suggestions of terms (Speed Typing) showing available content.

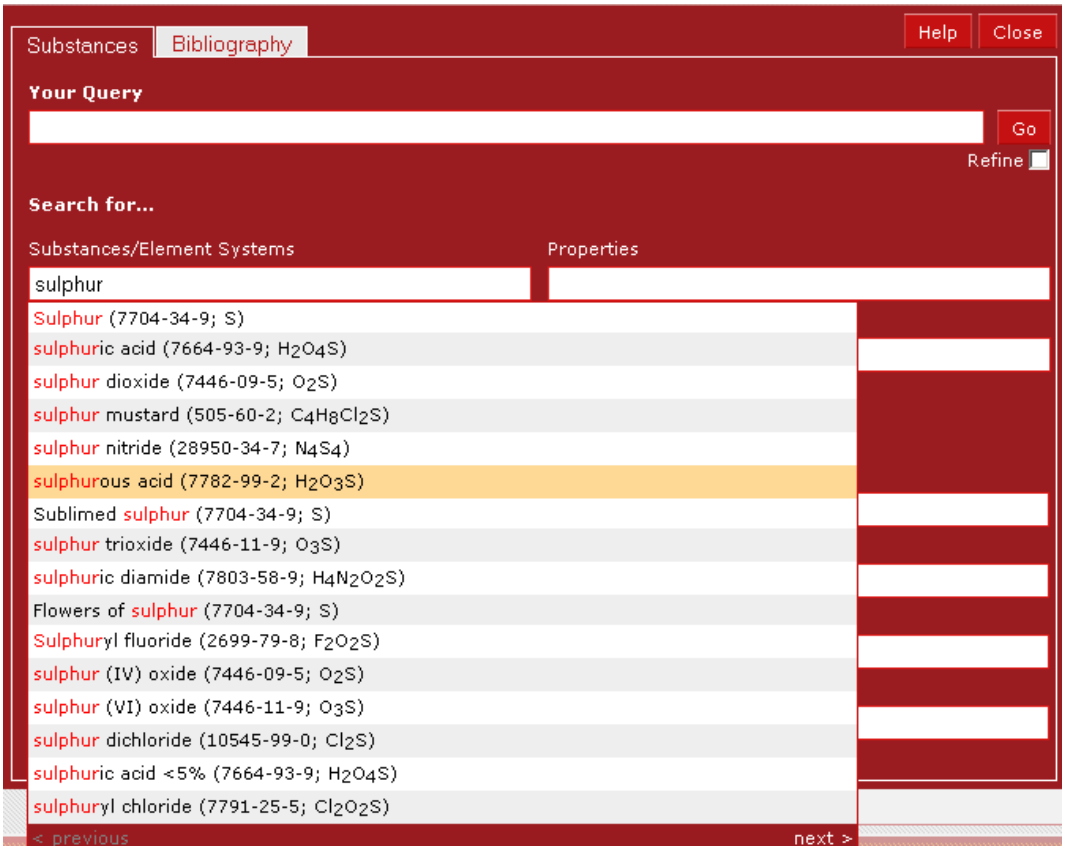
You can either type your query, then click Go or select a term from the speed-typing list and click Go.

To add any other search criterion, click Refine.



Speed Typing

Reduces typing effort for query formulation by suggesting terms and showing available content upfront. The more you type, the shorter the list of suggestions gets.

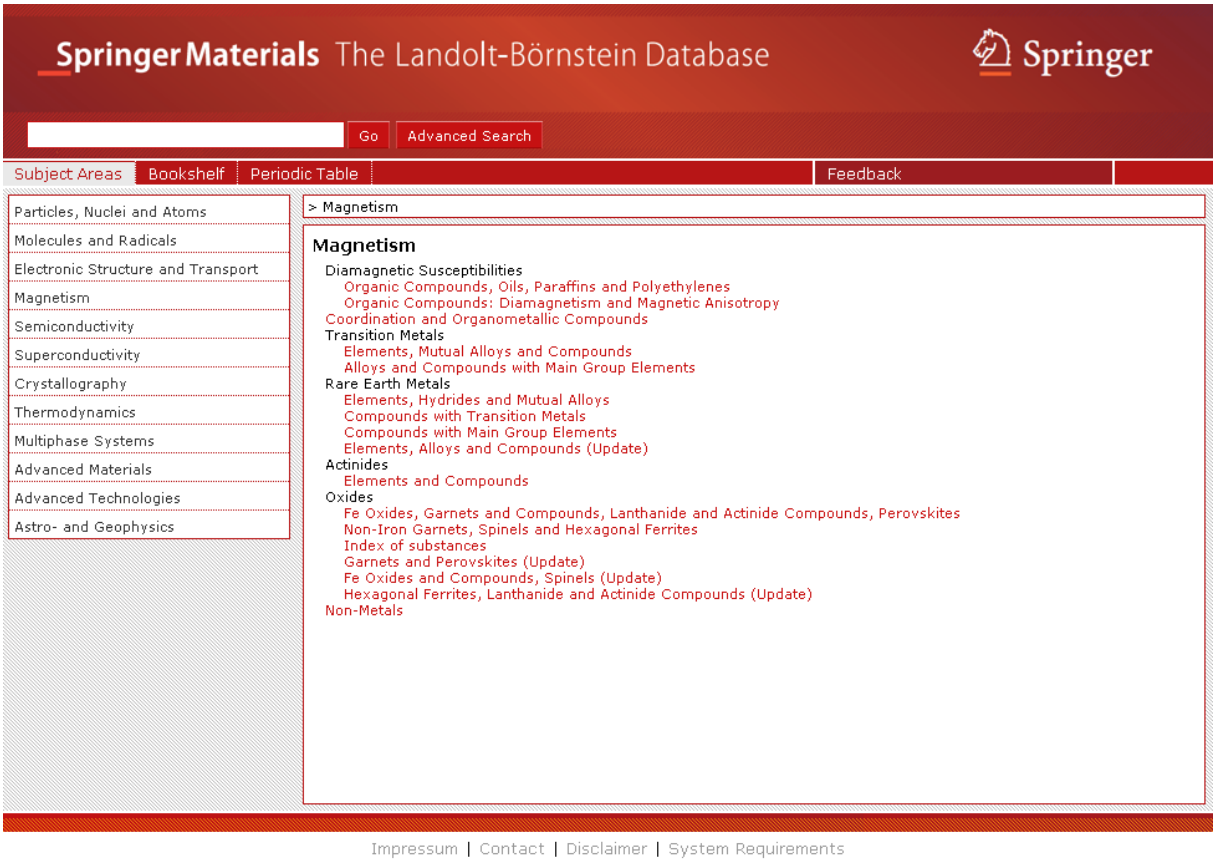


Subject Area Navigation

SpringerMaterials content is organized in 12 Subject Areas (see homepage):

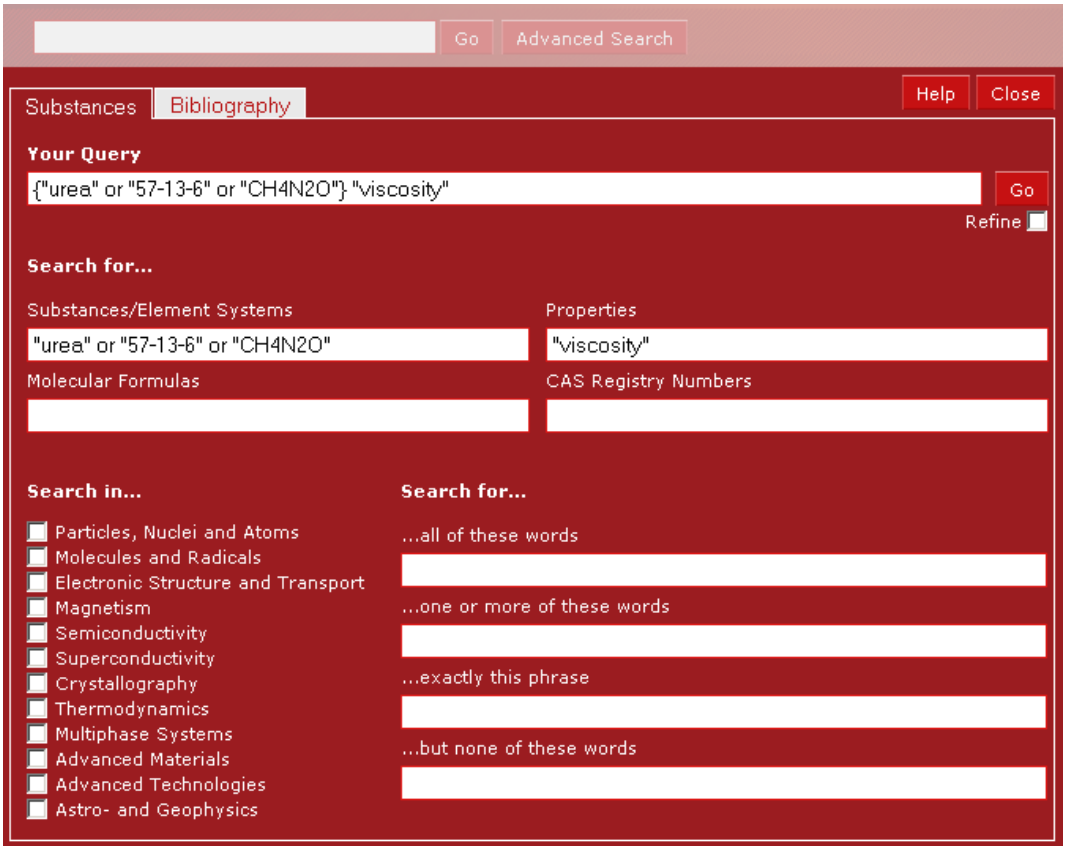
- Particles, Nuclei and Atoms
- Molecules and Radicals
- Electronic Structure and Transport
- Magnetism
- Semiconductivity
- Superconductivity
- Crystallography
- Thermodynamics
- Multiphase Systems
- Advanced Materials
- Advanced Technologies
- Astro- and Geophysics

Click on one of the Subject Areas to move to the content level, a list of Sub-Areas will open in the main window. Red headlines offer further Sub-Sub-Areas. A "pdf" icon ( ) shows that you have reached the content level; the nearby "i"-icon ( ) opens the InfoPage.



Your Query

A field in the Advanced Search that combines all simple search strings typed in any of the other fields of the Advanced Search page into a Boolean query that you can either submit as is or adapt to your needs before submitting to the search engine.


Go
Advanced Search
Substances
Bibliography
Help
Close
Your Query
{"urea" or "57-13-6" or "CH4N2O"} "viscosity"
Go
Refine
Search for...
Substances/Element Systems
"urea" or "57-13-6" or "CH4N2O"
Properties
"viscosity"
Molecular Formulas
CAS Registry Numbers
Search in...
Particles, Nuclei and Atoms
Molecules and Radicals
Electronic Structure and Transport
Magnetism
Semiconductivity
Superconductivity
Crystallography
Thermodynamics
Multiphase Systems
Advanced Materials
Advanced Technologies
Astro- and Geophysics
Search for...
...all of these words
...one or more of these words
...exactly this phrase
...but none of these words