Sample Document Database Fields Search Tips Login/Registration

Polymer Library (POLY)

The Polymer Library is the world's only database dedicated exclusively to information on rubbers, plastics, adhesives and polymer composites. Since 1972 the database contains more than 900.000 records covering commercial, marketing and academic aspects of the rubber and plastics industry.

The source material for the database is selected from more than 500 journals in a variety of languages from 30 different countries, including North America, Australia, Europe, Japan and China. Source material is also collected from books, technical reports and technical literature.

Scope

- Polymeric materials, polymer blends and monomers
- Polymeric composites and adhesives
- Synthesis, polymerisation and chemical modification
- Raw materials, additive and compounding components
- Application of polymeric materials
- Plants, apparatus and machines for processing polymers
- Analytics, analytical methods and devices
- Properties of polymeric materials and material testing
- Environmental pollution, industrial hazards and toxicity
- Economic and trade information
- Legislation and regulations
- Natural rubber cultivation

Language

English

File Data

Number of records: more than 1.273.134
Years covered: since 1972
Update: weekly

Producer

Until June 2018:
Smithers Information Ltd.

Since July 2018:
WTI-Frankfurt-digital GmbH

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Sample Document TOP

Database
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Title
Application of polymer-based membranes containing ionic liquids in membrane separation processes: a critical review.

Descriptors
ionische Flüssigkeit; Separation; Membranprozess; Gastrennung; Metallabscheidung; Inkorporierung; industrielle Anwendung; Dampfdruck (Mechanik); organische Verbindung; Protonenaustauschmembranbrennstoffzelle; Membrantechnologie; Metallion; Polymermembran
IONIC-LIQUID; SEPARATING; MEMBRANE-PROCESS; GAS-SEPARATION-METHOD; METAL-DEPOSITION; INCORPORATION; INDUSTRIAL-APPLICATIONS; STEAM-PRESSURE; ORGANIC-COMPOUNDS; PEM:POLYMER-ELECTROLYTE-MEMBRANE-FUEL-CELL; MEMBRANE-TECHNOLOGY; METAL-IONS; POLYMER-MEMBRANES

Abstract
The interest in ionic liquids, particularly in polymerizable ionic liquids, is motivated by their unique properties, such as good thermal stability, negligible vapor pressure, and wide electrochemical window. Due to these features ionic liquids were proposed to be used in the membrane separation technology. The utilization of conventional ionic liquids is, however, limited by their release from the membrane during the given separation process. Therefore, the incorporation of polymerizable ionic liquids may overcome this drawback for the industrial application. This work is a comprehensive overview of the advances of ionic liquid membranes for the separation of various compounds, i.e. gases, organic compounds, and metal ions.

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Classification
3IDC Physico-chemical measurement methods
3BX Fundamentals of chemistry
3PHC Membrane and diffusion separation processes
3PLC Chemical reactions, chemical reaction engineering

Publication Type and Form
J Journal
ED Digital Object Identifier (DOI)

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Serial Codes	SC
Language	LG
Publication Type	PT
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Publication Year	YR
Update	UP

Search Tips TOP

Search in specific fields

The "General Search" includes the following fields: Title, Abstract, Author, Institution, Conference Details, Source, Serial Codes (ISSN and ISBN), Thesaurus and Publication Year. In all other cases the respective field has to be selected. In the "Expert Search" every field can be selected from the dropdown-list, or you can directly enter the field tag (in capital letters), followed by colon with the search term, e.g. the classification CC:3PLD. The direct search with field tag is possible in all search types (Quick Search, Advanced Search and Expert Search).

Field Author (AU)

It is sufficient to enter the first letters of first or last name of an author into the Author Field (in "Advanced Search" or "Expert Search"). You will then be given a list of matching entries, from

which you can select the appropriate name.

Alternatively names may be searched with truncation (*), e.g. hoyer* returns hoyer-ina, hoyer-n-j, hoyer-norbert, hoyerberg, hoyermann etc. For a more precise search, please truncate at the initial of the first name, e.g. "hoyer n*" returns only authors with last name Hoyer, whose first names start with "N", as Hoyer, Niklas or Hoyer, Norbert. or Hoyer, N.
This way of searching is possible in all databases. Truncation is recommended, since first names are often abbreviated in the literature quoted.

Field Institution (CO)
This field supplies the author affiliation. Wherever possible, these institutions have been standardized and can be used for refining the search result. Name changes should be considered in the search (for example DaimlerChrysler -> Daimler).

Classification Field (CC)
In the "General Search" the field tag CC has to be used to get a correct result, e.g. CC:2BFB. Instead you can select the field from the dropdown-list in the "Expert Search".

In "Advanced Search" and "Expert Search" the subjects of classification from WTI-Frankfurt and Smithers can be selected from a list (see link below search fields) giving the top level of the WTI-classification. (where the selection of the selected top level automatically includes subordinate (more precise) classes in the search.)

Several selected items are combined with the operator OR. The selection of an item also includes the more precise subclasses into the search.

If you enter the code directly, e.g. CC:3BF, only the specified class is found, unless you truncate the class: CC:BF* includes the subclasses.

Additionally, you can refine your search result after a search in other search fields with the link "Classification" on the right-hand side of the title list. Several selected subjects are combined with the operator AND, that is: all must apply. This list is sortable either by number of hits or alphabetically by codes.

Field Source (SO)
Publication titles may be searched as phrases (strings), e.g. "laser in medicine and surgery".

Field Serial Codes (SC)
For a clear identification of publications, the search with ISBN or ISSN is recommended. ISSN and ISBN are searched with hyphens without text, e.g. 978-3-18-092009-2.

Field Document Number (NO)
The document number is a permanent identifier for a specific record. Search e.g. NO:20090101598.

Update
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