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BABS (Beilstein Database Abstracts) provides access to titles, abstracts and bibliographic data from the top journals in organic and related chemistry, published from 1980 to the present.

**SUBJECT COVERAGE**

- Organic and related chemistry

**SOURCES**

- more than 180 journals

**FILE DATA**

- 1980 to the present (02/09): 1.186.624 records
- Updated quarterly
- Automatic current-awareness searches (SDIs) may be run quarterly

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- Online Helps (HELP DIRECTORY lists all help messages available)
- STNGUIDE

## SEARCH AND DISPLAY FIELDS

Search Field Name	Search Code	Search Examples	Display Code
Basic Index (contains single words from the abstract (AB), controlled term (CT), and title (TI) fields)	None or /BI	S SOLVENT PROTON S MOLECULAR ORBITAL?	AB, CT, TI
Accession Number	/AN	S 6140634/AN	AN
Author	/AU	S MANCINI, M/AU	AU
Controlled Term	/CT	S MANNICH REACTIONS/CT	CT
Controlled Word	/CW	S ABIES/CW	CT
Document Type (code and text)	/DT	S JOURNAL/DT	DT
Entry Date 1)	(/TC) /ED (/UP)	S ED>APR 2000	ED
Field Availability	/FA	S AB/FA	not displayed
Issue 1)	/IS	S 10/IS AND 102/VL AND JPCBFK/ISN	SO
International Standard (Document) Number (contains CODEN)	/ISN	S ASBSDK/ISN	ISN, SO
Journal Title	/JT	S J ORG CHEM/JT	JT, SO
Language (ISO code and text)	/LA	S DE/LA S GERMANY/LA	LA
Publication Year 1)	/PY	S 1999/PY	PY, SO
Summary Language (ISO code and text)	/SL	S FR/SL S FRENCH/SL	SL
Source (contains journal title, CODEN, pagination and publication year)	/SO	S SYNLES/SO S CHEM EUROP J/SO	SO
Title	/TI	S ASYMMETRIC SYNTHESIS/TI	TI
Volume 1)	/VL	S 10-12/VL	SO
Word Count, Title 1)	/WC.T	S WC.T<10	WC.T

1) Numeric search field that may be searched using numeric operators or ranges.

## DISPLAY AND PRINT FORMATS

Any combination of display fields and formats may be used to display or print answers. Multiple codes must be separated by commas or spaces, e.g. 'D L1 1-5 TI AU'. The fields are displayed or printed in the order requested.

Hit-term highlighting is available for all display fields. Highlighting must be ON during SEARCH in order to use the HIT, KWIC, and OCC formats.

More information about display fields for specific types of information is available by typing one of the following 'HELP' commands at an arrow prompt (=>) in the BABS database:

HELP DFIELDS	-	lists all valid custom formats
HELP EFIELDS	-	lists all selectable fields
HELP FORMATS	-	lists valid predefined formats
HELP SRTFIELDS	-	lists valid sort fields

Format	Definition	Examples
AB	Abstract	D AB, TI
AN	Accession Number	D 1-5 AN
AU	Author	D AU TI
CT	Controlled Term	D CT
DT (TC)	Document Type	D DT
ED 1)	Entry Date	D ED
ISN 1)	International Standard (Document) Number	D ISN
JT 1)	Journal Title	D JT
LA	Language	D LA
PY 1)	Publication Year	D PY

1) Custom display only.

## DISPLAY AND PRINT FORMATS

Format	Definition	Examples
SL SO TI WC.T           1)	Summary Language Source Title Word Count, Title	D SL D SO D TI D WC.T
ABS ALL DALL IALL BIB IBIB IND TRIAL (TRI, SAMPLE, SAM, FREE) SCAN           2)	AN, AB AN, TI, AU, SO, DT, LA, SL, AB, CT ALL, delimited for post-processing ALL, indented with text labels AN, TI, AU, SO, DT, LA. SL (default) BIB, indented with text labels AN, TI, CT AN, TI, CT  TI, CT (random display without answer numbers)	D ABS D ALL D DALL D IALL D BIB D IBIB D IND D TRIAL  D SCAN
HIT KWIC  OCC	Hit-term(s) and field(s) Up to 50 words before and after hit-term(s) (KeyWord-In-Context) Number of occurrences of hit-term(s) and field(s) in which they occur	D HIT D KWIC  D OCC

1) Custom display only.

2) SCAN must be specified on the command line, i.e., D SCAN or DISPLAY SCAN.

## SELECT, ANALYZE, AND SORT CODES

The SELECT command is used to create E-numbered or L-numbered lists of terms taken from the specified field(s) in an answer set.

The ANALYZE command is used to create an L-number containing terms taken from the specified field in an answer set.

The SORT command is used to rearrange the search results in either alphanumeric (A) or numeric (N) order of the specified field(s).

Definition	Code	Analyze/ Select 1)	Sort
Abstract	AB	X 2)	-
Accession Number	AN	X	-
Author	AU	X	A
Coden	CODEN	X	A
Controlled Term	CT	X	-
Document Type	DT (TC)	X	-
Entry Date	ED (UP)	X	N
International Standard (Document) Number	ISN	X 3)	A
Journal Title	JT	X	A
Language	LA	X	A
Occurrence Count of Hit Terms	OCC	-	N
Publication Year	PY	X	N
Summary Language	SL	X	A
Source	SO	X 4)	A
Title	TI	X (default)	A
Word Count, Title	WC.T	X	N

1) HIT may be used to restrict terms extracted to terms that match the search expression used to create the answers set, e.g., SEL HIT CT.

2) Appends /BI to the terms created by SELECT.

3) Selects or analyzes CODEN with /ISN appended to the terms created by SELECT.

4) Selects or analyzes CODEN with /SO appended to the terms created by SELECT.

## SAMPLE RECORDS

## DISPLAY BIB

AN 6138470 BABS  
 TI Terrestrial carbon-storage from the last glacial maximum to the present  
 AU Bird, Michael I.; Lloyd, Jon; Farquhar, Graham D.  
 SO Chemosphere (1996), 33(9), 1675 - 1686  
 CODEN: CMSHAF  
 DT Journal  
 LA English  
 SL English

## DISPLAY IALL

ACCESSION NUMBER: 6725971 BABS  
 TITLE: Osmium-catalyzed selective oxidations of methane and ethane with hydrogen peroxide in aqueous medium  
 AUTHOR(S): Yuan, Qiang; Deng, Weiping; Zhang, Qinghong; Wang, Ye  
 SOURCE: Adv. Synth. Catal. (2007), 349(7), 1199 - 1209  
 CODEN: ASCAF7  
 DOCUMENT TYPE: Journal  
 ABSTRACT: Various transition metal chlorides including FeCl<sub>3</sub>, CoCl<sub>2</sub>, RuCl<sub>3</sub>, RhCl<sub>3</sub>, PdCl<sub>2</sub>, OsCl<sub>3</sub>, IrCl<sub>3</sub>, H<sub>2</sub>PtCl<sub>6</sub>, CuCl<sub>2</sub> and HAuCl<sub>4</sub> were studied for the selective oxidations of methane and ethane with hydrogen peroxide in aqueous medium. Among the metal chlorides investigated, osmium(III) chloride (OsCl<sub>3</sub>) exhibited the highest turnover frequency (TOF) for the formation of organic oxygenates (mainly alcohols and aldehydes) from both methane and ethane. For the OsCl<sub>3</sub>-catalyzed oxidation of methane with hydrogen peroxide, methyl hydroperoxide was also formed together with methanol and formaldehyde. The effects of various kinetic factors on the catalytic behavior of the OsCl<sub>3</sub>-H<sub>2</sub>O<sub>2</sub> system were investigated, and TOF values of 12 and 41 h<sup>-1</sup> could be obtained for oxygenate formation during the oxidations of methane and ethane, respectively. In the presence of OsCl<sub>3</sub>, NaClO, NaClO<sub>4</sub> or NaIO<sub>4</sub> as oxidant was incapable of oxidizing methane and ethane to the corresponding oxygenates, and the use of tert-butyl hydroperoxide (TBHP) instead of H<sub>2</sub>O<sub>2</sub> provided remarkably lower rates of formation of oxygenates. UV-Vis spectroscopic measurements suggested that OsCl<sub>3</sub> was probably oxidized into an Os(IV) species by H<sub>2</sub>O<sub>2</sub> in aqueous medium, and the Os(IV) species might be involved in the oxygenation of methane or ethane. The result that the conversions of both methane and ethane to oxygenates were suppressed by the addition of a radical scavenger suggested that the reactions proceeded via a radical pathway. CONTROLLED  
 TERM(S): Ethane; Homogeneous catalysis; Hydrogen peroxide; Methane; Oxygenation; Water solvent