

## METADEX (Metals Abstracts/Alloy Index)

- Subject Coverage**
- Composite materials (at least one metallic component)
  - Corrosion
  - Extractive metallurgy
  - Ferrous alloy production
  - Finishing
  - Melting, casting, powder metallurgy
  - Metallic coatings
  - Metallography
  - Non-ferrous alloy production
  - Ores (resources, preparation, mining)
  - Physics of metals
  - Products
  - Properties (physical, chemical, electrochemical etc.)
  - Testing, control, analysis
  - Thermal treatment
  - Thermomechanical and thermochemical treatment
  - Working (forming), machining, joining

**File Type** Bibliographic

**Features**

<a href="#">Alerts (SDIs)</a>	Monthly				
<a href="#">CAS Registry Numbers®</a>	<input checked="" type="checkbox"/>	Page Images	<input type="checkbox"/>	<a href="#">STN AnaVist</a>	<input type="checkbox"/>
<a href="#">Keep &amp; Share</a>	<input checked="" type="checkbox"/>	<a href="#">SLART</a>	<input checked="" type="checkbox"/>	<a href="#">STN Easy</a>	<input checked="" type="checkbox"/>
Learning Database	<input type="checkbox"/>	Structures	<input type="checkbox"/>	<a href="#">STN Viewer</a>	<input type="checkbox"/>

- Record Content**
- Bibliographic information, indexing, and element terms.
  - Abstracts are available for most records since 1979.

- File Size**
- More than 2.3 million citations (04/2011)

**Coverage** 1966-present

**Updates** Monthly

**Language** English

**Database Producer**  
 Cambridge Scientific Abstracts  
 7200 Wisconsin Avenue  
 Bethesda, MD, 20814  
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E-mail: helpdesk@fiz-karlsruhe.de

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**Sources**

- Journals
  - Patents (until 1994)
  - Conference contributions
  - Books
  - Reports
  - Other non-conventional literature
- 

**User Aids**

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

**Clusters**

- ALLBIB
  - AUTHORS
  - CHEMISTRY
  - COMPANIES
  - CORPSOURCE
  - CSAALL
  - ENGINEERING
  - MATERIALS
  - METALS
- [STN Database Clusters](#) information (PDF)
- 

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## Search and Display Field Codes

Fields that allow left truncation are indicated by an asterisk (\*).

### General Search Fields

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index* (contains single words from the title (TI), abstract (AB), controlled term (CT) and corporate name (CO) fields)	None or /BI	S COATINGS S ANTICORROSION PROPERT? S ALLOYS(S)FATIGUE S ?LASER?	TI, AB, CT, CO
Accession Number Alloy Indexing Term <b>(1,11)</b>	/AN /ALI	S "1991(12):11-1246"/AN S AL-4.3ZN-1.5MG/ALI S AL*ZN*MG/ALI	AN ALI
Application Date <b>(2,3)</b> Author (patent inventor) Classification Code <b>(4)</b>	/AD /AU /CC	S 19801200-19801230/AD S DOHERTY, R D/AU S 58/CC S METALLIC COATING/CC	AI AU CC
Classification Code of Alloy (code and text) <b>(11)</b> Controlled Term <b>(5)</b>	/CCA /CT	S AG/CCA S (CHROMIUM(W)STEELS)/CCA S CHROMIUM STEELS/CT S (POWDER COATINGS(S)CORROSION)/CT	ALI, CCA CT
Controlled Word	/CW	S DEOXIDATION/CW S COMPOSITE MATERIALS/CW	CT
Corporate Name <b>(4,6)</b> Corporate Source <b>(4)</b> (patent assignee)	/CO /CS	S NASA LEWIS RESEARCH CENTER/CO S OCCIDENTAL RESEARCH/CS S HALCON RESEARCH?/CS	CO CS, AU
Country of Publication (ISO code and text) <b>(6)</b>	/CY	S FRANCE/CY S FR/CY	CY
Document Type (code and text) <b>(7)</b>	/DT (or /TC)	S BOOK/DT S B/DT	DT
Element Term (contains chem. elements and formulas, compounds (CP), materials (SY: >= 2 metals), dopings, ions neg. (IN), ions pos. (IP), isotopes (IS), nuclear reactions (target T, reaction R, final nucleus F)) <b>(8,9)</b>	/ET	S AL*CU*MG/ET S ALCU2MG/ET S TI-MO-AL/ET S TI-0.05V-0.1H/ET S MG CP/ET S SI:H/ET S BE IP 2/ET S 119SN/ET	ET
E-mail Address <b>(5,10)</b>	/EML	S DVSVERLAG/EML	AU, EML, SO, PB
International Standard (Document) Number (contains ISSN and ISBN)	/ISN	S 1221-6909/ISN S 1-877836-18-4/ISN	ISN, SO
Journal Title (contains full and abbreviated titles)	/JT	S CZECH J PHYS/JT	JT, JTA, JTF, SO
Language (ISO code and text)	/LA	S GERMAN/LA S DAMAGE AND (NL OR DE)/LA	LA
Meeting Date <b>(2)</b>	/MD	S 19990203-19990301/MD	MD, SO
Meeting Location <b>(4)</b>	/ML	S NEW ORLEANS LOUISIANA/ML	ML, SO
Meeting Title	/MT	S MRS MEETING/MT	MT, SO
Meeting Year <b>(2)</b>	/MY	S 1982-1983/MY	MY, SO
Number of Report	/NR	S LA-UR-79-951/NR	NR
Patent Country <b>(3)</b>	/PC	S GB/PC	PI
Patent Number <b>(3)</b>	/PN	S 4568387/PN	PI
Publication Date <b>(3)</b>	/PD	S 19860130/PD	SO, PI
Publication Year <b>(2)</b>	/PY	S 1984-1985/PY	SO, PI

## Search and Display Field Codes (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Publisher <b>(4)</b> Source (contains journal title and other higher level titles, ISBN, ISSN, publisher, collation information (volume, issue, pagination), meeting information, e-mail address, and URL)	/PB /SO	S SPRINGER VERLAG/PB S (WATERLOO(S)CANADA)/SO S (PLASTICITY(2A)FRACTURE)/SO S (SPRINGER(L)BERLIN)/SO S 0-86108-240-0/SO S 0202-7747/SO	PB, SO SO
Title	/TI	S STABILITY/TI S TITANIUM OXIDE/TI	TI
Uniform Resource Locator <b>(4,10)</b> Update Date <b>(2)</b>	/URL /UP (or /ED)	S ASMINTERNATIONAL/URL S UP>=DEC 2002	URL, SO, PB UP
Word Count, Title <b>(2)</b>	/WC.T	S WC.T>=10	WC.T

- (1) Available since 1974.  
 (2) Numeric search field that may be searched using numeric operators or ranges.  
 (3) US patents since 1979, UK patents since 1982 and EP (European Patent Office) patents since 1986. Data available until 1994.  
 (4) Search with implied (S) proximity is available in this field.  
 (5) Pairs of controlled terms (main term/qualifier) are searchable with (S) operator.  
 (6) Available since 1992.  
 (7) Available since 1979.  
 (8) Search with special characters.  
 (9) Elements cited in Hill System order with an asterisk (\*) between element terms.  
 (10) Field available since May 2005.  
 (11) Field available until July 2010.

## DISPLAY and PRINT Formats

Any combination of formats may be used to display or print answers. Multiple codes must be separated by spaces or commas, 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 fields. Highlighting must be ON during SEARCH to use the HIT, KWIC, and OCC formats.

Format	Content	Examples
AB	Abstract	D TI AB
AD	Application Date	D AD
ALI	Alloy Indexing Term (contains CCA until April 2005)	D ALI
AN	Accession Number	D 1-5 AN
AU	Author (patent inventor)	D AU TI
CC	Classification Code	D CC
CCA <b>(2)</b>	Classification Code of Alloy	D CCA
CO	Corporate Name	D CO
CS	Corporate Source (patent assignee) (format incl. AU)	D CS
CT	Controlled Term	D CT
CY	Country of Publication	D CY
DT (TC)	Document Type	D DT
EML <b>(1)</b>	E-mail Address	D EML
ET	E-mail Address	D ET
ISN <b>(1)</b>	International Standard (Document) Number (contains ISSN and ISBN)	
JT <b>(1)</b>	Journal Title	D JT
JTA <b>(1)</b>	Journal Title, Abbreviated	D JTA
JTF <b>(1)</b>	Journal Title, Full	D JTF

**DISPLAY and PRINT Formats (cont'd)**

Format	Content	Examples
LA MD (1) ML (1) MT (1) MY (1) NR PB (1) PD (1) PI PY (1) SO TI UP (ED) (1) URL (1) WC.T (1)	Language Meeting Date Meeting Location Meeting Title Meeting Year Number of Report Publisher Publication Date Patent Information Publication Year Source (format includes NR) Title Update Date Uniform Resource Locator Word Count, Title	D LA TI D MD D ML D MT D MY D NR D PB D PD D PI D PY D SO D TI 1-3 D UP D URL D WC.T
ABS ALL  DALL IALL BIB  IBIB IND SCAN (3) TRIAL (TRI, SAMPLE, FREE)	AN, AB AN, TI, AU, CS, NR, SO, DT, CY, LA, AB, CC, CT, CO, ALI, CCA, ET for patents: AN, TI, AU, CS, SO, PI, AI, DT, CY, LA, AB, CC, CT, CO, ALI, ET ALL, delimited for post-processing ALL, indented with text labels AN, TI, AU, CS, NR, SO, DT, CY, LA for patents: AN, TI, AU, CS, SO, PI, AI, DT, CY, LA (BIB is default) BIB, indented with text labels AN, CC, CT, CO, ALI, CCA, ET TI, CT (random display without answer number) AN, TI, CT	D ABS  D DALL D IALL D 8 BIB  D IBIB D IND D SCAN D TRI
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) Available since May 2005.

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

**SELECT, ANALYZE, and SORT Fields**

The SELECT command is used to create E-numbers containing terms taken from the specified field 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 alphabetic or numeric order of the specified field(s).

## METADEX

## SELECT, ANALYZE, and SORT Fields (cont'd)

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract	AB	Y (2)	N
Accession Number	AN	Y	N
Alloy Indexing Term/Classification Code of Alloy	ALI	Y	N
Application Date	AD	Y	Y
Author	AU	Y	Y
Citation	CIT (RE)	Y (3,4)	N
Classification Code	CC	Y	Y
Classification Code of Alloy	CCA	Y	Y
Controlled Term	CT	Y	N
Corporate Name	CO	Y	Y
Corporate Source	CS	Y	Y
Country of Publication	CY	Y	Y
Document Type	DT (TC)	Y	Y
Element Term	ET	Y	N
E-mail Address	EML	Y	Y
Entry Date	ED (UP)	Y	Y
International Standard (Document) Number	ISN	Y (5)	Y
International Standard Book Number	ISBN	N	Y
International Standard Serial Number	ISSN	N	Y
Journal Title	JT	Y	Y
Journal Title, Abbreviated	JTA	Y	Y
Journal Title, Full	JTF	Y	Y
Language	LA	Y	Y
Meeting Date	MD	Y	Y
Meeting Location	ML	Y	Y
Meeting Title	MT	Y	Y
Meeting Year	MY	Y	Y
Number of Report	NR	Y	Y
Occurrence Count of Hit Terms	OCC	N	Y
Other Source	OS	Y	Y
Patent Country	PC	Y (4)	Y
Patent Number	PN (PI)	Y	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y (4)	Y
Publisher	PB	Y	Y
Source	SO	Y (6)	N
Title	TI	Y (default)	Y
Uniform Resource Locator	URL	Y	Y
Word Count, Title	WC.T	Y	Y

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

(2) Select appends /BI.

(3) SELECT CIT allows you to extract the reference data from the source documents in this file and have them automatically converted to a citation format for searching in the SCISEARCH file. SEL CIT selects first author, publication year, volume, first page, and a truncation symbol with /RE appended.

(4) Select or analyze HIT are not valid with this field.

(5) Selects ISSN, and ISBN with /ISN appended.

(6) Selects ISSN, and ISBN with /SO appended.

## Sample Record

### DISPLAY ALL OF JOURNAL

AN 2010(02):71-1418056 METADEX  
TI Atomistic Modeling of the Structural and Thermal Conductivity of the InSb.  
AU Rino, J.P. (Departamento de Fisica, Universidade Federal de Sao Carlos, 13565-905 Sao Carlos, SP - Brazil ); de Oliveira Cardozo, G.; Picinin, A.  
SO Computers, Materials, & Continua (20090000), vol. 12, 2, pp. 145-156  
Published by: Tech Science Press, 4924 Balboa Blvd., #488, Encino, CA, 91316, mailto: sale@techscience.com, URL: <http://www.techscience.com>.  
20090000  
ISSN: 1546-2218  
DT Journal  
CY United States  
LA English  
AB A new parametrization for the previous empirical interatomic potential for indium antimonite is presented. This alternative parametrization is designed to correct the energetic sequence of structures. The effective empirical interatomic potential proposed consists of two and three body interactions which has the same functional form of the interatomic potential proposed by Vashishta et. al. to study other semiconductors (Branicio et al., 2003; Ebbsjo et al., 2000; Shimojo et al., 2000; Vashishta et al., 2008). Molecular dynamics simulations (MD) are performed to study high pressure phases of InSb up to 70 GPa and its thermal conductivity as a function of temperature. The rock-salt to cesium chloride, expected to occur at high pressures, is observed with the proposed interatomic potential.  
CC 71 General and Nonclassified  
CT Semiconductors; Indium antimonides; Thermal conductivity; Parametrization; Computer simulation; Intermetallics; Mathematical models; Empirical analysis;  
ET In\*Sb; In sy 2; sy 2; Sb sy 2; InSb; In cp; cp; Sb cp; In\*Sb; In sy 2; sy 2; Sb sy 2; InSb; In cp; cp; Sb cp

### DISPLAY BIB OF REPORT

AN 2009(06):61-1109539 METADEX  
TI Modelling and Experimental Validation of the Acoustic Electric Feedthrough Technique.  
AU Moss, Scott (Air Vehicles Division, Maritime Platforms Division, Defence Science and Technology Organisation ); McMahon, Phillip; Konak, Michael; Phoumsavanh, Chris; Rajic, Nik; Galea, Steve; Powlesland, Ian  
NR DSTO-RR-0338  
SO Modelling and Experimental Validation of the Acoustic Electric Feedthrough Technique, (20080000), pp. 32  
Published by: Defence Science and Technology Organisation, Aeronautical and Maritime Research Laboratory, P.O. Box 4331, Melbourne, Victoria, 3001  
DT Report  
CY Australia  
LA English

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