

## 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**

Alerts (SDIs)	Monthly				
CAS Registry Number <sup>®</sup> Identifiers	<input type="checkbox"/>	Page Images	<input type="checkbox"/>	STN <sup>®</sup> AnaVist™	<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<sup>®</sup></a>	<input checked="" type="checkbox"/>
Learning Database	<input type="checkbox"/>	Structures	<input type="checkbox"/>		

**Record Content** Bibliographic information, indexing and abstracts

**File Size** More than 8.6 million citations (12/2016)

**Coverage** 1966-2016 (Patents are covered since 1869)

**Updates** Static file

**Language** English

**Database Producer**  
 ProQuest LLC  
 789 E. Eisenhower Parkway  
 P.O. Box 1346  
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Email: helpdesk@fiz-karlsruhe.de

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**Sources**

- Journals
  - Patents
  - 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
  - ENGINEERING
  - MATERIALS
  - METALS
- [STN Database Clusters](#) information (PDF)
- 

**Pricing**

Enter HELP COST at an arrow prompt.

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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 abstract (AB), controlled term (CT), and title (TI) fields)	None or /BI	S INDUSTRIAL MEASUREMENT S MANAGEMENT(L)TEAM S ?SPECTRA?	AB, CT, TI
Abstract*	/AB	S MULTISENSOR/AB	AB
Accession Number	/AN	S 2012:100/AN	AN
Alloy Indexing Term	/ALI	S ALUSTAR/ALI	ALI
Author (includes inventor)	/AU	S MAN, ?/AU S MAN C S/AU	AU, IN
Availability	/AV	S BRITISH LIBRARY	AV
Classification Code (1)	/CC	S AIRCRAFT COMMUNICATIONS/CC	CC
Classification Code Alloy	/CCA	S MANGANESE STEELS/CCA	CCA
Corporate Source (incl. author's affiliation) (1)	/CS	S UNIVERSITY OF CHINA/CS	CS
Controlled Term	/CT	S ANAEROBIC DIGESTION/CT	CT
Controlled Word	/CW	S MANGANESE/CW	CT
Digital Object Identifier	/FTDOI	S CNKI:11-1801/TB.20110720.1332.001/FTDOI	FTDOI, SO
Document Number	/DN	S 10189090/DN	DN
Document Type (code and text)	/DT (or /TC)	S CONFERENCE ARTICLE/DT S CA/DT	DT
E-mail Address (1)	/EML	S MANEY@MANEY.CO.UK/EML	EML, SO
Entry Date (2)	/ED	S ED>17 JUL 2012	ED
Field Availability	/FA	S AB/FA	FA
File Segment	/FS	S AH/FS AND L1	FS
International Standard (Document) Number (ISBN and ISSN)	/ISN	S 0945-0084/ISN	ISN, SO
Inventor	/IN	S NELSON ADAM/IN	IN
Journal Title	/JT	S ARCHITECTURAL DESIGN/JT	JT, SO
Language (ISO code and text)	/LA	S L1 NOT ENGLISH/LA	LA
Meeting Title (includes meeting date and location)	/MT	S MICROSCOPY OF OXIDATION/MT	MT, SO
Note	/NTE	S PAPER PRESENTED/NTE	NTE
Number of Report	/NR	S AD-A-083496/NR	NR
Patent Assignee (1)	/PA	S BASF/PA	PA
Patent Country (3)	/PC	S US/PC	PI
Patent Number (3)	/PN	S US239/PN	PI
Physical Properties	/PHP	S DEN/PHP (5A) PLATINUM	AB, TI
Publisher	/PB	S SPRINGER/PB	PB, SO
Publication Date (2)	/PD	S JAN 2001-MAY 2001/PD	PD, SO
Publication Year (2)	/PY	S PY>=1999	PY, SO
Publisher Item Identifier	/PUI	S A11388202V852943/PUI	PUI

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

Search Field Name	Search Code	Search Examples	Display Codes
Reference Count <b>(2)</b>	/REC (or /RE.CNT) /SO	S REC=5	REC, SO
Source (contains journal titles, other higher level titles, publisher and place of publication, meeting information collation information (volume, issue, pages), ISN, patent and application information, reference count, and publication year, URL and email addresses)		S FOUNDRYMAN/SO AND 1999/SO S ELSEVIER/SO S MATERIALS/SO AND 230/SO S (ADSORPTION AND 19)/SO S EUROPEAN PATENT/SO S EP00325S1/SO	SO
Summary Language (ISO code and text)	/SL	S SPANISH/SL	SL
Title*	/TI	S GAS NITRIDING/TI	TI
Update Date <b>(2)</b>	/UP	S UP>JUNE 2012	ED
Uniform Resource Locator <b>(1)</b>	/URL	S ASMEDL/URL	URL, SO
Word Count, Title <b>(2)</b>	/WC.T	S WC.T<10 AND L1	WC.T

(1) Search with implied (S) proximity is available in this field.

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

(3) Patent Numbers are standardized for CA, GB, and US patents.

## Property Fields<sup>1)</sup>

In METADEX a numeric search for a specific set of physical properties (/PHP) is available within the title and abstract fields. The numeric values are not displayed as single fields, but highlighted within the hit displays.

Use EXPAND/PHP to search for all available physical properties. A search with the respective field codes will be carried out in the abstract and title fields. The /PHP index contains a complete list of codes and related text for all physical properties available for numeric search.

Field Code	Property	Unit	Symbol	Search Examples
/AOS	Amount of substance	Mol	mol	S 10 /AOS
/BIR	Bit Rate	Bit/Second	bit/s	S 330/BIR
/BIT	Stored Information	Bit	Bit	S BIT > 3 MEGABIT
/CAP	Capacitance	Farad	F	S 1-10 MF/CAP
/CDN	Current Density	Ampere/Square Meter	A/m <sup>2</sup>	S CDN>10 A/M**2
/CMOL	Molarity, Molar Concentration	Mol/Liter	mol/L	S UREA/BI (S) 2/CMOL
/CON	Conductance	Siemens	S	S 1S-3/CON
/DB	Decibel	Decibel	dB	S DB>50
/DEG	Degree	Degree	°	S CYLINDER/BI (S) 45/DEG
/DEN	Density (Mass Concentration)	Kilogram/Cubic Meter	kg/m <sup>3</sup>	S 5E-3-10E-3/DEN
/DEQ	Dose Equivalent	Sievert	Sv	S 2/DEQ
/DOS	Dosage	Milligram/Kilogram	mg/kg	S DOS>0.8
/DV	Viscosity, dynamic	Pascal * Second	Pa * s	S DV>5000
/ECD	Electric Charge Density	Coulomb/Square Meter	C/m <sup>2</sup>	S 10E-6 - 10E-5 C/M**2/ECD
/ECH	Electric Charge	Coulomb	C	S 2-3/ECH
/ECO	Electrical Conductivity	Siemens/Meter	S/m	S ECO>800 S/M

Property Fields<sup>1)</sup> (cont'd)

Field Code	Property	Unit	Symbol	Search Examples
/ELC /ELF /ENE	Electric Current Electric Field Energy	Ampere Volt/Meter Joule	A V/m J	S 1-10/ELC S 650-700/ELF S SEMICONDUCT?(10A) 20-30 /ENE
/ERE /FOR /FRE /IU /KV	Electrical Resistivity Force Frequency International Unit Viscosity, kinematic	Ohm * Meter Newton Hertz none Square Meter/Second	Ohm * m N Hz IU m <sup>2</sup> /s	S ERE>2 S 50 N /FOR S OSCILLAT?/BI (S) 1- 3/FRE S IU>1000 (P) ANTIBIOTIC S SILICON?/BI (5A) 10E-5 M**2/S/KV
/LEN (or /SIZ) /LUME	Length, Size Luminous Emittance, Illuminance	Meter Lux	m lx	S 1-4/LEN S 10-50/LUME
/LUMF /LUMI /M /MCH /MFD (or /MFS) /MFR (or /MFL) /MM /MOLS /MVR /NUC /PER /PERA /PHV /POW	Luminous Flux Luminous Intensity Mass Mass to Charge Ratio Magnetic Flux Density Mass Flow Rate Molar Mass Molality of Substance Melt Volume Rate Nutrition Content Percent (Proportionality) Permittivity, Absolute pH Value Power	Lumen Candela Kilogram none Tesla Kilogram/Second Gram/Mol Mol/Kilogram none none Farad/Meter pH Watt	Lm cd kg m/z T kg/s g/mol mol/kg g/10 min g/100*kcal % F/m pH W	S LUMF>1000 S LUMI<4 S ALLOY/BI (30A) 1E-10-1E-5/M S MCH=100 S MFD>102 S MFR<0.1 S 2000-3000 G/MOL/MM S 01.-10 MOL/KG/MOLS S 3/MVR S NUC<100(XW)CARBOHYDRATE S POLYMER?/AB (5A) 4/PER S DIELECTRIC/BI (S) 4- 4.1/PERA S 7.4-7.6/PHV S LIGHT/BI (S) ENERGY/BI (S) 350 WATT/POW
/PRES (or /P) /RAD /RES /RSP /SAR	Pressure Radioactivity Electrical Resistance Rotational Speed Area /Surface Area	Pascal Becquerel Ohm Revolution/Minute Square Meter	Pa Bq Ohm rpm m <sup>2</sup>	S (VACUUM (5A) DISTILL?)/BI (S) 1000-1100/PRES S 10e10-10e11 RAD S SENSOR /BI (S) 10- 100/RES S 2-100/RSP (S) MACHINE/AB S (COATING? OR FOIL?)/BI (S) 10- 100/SAR
/SOL /STSC /TCO /TEMP (or /T) /TIM /VEL (or /V) /VELA /VLR /VOL /VOLT	Solubility Surface Tension Thermal Conductivity Temperature Time Velocity Velocity, angular Volumetric Flow Rate Volume Voltage	Gram/100 gram Joule /Square Meter Watt/Meter * Kelvin Kelvin Second Meter per Second Radian/Second Cubic Meter/Second Cubic Meter Volt	g/100 g J/m <sup>2</sup> W/m * K K s m/s rad/s m <sup>3</sup> /s m <sup>3</sup> V	S SOL>20 (10W) WATER S 60 J/M**2/STSC S 1/TCO (S) HEAT? S (REACTION? (10A) ENZYM?) (S) 5/TEMP S ?INCUB?/BI (10A) 10-50/TIM S REDUC?/BI (S) 1E-3-5E-3/VEL S VELA>10 S 1-2/VLR S 1E-8-2E-8/VOL.EX S POTENTIAL/BI (10A) 5E-3 V <VOLT<7E-3 V

(1) Exponential format is recommended for the search of particularly high or low values, e.g. 1.8E+7 or 1.8E7 (for 18000000) and 9.2E-8 (for 0.00000092).

**METADEX****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.

<b>Format</b>	<b>Content</b>	<b>Examples</b>
AB ALI AN AU AV CC CCA CS CT DN DT (TC) ED (UP) (1) EML (1) FA FTDOI (1) IN ISN (1) JT (1) LA MT (1) NTE NR PA PB (1) PD (1) PI (PN) PUI PY (1) REC (RE.CNT) (1) SL SO TI URL (1) WC.T (1)	Abstract Alloy Indexing Term Accession Number Author Availability Classification Code Classification Code Alloy Corporate Source Controlled Term Document Number Document Type Entry Date (includes Update Date) E-mail Address Field Availability Digital Object Identifier Inventor International Standard (Document) Number Journal Title Language Meeting Title Note Number of Report Patent Assignee Publisher Publication Date Patent Information Publisher Item Identifier Publication Year Reference Count Summary Language Source Title Uniform Resource Locator Word Count, Title	D TI AB D ALI D 1-5 AN D AU TI D AV D CC D CCA D CS D CT D DN D DT D ED D EML D FA D FTDOI D IN D ISN D JT D LA TI D MT D NTE D NR D PA D PB D PD D PI D PUI D PY D REC D SL D SO D TI 1-3 D URL D WC.T
ABS ALL  DALL IALL BIB  IBIB IND SCAN (2) TRIAL (TRI, SAM, SAMPLE, FREE)	AN, AB AN, DN, TI, AU, IN, CS, PA, PI, NR, SO, NTE, PUI, DT, FS, LA, SL, AV, ED, AB, CC, CT, ALI, CCA ALL, with delimiter for post processing ALL, indented with text labels AN, DN, TI, AU, IN, CS, PA, PI, NR, SO, NTE, PUI, DT, FS, LA, SL, AV, ED (BIB is the default) BIB, indented with text labels AN, CC, CT, ALI, CCA TI, CC, CT (random display without answer numbers) AN, TI, CC, CT, ALI, CCA	D ABS D 1-3 ALL  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) 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).

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
Abstract	AB	Y	N
Alloy Indexing Term	ALI	Y	Y
Accession Number	AN	Y	Y
Author	AU	Y	Y
Citation	CIT (RE)	Y (2,3)	N
Classification Code	CC	Y	Y
Classification Code Alloy	CCA	Y	Y
Controlled Term	CT	Y	Y
Corporate Source	CS	Y	Y
Digital Object Identifier	FTDOI	N	Y
Document Number	DN	Y	Y
Document Type	DT (TC)	Y	Y
E-mail Address	EML	Y	Y
Entry Date	ED	Y	Y
Field Availability	FA	Y	N
Inventor	IN	Y	Y
International Standard (Document) Number	ISN	Y (4)	Y
International Standard Book Number	ISBN	N	Y
International Standard Serial Number	ISSN	N	Y
Journal Title	JT	Y	Y
Language	LA	Y	Y
Meeting Title	MT	Y	Y
Note	NTE	Y	Y
Number of Report	NR	Y	Y
Occurrence Count of Hit Terms	OCC	N	Y
Patent Assignee	PA	Y	Y
Patent Country	PC	Y	Y
Patent Number	PN (PI)	Y	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y	Y
Publisher	PB	Y	Y
Publisher Item Identifier	PUI	Y	Y
Reference Count	REC (RE.CNT)	Y	Y
Source	SO	Y (5)	Y
Summary Language	SL	Y	Y
Title	TI	Y (default)	Y
Uniform Resource Locator	URL	Y	Y
Update Date	UP	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 or ANALYZE HIT are not valid with this field.
- (3) SELECT or ANALYZE CIT allows you to extract the reference from the source documents in this file and have them automatically converted to a citation format for searching in the SCISEARCH file. SEL or ANALYZE CIT extracts first author, publication year, volume, first page, with a truncation symbol and with /RE appended to the terms created by SELECT.
- (4) Selects or analyzes ISSN and ISBN with /ISN appended to the terms created by SELECT.
- (5) Selects or analyzes ISSN and ISBN with /SO appended to the terms created by SELECT.

## Sample Records

### DISPLAY ALL OF JOURNAL

AN 2012:228916 METADEX  
DN 16646171  
TI Phase Development During Setting and Hardening of a Bone Cement Based on alpha -Tricalcium and Octacalcium Phosphates  
AU Komlev, Vladimir S; Fadeeva, Inna V; Barinov, Sergey M; Rau, Julietta V; Fosca, Marco; Gurin, Alexey N; Gurin, Nikolay A  
CS A.A. Baikov Institute of Metallurgy and Materials Science, Russian Academy of Sciences, Leninsky Prospect 49, 119991 Moscow, Russia  
EMAIL: komlev@mail.ru  
SO Journal of Biomaterials Applications [J. Biomater. Appl.]. Vol. 26, no. 8, pp. 1051-1068. May 2012., 35 refs.  
ISSN: 0885-3282  
DOI: 10.1177/0885328210390403  
Published by: Sage Publications Ltd., 6 Bonhill St. London EC2A 4PU  
United Kingdom  
PUI 10.1177\_0885328210390403  
DT Journal; Article  
FS Ceramic Abstracts/World Ceramics Abstracts (WC); Solid State and Superconductivity Abstracts (SO); Mechanical & Transportation Engineering Abstracts (MT); METADEX (MD); Advanced Polymers Abstracts (EP); Composites Industry Abstracts (ED); Engineered Materials Abstracts, Ceramics (EC); ANTE: Abstracts in New Technologies and Engineering (AN)  
LA English  
SL English  
ED Entered STN: 17 Jul 2012  
Last updated on STN: 17 Jul 2012  
AB In this study, the phase development in the cement system alpha -TCP-OCP with phosphoric acid as a setting liquid was studied. The most promising formulation of alpha -TCP (60wt%) and OCP (40wt%) is proposed. This cement has the following characteristics: setting time 10min, pH=6.7, the compressive strength about 30MPa, and high dissolution rate in an isotonic solution; the final wt% composition of alpha -TCP/DCPD/HA/OCP equals 27/38/20/15. Energy dispersive X-ray diffraction techniques were used for in situ monitoring of the processes taking place in the cement in real time.  
CC 3 Cements, Limes, and Plasters (WC); 15 Engineering and Industry (SO); 61 Design Principles (MT); 61 Engineering Components and Structures (MD); F1 Engineering Components and Structures (EP); F1 Engineering Components and Structures (ED); F1 Engineering Components and Structures (EC); Yes (AN)  
CT Cements; Compressive strength; Diffraction; Dissolution; Hydroxyapatite; Phosphates; Setting (hardening); Surgical implants



**DISPLAY BIB OF PATENT**

AN 2012:228914 METADEX  
DN 16852967  
TI System and method for managing compression and decompression of system  
memory in a computer system  
IN Geiger, Peter; Alvarez, Manuel J II; Dye, Thomas A  
PA Mossman Holdings LLC (Wilmington, DE)  
PI US 43483 20120619  
SO Application Information: 15 May 2008, 12/121,598  
DT Patent  
FS Mechanical & Transportation Engineering Abstracts (MT); METADEX (MD);  
ANTE: Abstracts in New Technologies and Engineering (AN); Aerospace &  
High Technology Database (AH)  
LA English  
ED Entered STN: 17 Jul 2012  
Last updated on STN: 17 Jul 2012

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Internet: www.stn-international.com

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Email: support@jaici.or.jp (Technical Service)  
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