

# ANTE (Abstracts in New Technologies and Engineering)



- Subject Coverage**
- Aerospace
  - Chemical technology and engineering
  - Communications engineering
  - Computers and control
  - Construction
  - Design
  - Electrical and electronic engineering
  - Energy
  - Ergonomics
  - Food, farming fishing and forestry
  - Health and safety
  - Management services
  - Mechanical and production engineering
  - Medical technology
  - Metallurgy
  - Military technology
  - Mineral extraction and processing
  - Photography and cinematography
  - Pollution, waste and water engineering
  - Printing, paper and packaging
  - Quality assurance, training and standards
  - Radio and television
  - Road, rail and sea transport
  - Science and measurement
  - Sound and video recording
  - Textiles, leather and wood

**File Type** Bibliographic

- Features**
- |                                       |                                     |                       |                                     |                             |                          |
|---------------------------------------|-------------------------------------|-----------------------|-------------------------------------|-----------------------------|--------------------------|
| <a href="#">Alerts (SDIs)</a>         | Monthly                             |                       |                                     |                             |                          |
| <a href="#">CAS Registry Numbers®</a> | <input 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 type="checkbox"/> |
| Learning Database                     | <input type="checkbox"/>            | Structures            | <input type="checkbox"/>            | <a href="#">STN Viewer</a>  | <input type="checkbox"/> |

- Record Content**
- Bibliographic information and indexing.
  - Abstracts are available from 1993 to present.

**File Size** 574,926 records (12/09)

**Coverage** 1981-present

**Updates** Monthly

**Language** English

**Database Producer** Cambridge Scientific Abstracts  
7200 Wisconsin Avenue  
Bethesda, MD, 20814  
U.S.A.  
Phone: +1 301-961-6700  
Fax: +1 301-961-6720  
E-mail: support@csa.com  
Copyright Holder

**Database  
Supplier**

FIZ Karlsruhe  
STN Europe  
P.O. Box 2465  
76012 Karlsruhe  
Germany  
Phone: +49-7247-808-555  
Fax: +49-7247-808-259  
E-mail: [helpdesk@fiz-karlsruhe.de](mailto:helpdesk@fiz-karlsruhe.de)

---

**Sources**

- Journals
- 

**User Aids**

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

**Clusters**

- [AEROTECH](#)
  - [AGRICULTURE](#)
  - [ALLBIB](#)
  - [AUTHORS](#)
  - [BIOSCIENCE](#)
  - [COMPUTER](#)
  - [CORPSOURCE](#)
  - [CSAALL](#)
  - [ENVIRONMENT](#)
  - [ELECTRICAL](#)
  - [ENGINEERING](#)
  - [MATERIALS](#)
- 

**Pricing**

See the [STN Price List](#) or enter HELP COST at an arrow prompt.

---

## 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 2004000021/AN	AN
Author	/AU	S MAN, ?/AU S MAN C S/AU	AU
Corporate Source (incl. author's affiliation) <b>(1)</b>	/CS	S MANCHESTER AIRPORT/CS	CS
Controlled Term	/CT	S ANAEROBIC DIGESTION/CT	CT
Controlled Word	/CW	S MANGANESE/CW	CT
Data Entry Date <b>(2,3)</b>	/DED	S DED=JAN 1998	DED
Document Number	/DN	S 100014/DN	DN
Document Type (code and text)	/DT (or /TC)	S CONFERENCE ARTICLE/DT S CA/DT	DT
E-mail Address <b>(1)</b>	/EML	S MANEY@MANEY.CO.UK/EML	EML, SO
Field Availability	/FA	S AB/FA	not displayed
File Segment <b>(4)</b>	/FS	S SELECTIVE/FS	FS
International Standard (Document) Number (ISBN and ISSN)	/ISN	S 0945-0084/ISN	ISN, SO
Journal Title (contains full and abbreviated titles)	/JT	S ARCHITECTURAL DESIGN/JT	JT, JTA, JTF, SO
Language (ISO code and text)	/LA	S L1 NOT ENGLISH/LA	LA
Number of Report	/NR	S AD-A188642/NR	NR
Note <b>(1)</b>	/NTE	S PAPER PRESENTED/NTE	NTE
Other Source	/OS	S ALUMINIUM INDUSTRY (AI)/OS	OS
Publisher <b>(1)</b>	/PB	S SPRINGER VERLAG/PB	PB
Publication Date <b>(2)</b>	/PD	S JAN 2001-MAY 2001/PD	PD, SO
Publication Year <b>(2)</b>	/PY	S PY>=1999	PY, SO
Reference Count <b>(2)</b>	/REC (or /RE.CNT)	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), ISSN, ISBN, reference count, and publication year, URL and email addresses)	/SO	S FOUNDRYMAN/SO AND 1999/SO S ELSEVIER/SO S MATERIALS/SO AND 230/SO	SO
Title	/TI	S GAS NITRIDING/TI	TI
Update Date <b>(2)</b>	/UP (or /ED)	S UP=JUN 2004	UP
Uniform Resource Locator <b>(1)</b>	/URL	S CAMBRIDGE/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)** This field is available until April 2004.

**(4)** This field contains the coverage grade of the source publication (available until May 2005).

**ANTE****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 AN AU CS CT DED (1) DN DT (TC) EML (1) FS (1) ISN (1) JT (1) JTA (1) JTF (1) LA NR NTE OS PB (1) PD (1) PY (1) REC (RE.CNT) (1) SO TI UP (ED) (1) URL (1) WC.T (1)	Abstract Accession Number Author Corporate Source Controlled Term Data Entry Date Document Number Document Type E-mail Address File Segment International Standard (Document) Number Journal Title Journal Title, Abbreviated Journal Title, Full Language Number of Report Note Other Source Publisher Publication Date Publication Year Reference Count Source Title Update Date Uniform Resource Locator Word Count, Title	D TI AB D 1-5 AN D AU TI D CS D CT D DED D DN D DT D EML D FS D ISN D JT D JTA D JTF D LA TI D NR D NTE D OS D PB D PD D PY D REC D SO D TI 1-3 D UP 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, CS, SO, NR, DT, LA, SL, NTE, OS, AB, CT ALL, with delimiter for post processing ALL, indented with text labels AN, DN, TI, AU, CS, SO, NR, DT, LA, SL, NTE, OS (BIB is the default) BIB, indented with text labels AN, CT TI, CT (random display without answer numbers) AN, TI, CT	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
Accession Number	AN	Y	N
Author	AU	Y	Y
Citation	CIT (RE)	Y (2,3)	Y
Controlled Term	CT	Y	Y
Corporate Source	CS	Y	N
Data Entry Date	DED	Y	N
Document Number	DN	Y	Y
Document Type	DT (TC)	Y	N
E-mail Address	EML	Y	Y
File Segment	FS	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
Journal Title, Abbreviated	JTA	Y (5)	Y
Journal Title, Full	JTF	Y (5)	Y
Language	LA	Y	Y
Note	NTE	Y	Y
Number of Report	NR	Y	Y
Occurrence Count of Hit Terms	OCC	N	Y
Other Source	OS	Y	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y	Y
Publisher	PB	Y	Y
Reference Count	REC (RE.CNT)	Y	Y
Source	SO	Y (6)	Y
Title	TI	Y (default)	Y
Uniform Resource Locator	URL	Y	Y
Update Date	UP (ED)	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) Appends /JT to the terms created by SELECT.
- (6) Selects or analyzes ISSN and ISBN with /SO appended to the terms created by SELECT.

## Sample Record

### DISPLAY ALL

AN 2005007988 ANTE  
 DN 344822  
 TI Exergy analysis of ejector-refrigeration cycle using water as working fluid.  
 AU Alexis, G. K.  
 eMail: galexis@gdias.teipir.gr  
 CS Department of Mechanical Engineering, Faculty of Technological Applications, Technical Education Institute of Piraeus, 250 Thivon & P. Ralli, Athens 12244, Greece  
 SO International Journal of Energy Research, vol. 29, no. 2, pp. 95-105, Feb. 2005, 20050200, il., tbls., refs.  
 Published by: John Wiley & Sons Ltd., Baffins Lane, Chichester, Sussex, PO19 1UD, UK, [cs-journals@wiley.co.uk], [<http://www.interscience.wiley.com>]  
 ISSN: 0363-907X  
 DT Journal  
 LA English  
 AB Exergy is based on the second law of thermodynamics and is the only rational basis for evaluating the system performance. The aim of this paper is to study in detail the irreversibilities in the steam-ejector refrigeration system. The influence of the cycle parameters is analysed on the basis of the first and second law and the results indicated the components with the greater irreversibility. A better quality of the ejector has more effect on the system performance than the better quality of other components, because the ejector at first and the condenser at second have the greater exergy loss of the system. For the refrigeration system the maximum coefficient of performance varying between 0.4 to 0.6 and the second law efficiency remains close to 0.17 for generator pressure 6 bar, condenser temperature 44-50deg.C and evaporator temperature 4-8deg.C. Also the study showed that the second law analysis quantitatively visualizes losses within a system and gives clear trends for optimization. (Original abstract)  
 CT DEA: Refrigeration; DEA: Jet pumps; DEA: Working fluids; DEA: Water; DEA: Thermodynamic cycles; DEA: Thermal efficiency; DEA: Exergy

---

#### In North America

CAS  
 STN North America  
 P.O. Box 3012  
 Columbus, Ohio 43210-0012 U.S.A.

CAS Customer Care:  
 Phone: 800-753-4227 (North America)  
 614-447-3700 (worldwide)  
 Fax: 614-447-3751  
 E-mail: help@cas.org  
 Internet: www.cas.org

#### In Europe

FIZ Karlsruhe  
 STN Europe  
 P.O. Box 2465  
 76012 Karlsruhe  
 Germany  
 Phone: +49-7247-808-555  
 Fax: +49-7247-808-259  
 E-mail: helpdesk@fiz-karlsruhe.de  
 Internet: www.stn-international.de

#### In Japan

JAICI (Japan Association for  
 International Chemical Information)  
 STN Japan  
 Nakai Building  
 6-25-4 Honkomagome, Bunkyo-ku  
 Tokyo 113-0021, Japan  
 Phone: +81-3-5978-3601 (Technical Service)  
 +81-3-5978-3621 (Customer Service)  
 Fax: +81-3-5978-3600  
 E-mail: support@jaici.or.jp (Technical Service)  
 customer@jaici.or.jp (Customer Service)  
 Internet: www.jaici.or.jp