

CORROSION (Corrosion Abstracts)

Subject Coverage	<ul style="list-style-type: none"> • Alloying • Atmospheric corrosion • Cathodic protection • Corrosion in oil and gas production • Corrosion in specific materials • Corrosion potential • Corrosion prevention • Cracking • Creep • Designing for cathodic protection • Designing for corrosion control • Diffusion • Fatigue 	<ul style="list-style-type: none"> • Immersion • Impedance • Inhibition • Inspection • Marine corrosion • Microbiologically influenced corrosion • Oxidation • Pipe corrosion • Pitting • Protective coatings and linings • Theory and data interpretation • Welding
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File Type Bibliographic

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Record Content • Bibliographic information, abstracts, and for data since March 1998 controlled terms.

File Size • 154,681 citations (10/09)

Coverage 1966-present

Updates Monthly

Language English

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CORROSION

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Search and Display Field Codes

General Search Fields

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index (contains single words from the abstract (AB), corporate name (CO), controlled term (CT), and title (TI) fields)	None or /BI	S ALLOYS(S)FATIGUE# S EURO INOX S METALLIC MATERIAL?	TI, AB, CO, CT
Accession Number	/AN	S 20000755/AN	AN
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Controlled Word (2)	/CW	S MEASUREMENTS/CW	CT
Corporate Name (1,2)	/CO	S EUROPEAN COMMITTEE/CO	
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Publication Year (3)	/PY	S PY=1999	PY, SO
Publisher (1)	/PB	S ACADEMIC PUBLISHERS/PB	PB, SO
Reference Count (2,3)	/REC (or /RE.CNT)	S REC<=10	REC, SO
Source (contains journal title and other higher level titles, ISBN, ISSN, publisher, meeting information, collation information, references, and publication date)	/SO	S PROCEEDINGS/SO S 0300-9440/SO S SURFACE SCIENCE/SO	SO
Title	/TI	S CREVICE CORROSION/TI	TI
Update Date (2)	/UP (or /ED)	S UP>JAN 2000	UP
Word Count, Title (2)	/WC.T	S WC.T<15	WC.T

- (1) Search with implied (S) proximity is available in this field.
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(3) Numeric search field that may be searched with numeric operators or ranges.
(4) Search with implied (L) proximity is available in this field.

CORROSION**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 CO CT (2) CY DT (TC) ISN (1,2) JT (1,2) JTA (1,2) JTF (1,2) LA MD (1,2) ML (1,2) MT (1,2) MY (1,2) PB (1) PD (1) PY (1) REC (RE.CNT) (1) SO TI WC.T (1)	Abstract Accession Number Author (includes author's affiliation) Corporate Name Controlled Term Country of Publication Document Type International Standard (Document) Number Journal Title Journal Title, Abbreviated Journal Title, Full Language Meeting Date Meeting Location Meeting Title Meeting Year Publisher Publication Date Publication Year Reference Count Source Title Word Count, Title	D TI AB D 1-5 AN D AU TI D TI CO D CT D CY D DT D ISN D JT D JTA D JTF D LA TI D MD D ML D MT D MY D PB D PD D PY D REC D SO D TI 1-3 D WC.T
ABS ALL DALL IALL BIB IBIB IND SCAN (3) TRIAL (TRI,SAMPLE, SAM, FREE)	AN, AB AN, TI, AU, CS, SO, DT, CY, LA, AB, CT, CO ALL, with delimiter for post processing ALL, indented with text labels AN, TI, AU, CS, SO, DT, CY, LA (BIB is default) BIB, indented with text labels AN, CT, CO TI, CT (random display without answer numbers) AN, TI, CT, CO	D ABS D ALL D DALL D IALL D 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

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(2) Field available since March 1998.

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

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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 (2)	N
Accession Number	AN	Y	N
Author	AU	Y	Y
Citation	CIT (RE)	Y (3,4)	N
Controlled Term	CT	Y (5)	N
Corporate Name	CO	Y (5)	Y
Corporate Source	CS	Y (5)	Y
Country of Publication	CY	Y (5)	Y
Document Type	DT (TC)	Y	Y
International Standard (Document) Number	ISN	Y (5)	Y
International Standard Book Number	ISBN	Y (5)	Y
International Standard Serial Number	ISSN	Y (5)	Y
Journal Title	JT	Y (5)	Y
Journal Title, Abbreviated	JTA	Y (5)	Y
Journal Title, Full	JTF	Y (5)	Y
Language	LA	Y	Y
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Meeting Year	MY	Y (5)	Y
Occurrence Count of Hit Terms	OCC	N	Y
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Publication Year	PY	Y	Y
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Source	SO	Y (6)	Y
Title	TI	Y (default)	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) Appends /BI to the terms created by SELECT.
- (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) SELECT HIT or ANALYZE HIT are not valid with this field.
- (5) Field available since March 1998.
- (6) Selects or analyzes ISSN, and ISBN with /SO appended to the terms created by SELECT.

CORROSION

Sample Records

DISPLAY ALL (RECORD AS OF MARCH 1998)

AN 20004630 CORROSION
 TI High-temperature oxidation of Fe sub 3Al containing yttrium.
 AU Cho, W.D.(University of Utah); Kim, I. (University of Utah); Kim, H.J.
 (Yuhan College)
 SO Journal of Materials Science, (15 Sep 2000), 35, 18, 4695-4703, Numerical
 Data, Diffraction Patterns, Photomicrographs, Graphs, 24 reference(s)
 ISSN: 0022-2461
 DT Journal
 CY United States
 LA English
 AB The effect of yttrium addition on the oxidation behavior of Fe sub 3Al
 alloys was investigated in terms of oxidation rate and oxide adhesion in
 the temperature range of 800-1100DGC. The oxidation rate of the alloys,
 Fe-14.3 weight% Al and Fe-14.1 weight% Al-0.3 weight% Y, was nearly
 identical, and the parabolic rate constant as a function of temperature is
 found to be $K \text{ sub } p = 5128 \text{ exp } -39506 \text{ (cal/mol)}/RT \text{ mg sup } 2/\text{cm sup } 4 \text{ h}$.
 While the alumina scale formed on the Y-free Fe sub 3Al alloy was observed
 to be fragile and spalled easily, the oxide layer formed on the Fe sub
 3Al-Y was protective, dense, and adhesive. Based on the microstructural,
 morphological, and compositional studies, the adhesion improvement due to
 the yttrium addition was discussed in terms of growth stress, the
 formation of pegs and scale growth mechanism.
 CT Intermetallics; Iron compounds; Aluminides; Yttrium; Oxidation rate;
 Reaction kinetics; Scale (corrosion); Oxide coatings; Adhesion

DISPLAY BIB (RECORD BEFORE MARCH 1998)

AN 19981358 CORROSION
 TI LABORATORY STUDY OF SACRIFICIAL ANODES FOR REINFORCED CONCRETE.
 AU Brousseau, R
 SO R. Brousseau, and B. Baldock (National Research Council of Canada),
 Corrosion, Vol. 54, No. 3 (1998), pp. 241-245, 7 reference(s)
 Published by: Corrosion, NACE International, P.O. Box 218340, Houston, TX
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