

Wilson Applied Science & Technology Abstracts

FILE DESCRIPTION

Wilson Applied Science & Technology Abstracts provides comprehensive abstracting and indexing of more than 400 core English-language scientific and technical publications. Non-English-language periodicals are indexed if English abstracts are provided. Periodical coverage includes trade and industrial publications, journals issued by professional and technical societies, and specialized subject periodicals, as well as special issues such as buyers' guides, directories, and conference proceedings.

Wilson Applied Science & Technology Abstracts covers a wide range of interdisciplinary fields through a broad array of science and technology journals. Detailed abstracts of 50 to 150 words describe the content and scope of the source articles. Types of materials indexed include feature articles, interviews, obituaries, biographies, speeches, and product evaluations. Wilson Applied Science & Technology Abstracts is the equivalent of H.W. Wilson's Applied Science & Technology Index (AST) and H.W. Wilson's Applied Science & Technology Abstracts (ASA).

SUBJECT COVERAGE

Wilson Applied Science & Technology Abstracts covers:

- Acoustics
- Aeronautics
- Atmospheric Science
- Chemical Engineering
- Chemistry
- Civil Engineering
- Computer Technology
- Electrical Engineering
- Energy Resources
- Environmental Engineering
- Fire Prevention
- Food and Food Industry
- Geology
- Industrial Engineering
- Machinery
- Marine Technology
- Mathematics
- Mechanical Engineering
- Metallurgy
- Mineralogy
- Mining Engineering
- Nuclear Engineering
- Oceanography
- Optical Computing
- Petroleum and Gas
- Physics
- Plastics
- Robotics
- Solid State Technology
- Space Science
- Telecommunications
- Textile Industry and Fabrics
- Transportation
- Waste Management

TIPS

USE FILE 99

for industrial and engineering applications in broad areas of science and technology.

USE /DE

to search for a subject:

SELECT ROBOTIC(W)MOTION?/DE

USE JN=

to search for a Journal Name:

SELECT JN=JOURNAL OR ROBOTIC SYSTEMS

USE RANK

to find other terms for searching:

SELECT WASTE(W)MANAGEMENT/DE
RANK DE

USE LIMITS

to focus results:

/ABS (Abstracts present)
/ENG (English language documents)

DIALOG FILE DATA

Inclusive Dates:

Indexing coverage from October 1983 to the present
Abstracts from March 1993

Update Frequency:

Closed (Approximately 5,000 records per update)

File Size: 2,037,790 records

CONTACT

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SAMPLE RECORD

DIALOG(R)File 99:WILSON APPL. SCI. & TECH. ABS.
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AA= 0051663 H.W. WILSON RECORD NUMBER: BAST96002385

/TI Parametric Motor Control: a new approach to the control
of point-to-point manipulator movements

AU= Bock, Otmar; D'Eleuterio, Gabriele M. T; Lipitkas, John

SO=, JN=, PY= Journal of Robotic Systems v. 13 (Jan. '96) p. 35-40

DT=, SN= DOCUMENT TYPE: Feature Article ISSN: 0741-2223

LA= LANGUAGE: English

ST= RECORD STATUS: New record

/AB ABSTRACT: A control scheme for point-to-point movements
of robotic manipulators based on an established concept
of human movement control is proposed. The
attractiveness of parametric motor control in the field
of robotics lies in its computational simplicity, as
calculations are reduced to a single mapping operation
that converts the desired kinematics of a movement into
the pertinent force parameters. In this approach, the
actuator drive signals have an invariant shape and are
parametrically altered to fit the requirements of
different tasks . An artificial neural network is used
to provide the appropriate parameter values before
movement onset. The approach does not require multiple
feedback loops or explicit solutions of the inverse
kinematic and inverse dynamic equations. A test trial
showed that parametric motor control yields
satisfactory performance results, allowing the
manipulator to distinguish between targets in a 5
(times) 3 grid and to generalize to new target
locations.

/DE DESCRIPTORS: Robotic motion control--Neural network
models; Point-to-point position control;
Manipulators--Control;

SEARCH OPTIONS

BASIC INDEX

SEARCH SUFFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
—	—	All Basic Index Fields	Word	S MANIPULATOR(W)MOVEMENT?
/AB	AB	Abstract ¹	Word	S ARTIFICIAL(W)NEURAL(W)NETWORK?/AB
/DE	DE	Descriptor ²	Word & Phrase	S ROBOTIC?(L)NEURAL(W)NETWORK/DE S ROBOTIC MOTION CONTROL/DE
/GN	GN	Geographic Name ^{3,4}	Word	S JUPITER(W)PLANET/GN
/NM	NM	Named Person ³	Word	S KAZANOWSKI(W)LARRY/NM
/TI	TI	Title	Word	S MANIPULATOR(W)MOVEMENT?/TI

¹ Abstracts available from March 1993 to the present.

⁴ Geographic Name is also searchable as Descriptors (/DE, /DF).

² Also /DF.

³ Searchable in the Basic Index and in the Additional Indexes.

ADDITIONAL INDEXES

SEARCH PREFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
AA=	AA	H. W. Wilson Record Number	Phrase	S AA=BAST96002385
—	AN	DIALOG Accession Number		
AU=	AU	Author ⁵	Phrase	S AU=BOCK, OTMAR
BN=	BN	International Standard Book Number (ISBN)	Phrase	S BN=0130404187
CS=	CS	Corporate Source ⁶	Word & Phrase	S CS=(SWEDISH AND CONNECTIONISM) S CS=SWEDISH CONFERENCE?
DT=	DT	Document Type	Phrase	S DT=FEATURE ARTICLE
GN=	GN	Geographic Name ^{3,4}	Phrase	S GN=NEW YORK?
JN=	JN	Journal Name ⁷	Phrase	S JN=JOURNAL OF ROBOTIC SYSTEMS
LA=	LA	Language ⁸	Phrase	S LA=ENGLISH
NM=	NM	Named Person ³	Phrase	S NM=KAZANOWSKI, LARRY
PD=	PD	Publication Date	Phrase	S PD=19960100
PY=	PY	Publication Year	Phrase	S PY=1996
SN=	SN	International Standard Serial Number (ISSN)	Phrase	S SN=0741-2223 S SN=07412223
SO=	SO	Source Information ⁹	Word	S SO=(ROBOTIC AND P(W)35)
ST=	ST	Status of Record	Phrase	S ST=NEW RECORD
UD=	—	Update	Phrase	S UD=9999

⁵ Only the first three authors names are included.

⁶ Corporate Source (CS=) is available on approximately 1% of the records.

⁷ Both the full journal name and the abbreviated journal name are searchable.

⁸ Records which are not indexed for language (found mainly in DT=REVIEW), are indexed as LA=UNDETERMINED. The /ENG limit excludes LA=UNDETERMINED.

⁹ Search and Display include Journal Name, Volume, Issue, Pagination, and Publication Date.

SPECIAL FEATURES

For command descriptions, enter HELP LIMIT, HELP SORT, HELP RANK, HELP DUP, HELP CURRENT online.

LIMIT	/ -- DIALOG Accession Number /ABS -- Abstract Present /ENG -- English-Language Source Article /NEW -- New Record in Database /NOABS -- No Abstract Present /NONENG -- Non-English Language Source Article /YYYY -- Publication Year	S S1/0010000-99999999 S S3/ABS S S5/ENG S S7/NEW S S4/NONABS S S6/NONENG S S2/1993
SORT	AU, CS, JN, PD, PY, TI	SORT S1/ALL/PY/D SORT S3/ALL/AU
RANK	All phrase- and numeric-indexed fields in the Additional Indexes can be ranked. Other RANK codes include: DE	RANK DE RANK AU S4
RD, ID	Remove duplicates (RD) or identify duplicates (ID,IDO).	RD S5
CURRENT	Search only the most recent year plus one (CURRENT1) to five (CURRENT5) years.	B 99 CURRENT2

PREDEFINED FORMAT OPTIONS

NO.	DIALOGWEB FORMAT	RECORD CONTENT
1	--	DIALOG Accession Number
2	--	Bibliographic Citation and Indexing
3	Medium	Bibliographic Citation
4	--	Full Record with Tagged Fields ¹
5	--	Full Record ¹
6	Short	Title and Publication Date
7	Long	Bibliographic Citation and Abstract ¹
8	Free	Title, Indexing, and Publication Date
9	Full	Full Record ¹
K	--	KWIC (Key Word In Context) displays a window of text; may be used alone or with other formats

OTHER OUTPUT OPTIONS

For an explanation, enter HELP TYPE, HELP UDF, HELP TAG online.

USER DEFINED FORMATS	Display codes listed in the Search Options tables can be used to customize output.	TYPE S3/TI,AU,SO/1-5 PRINT S2/TI,AB,SO/ALL
TAG	Output can be displayed with tags identifying each display field.	TYPE S3/5/1-10 TAG PRINT S2/9/ALL TAG DISPLAY S3/7/ALL
DIRECT RECORD ACCESS	If the accession number of a specific record is known, it can be used to display the record directly.	TYPE 01000005/5 DISPLAY 0074483/4 PRINT 50301964/9

FOR ONLINE HELP:

See HELP FIELDS 99 for searchable fields; HELP FORMAT 99 for output formats; HELP LIMIT 99 for limits; HELP RATES 99 for cost information; HELP SORT 99 for sorts.