1MOBILITY (Global Mobility Bibliographic Database)

Subject Coverage	• Automation • Manufacturing • Research & Design • Emissions • Marketing • Quality • Environment • Materials • Safety • Fuels & Lubricants • Noise & Vibration • Testing • Human factors • Population • Transportation • Management • Reliability

File Type Bibliographic

Features

Thesaurus	None				
[Alerts (SDIs)](#)	Monthly				
CAS Registry Numbers® Identifiers	☐	Page Images	☐	STN® AnaVist™	☐
Keep & Share	☐	[SLART](#)	☑	STN Easy®	☐
Learning Database	☐	Structures	☐		

Record Content
- Bibliographic information
- Indexing
- Abstracts

File Size More than 172,761 records (06/2017)

Coverage 1906-present

Updates Monthly

Language English

Database Producer
SAE International
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Sources	Books, conference proceedings, journals, papers, and file data
User Aids	• Online Helps (HELP DIRECTORY lists all help messages available) • STNGUIDE
Clusters	• ALLBIB • AUTHORS • ENGINEERING • FUELS • MATERIALS • MEETINGS • MOBILITY • SAFETY STN Database Clusters information (PDF).
Pricing	Enter HELP COST at an arrow prompt (=>).

Search and Display Field Codes

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

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index* (contains single words from the abstract (AB), controlled term (CT) and title (TI) **(1)**	None (or /BI)	S DUMP TRUCK# S PASSENGER CAR#/BI S NISSAN AND 1996 S ?CYLINDER?	AB, CT, TI
Abstract* **(1)**	/AB	S 3D CAD/AB	AB
Accession Number	/AN	S 1998:1004/AN	AN
Author	/AU	S BAKER T?/AU S BAKER,T?/AU	AU
Classification Code **(2)**	/CC	S SPACE/CC S "LAND OR SEA"/CC S AIR SPACE/CC	CC
Controlled Term	/CT	S ADHESIVES/CT S MANUFACTURING PROCESSES/CT	CT
Controlled Word	/CW	S INTELLIGENT VEHICLE/CW	CT
Corporate Source **(2)**	/CS	S HONEYWELL AERONAUTIC?/CS	CS
Country of Publication (ISO code and text)	/CY	S US/CY S UNITED STATES OF AMERICA/CY	CY
Cross Reference	/CR	S 630115/CR	CR
Document Number	/DN	S 080008/DN	DN
Document Type (code and text)	/DT (or /TC)	S CONFERENCE?/DT S CA/DT	TC
Entry Date **(3)**	/ED	S ED>=2012	ED
Field Availability	/FA	S AB/FA	FA
File Segment (code and text)	/FS	S SAE/FS	FS
International Standard (Document) Number (contains ISSN, AND ISBN)	/ISN	S 0736-2536/ISN	ISN, SO
Journal Title	/JT	S AUTOMOTIVE ENGINEER?/JT	JT, SO
Language (ISO code and text)	/LA	S EN/LA S ENGLISH/LA	LA
Meeting Date **(3)**	/MD	S 20-23 APR 1992/MD	MD, SO
Meeting Location	/ML	S (AIRLINE OR AEROSPACE)/SO AND CALIF?/ML	ML, SO
Meeting Title	/MT	S CAR CRASH CONFERENCE/MT	MT, SO
Meeting Year **(3)**	/MY	S MY=2000	MD, SO
Publication Date **(3)**	/PD	S PD>19900600 AND ISUZU/CS	SO
Publication Year **(3)**	/PY	S 1996-2000/PY	PY, SO
Source (contains journal title, meeting information, collation information (volume, issue, pagination), publishing information, ISBN, and ISSN)	/SO	S USA/SO S 1991/SO	ISN, JT, MD, ML, MT, PY, SO
Title* **(1)**	/TI	S BRAKE CYLINDER?/TI	TI
Update Date **(3)**	/UP	S UP>=19980100	ED

(1) In 1MOBILITY a numeric search for a specific set of physical properties (/PHP) is available within the fields AB, BI, and TI. 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 all database fields with English text. The /PHP index contains a complete list of codes and related text for all physical properties available for numeric search. See HELP NPS.

(2) Searching with implied (S) proximity is available in this field.

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

DISPLAY and PRINT Formats

Any combination of display fields and formats may be used to display and print answers. Multiple codes must be separated by commas or spaces, e.g., D L1 1-5 TI SO. The fields are displayed or printed in the order requested.

Hit-term highlighting is available for all displayable fields except AU, and CS. Highlighting must be ON during SEARCH to use the HIT, KWIC, and OCC formats.

Format	Content	Examples
AB	Abstract	D L4 1-4 ABS
AN	Accession Number	D L1 3 AN
AU	Author	D AU 1,3-5
CC	Classification Code	D CC 5-10
CR	Cross Reference	D 1-3,7,8 CR
CS	Corporate Source	D CS
CT	Controlled Term	D CT
CY	Country of Publication	D CY 1-5
DN	Document Number	D L1 DN 3
DT (TC)	Document Type	D 1,3,6 DT L5
ED	Entry Date	D ED
FA **(1)**	Field Availability	D FA
FS	File Segment	D FS
ISN **(1)**	International Standard (Document) (ISSN and ISBN) Number	D ISN 2
JT **(1)**	Journal Title	D L8 JT 1-3
LA	Language	D 1,4 LA
MD **(1)**	Meeting Date	D L1 MD
ML **(1)**	Meeting Location	D ML
MT **(1)**	Meeting Title	D MT L1 4
MY **(1)**	Meeting Year	D MY
PB **(1)**	Publisher	D PB
PY **(1)**	Publication Year	D PY
SO	Source	D SO
TI	Title	D TI 2
UP	Update Date	D UP
WC.T **(1)**	Word Count, Title	D WC.T
ABS	AB	D 2,6 ABS
ALL	AN, DN, CR, TI, AU, CS, SO, CY, DT, FS, LA, ED, AB, CC, CT	D L1 ALL
DALL	ALL, delimited for post processing.	D DALL
IALL	ALL, indented with text labels	D IALL 3
BIB	AN, DN, CR, TI, AU, CS, SO, CY, DT, FS, LA, ED (default)	D BIB
IBIB	BIB, indented with text labels	D L4 IBIB 2 5
IND	AN, CC, CT	D IND L8
SCAN **(2)**	TI, CC, CT (random display without answer number)	D SCAN
TRIAL (TRI, SAM, SAMPLE, FREE)	AN, TI, CC, CT	D TRIAL
HIT	Fields containing hit terms	D HIT
KWIC	Hit term with 50 words on either side (KeyWord-In-Context)	D KWIC
OCC	Fields that contain hit terms and number of times they occur	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 or an L-number 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 (2)	Y
Classification Code	CC	Y	Y
Controlled Term	CT	Y	N
Corporate Source	CS	Y (2)	Y
Country of Publication	CY	Y	Y
Cross Reference	CR	Y	N
Document Number	DN	Y	Y
Document Type	DT (TC)	Y	Y
Entry Date	ED	Y	Y
Field Availability	FA	Y	N
File Segment	FS	Y	Y
International Standard Book Number	ISBN	N	Y
International Standard (Document) Number	ISN	Y (3)	Y
International Standard Serial Number	ISSN	N	Y
Journal Title	JT	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
Occurrence Count of Hit Terms	OCC	N	Y
Publisher	PB	Y	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y	Y
Source	SO	Y (4)	N
Update Date	UP	Y	Y
Title	TI	Y (default)	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 HIT and ANALYZE HIT are not valid with this field.
(3) Selects or analyzes ISSN and ISBN with /ISN appended to the terms created by SELECT.
(4) Selects ISSN and ISBN with /SO appended to the terms created by SELECT.

Sample Records

DISPLAY ALL

```
AN     2010:1616   1MOBILITY
DN     2010-01-1092
TI     Development of Fuel Cell Hybrid Vehicle Rapid Start-Up from Sub-Freezing
       Temperatures
AU     Manabe, Kota(1); Naganuma, Yoshiaki(1); Nonobe, Yasuhiro(1); Kizaki,
       Mikio(1); Ogawa, Tomoya(2)
CS     (1)Toyota Motor Corp.
       (2)Toyota Technical Development Corp.
SO     (12 Apr 2010)
       Published by: SAE International, Warrendale, Pennsylvania, USA
       Conference: SAE 2010 World Congress, Detroit, Michigan, USA, 13 Apr 2010
       - 15 Apr 2010
       Secondary Source: SP-2276
CY     United States of America
DT     Conference Article; (Technical Paper)
FS     SAE
LA     English
ED     Entered STN: 2 Apr 2010
       Last updated on STN: 29 Feb 2012
AB      The Fuel Cell is a highly efficient device that when integrated with hybrid
        technology yields even higher system-level efficiencies. This impressive
        efficiency is one of the key reasons fuel cell technology is one of the most
        promising future power sources. However, this benefit creates a significant
        challenge in cold climates. With so much of the energy converted directly to
        power, there is little waste heat compared to conventional internal combustion
        engine (ICE) technologies. This challenge is particularly apparent at system
        start up from ambient sub-freezing temperatures due to the fact that the fuel
        cell heats-up slower than internal combustion engines (ICEs). Clearly, the amount
        of heat generation can be increased if the total power produced by the system is
        increased proportionally, but this method can be challenging because the excess
        power must be consumed in some manner (such as by a cabin heater). Toyota has
        resolved this issue with a "rapid start-up" methodology to speed warm-up during
        start by limiting fuel supply to increase its concentration overvoltage, thereby
        reducing efficiency and maximizing waste heat generation. At this operating
        point, power generation can be controlled to fulfill the system requirement while
        waste heat generation can be maximized as much as the fuel cell polarization
        curve allows. This method yields 10 to 20 times the waste heat generation
        compared to normal idle operation without using an additional heater unit. This
        rapid start-up operation method was realized as a stable vehicle start-up system
        while resolving electro-circuit topology issues and also established the fuel
        concentration overvoltage control methodology for operating the fuel cell stack
        at low efficiency.
CC     Land or Sea
CT     Cold starting; Cold weather operation; Fuel cells; Hybrid vehicles
```

DISPLAY BIB

```
AN     2011:4057   1MOBILITY
DN     7-36-7-8
TI     BMW 6 Series Convertible
AU     Bickerstaffe, Simon(1)
CS     (1)Automotive Engineer
SO     Automotive Engineer (1 Sep 2011), Volume 36, Number 7, pp. 8, 2 p.
       ISSN: 0307-6490
       Published by: Institution of Mechanical Engineers, London, England
CY     United Kingdom
DT     Journal
FS     I MECH E
LA     English
ED     Entered STN: 1 Dec 2011
       Last updated on STN: 28 Feb 2012
```