

1MOBILITY (Global Mobility Bibliographic Database)

Subject Coverage	<ul style="list-style-type: none"> Automation Emissions Environment Fuels & Lubricants Human factors Management 	<ul style="list-style-type: none"> Manufacturing Marketing Materials Noise & Vibration Population Reliability 	<ul style="list-style-type: none"> Research & Design Quality Safety Testing Transportation
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File Type Bibliographic

Features	Thesaurus	None		
	Alerts (SDIs)	Monthly		
	CAS Registry Number [®] Identifiers	<input type="checkbox"/>	Page Images	<input type="checkbox"/>
	Keep & Share	<input type="checkbox"/>	SLART	<input checked="" type="checkbox"/>
	Learning Database	<input type="checkbox"/>	Structures	<input type="checkbox"/>

Record Content

- Bibliographic information
- Controlled and supplementary terms
- Abstracts

File Size More than 189,273 records (07/2020)

Coverage 1906-present

Updates Monthly

Language English

Database Producer
SAE International
400 Commonwealth Drive
Warrendale, PA 15096 USA
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Email: helpdesk@fiz-karlsruhe.de

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
- NPS
- SAFETY

STN Database Cluster Information:

<http://www.stn-international.com/en/customersupport/customer-support#cluster+%7C+subjects+%7C+features>

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 (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) Accession Number Author Classification Code (2) Controlled Term Controlled Word Corporate Source (2) Country of Publication (code and text) Cross Reference Document Number Document Type (code and text) Entry Date (3) Field Availability File Segment (code and text) International Standard (Document) Number (contains ISSN, AND ISBN) Journal Title Language (code and text) Meeting Date (3) Meeting Location Meeting Title Meeting Year (3) Publication Date (3) Publication Year (3) Source (contains journal title, meeting information, collation information (volume, issue, pagination), publishing information, ISBN, and ISSN) Title* (1) Update Date (3)	/AB /AN /AU /CC /CT /CW /CS /CY /CR /DN /DT (or /TC) /ED /FA /FS /ISN /JT /LA /MD /ML /MT /MY /PD /PY /SO /TI /UP	S 3D CAD/AB S 1998:1004/AN S BAKER T?/AU S BAKER,T?/AU S SPACE/CC S "LAND OR SEA"/CC S AIR SPACE/CC S ADHESIVES/CT S MANUFACTURING PROCESSES/CT S INTELLIGENT VEHICLE/CW S HONEYWELL AERONAUTIC?/CS S US/CY S UNITED STATES OF AMERICA/CY S 630115/CR S 080008/DN S CONFERENCE?/DT S CA/DT S ED>=2012 S AB/FA S SAE/FS S 0736-2536/ISN S AUTOMOTIVE ENGINEER?/JT S EN/LA S ENGLISH/LA S 20-23 APR 1992/MD S (AIRLINE OR AEROSPACE)/SO AND CALIF?/ML S CAR CRASH CONFERENCE/MT S 1987<1999 S PD>19900600 AND ISUZU/CS S 1996-2000/PY S USA/SO S 1991/SO S BRAKE CYLINDER?/TI S UP>=19980100	AB AN AU CC CT CT CS, AU CY CR DN TC ED FA FS ISN, SO JT, SO LA MD, SO ML, SO MT, SO MD, SO SO PY, SO ISN, JT, MD, ML, MT, PY, SO TI 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.

1MOBILITY**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 PY. Highlighting must be ON during SEARCH to use the HIT, KWIC, and OCC formats.

Format	Content	Examples
AB AN AU CC CR CS CT CY DN DT (TC) ED FA (1) FS ISN (1) JT (1) LA MD (1) ML (1) MT (1) PY (1) SO TI UP	Abstract Accession Number Author Classification Code Cross Reference Corporate Source Controlled Term Country of Publication Document Number Document Type Entry Date Field Availability File Segment International Standard (Document) (ISSN and ISBN) Number Journal Title Language Meeting Date Meeting Location Meeting Title Publication Year Source Title Update Date	D L4 1-4 ABS D L1 3 AN D AU 1,3-5 D CC 5-10 D 1-3,7,8 CR D CS D CT D CY 1-5 D L1 DN 3 D 1,3,6 DT L5 D ED D FA D FS D ISN 2 D L8 JT 1-3 D 1,4 LA D L1 MD D ML D MT L1 4 D PY D SO D TI 2 D UP
ABS ALL BIB DALL IALL IBIB IND SCAN (2) TRIAL (TRI, SAM, SAMPLE, FREE)	AB AN, DN, CR, TI, AU, CS, SO, CY, DT, FS, LA, ED, AB, CC, CT AN, DN, CR, TI, AU, CS, SO, CY, DT, FS, LA, ED (default) ALL, delimited for post processing. ALL, indented with text labels BIB, indented with text labels AN, CC, CT TI, CC, CT (random display without answer number) AN, TI, CC, CT	D 2,6 ABS D L1 ALL D BIB D DALL D IALL 3 D L4 IBIB 2 5 D IND L8 D SCAN D TRIAL
HIT KWIC OCC (1)	Fields containing hit terms Hit term with 20 words on either side (KeyWord-In-Context) Fields that contain hit terms and number of times 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 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
Occurrence count of hit terms	OCC	N	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y	Y
Source	SO	Y (4)	N
Title	TI	Y (default)	Y
Update Date	UP	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

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