

## 1MOBILITY (Global Mobility Bibliographic Database)

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

<b>Features</b>	Thesaurus	None		
	<a href="#">Alerts (SDIs)</a>	Monthly		
	CAS Registry Numbers® Identifiers	<input type="checkbox"/>	SLART	<input checked="" type="checkbox"/>
	Keep & Share	<input type="checkbox"/>		

**Record Content**

- Bibliographic information
- Indexing
- Abstracts

**File Size** More than 196,850 records (12/2022)

**Coverage** 1906-present

**Updates** Monthly

**Language** English

**Database Producer**  
SAE International  
400 Commonwealth Drive  
Warrendale, PA 15096 USA  
Phone: (724) 772-7108  
Telefax:(724) 776-3036

**Sources** Books, conference proceedings, journals, papers, and file data

**User Aids**

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

**Cluster**

- 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>

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## 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) <b>(1)</b> )	None (or /BI)	S DUMP TRUCK# S PASSENGER CAR#/BI S NISSAN AND 1996 S ?CYLINDER?	AB, CT, TI
Abstract* <b>(1)</b>	/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 <b>(2)</b>	/CC	S COMMERCIAL VEHICLE/CC	CC
Controlled Term	/CT	S ADHESIVES/CT S MANUFACTURING PROCESSES/CT	CT
Controlled Word	/CW	S INTELLIGENT VEHICLE/CW	CT
Corporate Source <b>(2)</b>	/CS	S HONEYWELL AERONAUTIC?/CS	CS
Country of Publication (ISO code and text)	/CY	S US/CY S UNITED STATES /CY	CY
Cross Reference	/CR	S 190069/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 <b>(3)</b>	/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 <b>(3)</b>	/MD	S MD=25 SEP 2022	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 <b>(3)</b>	/MY	S MY=2000	MD, SO
Publication Date <b>(3)</b>	/PD	S PD>19900600 AND ISUZU/CS	SO
Publication Year <b>(3)</b>	/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* <b>(1)</b>	/TI	S BRAKE CYLINDER?/TI	TI
Update Date <b>(3)</b>	/UP	S UP>=19980100	ED
Word Count, Title	/WC.T	S WC.T>2WC.T	WC.T

**(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

Property Fields<sub>1)</sub>

In 1MOBILITY a numeric search for a specific set of physical properties (/PHP) is available within the text fields (TI, AB, and BI). 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.

Field Code	Property	Unit	Symbol	Search Examples
/AOS	Amount of substance	Mol	mol	S 10 /AOS
/BIR	Bit Rate	Bit/Second	bit/s	S 330/BIR
/BIT	Stored Information	Bit	Bit	S BIT > 3 MEGABIT
/CAP	Capacitance	Farad	F	S 1-10 MF/CAP
/CDN	Current Density	Ampere/Square Meter	A/m <sup>2</sup>	S CDN>10 A/M**2
/CMOL	Molarity, Molar Concentration	Mol/Liter	mol/L	S UREA/BI (S) 2/CMOL
/CON	Conductance	Siemens	S	S 1S-3/CON
/DB	Decibel	Decibel	dB	S DB>50
/DEG	Degree	Degree	°	S CYLINDER/BI (S) 45/DEG
/DEN	Density (Mass Concentration)	Kilogram/Cubic Meter	kg/m <sup>3</sup>	S ANTIBODY (S) 5E-3-10E-3/DEN
/DEQ	Dose Equivalent	Sievert	Sv	S 2/DEQ
/DOS	Dosage	Milligram/Kilogram	mg/kg	S DOS>0.8
/DV	Viscosity, dynamic	Pascal * Second	Pa * s	S DV>5000
/ECD	Electric Charge Density	Coulomb/Square Meter	C/m <sup>2</sup>	S 1 C/M**2 /ECD
/ECH	Electric Charge	Coulomb	C	S 2-3/ECH
/ECO	Electrical Conductivity	Siemens/Meter	S/m	S ECO>800 S/M (5A) METAL
/ELC	Electric Current	Ampere	A	S 1-10/ELC
/ELF	Electric Field	Volt/Meter	V/m	S 650-700/ELF
/ENE	Energy	Joule	J	S TORQUE (5A) 20 - 30 /ENE
/ERE	Electrical Resistivity	Ohm * Meter	Ohm * m	S ERE>2
/FOR	Force	Newton	N	S 50 N /FOR
/FRE	Frequency	Hertz	Hz	S OSCILLAT?/BI (S) 1- 3/FRE
/IU	International Unit	none	IU	S IU>1000 (P) ANTIBIOTIC
/KV	Viscosity, kinematic	Square Meter/Second	m <sup>2</sup> /s	S SILICON?/BI (5A) 10E-5 M**2/S /KV
/LEN (or /SIZ)	Length, Size	Meter	m	S 1-4/LEN
/LUME	Luminous Emittance, Illuminance	Lux	lx	S 10-50/LUME
/LUMF	Luminous Flux	Lumen	Lm	S LUMF>1000
/LUMI	Luminous Intensity	Candela	cd	S LUMI<4
/M	Mass	Kilogram	kg	S ALLOY/BI (30A) 1E-10-1E-5/M
/MCH	Mass to Charge Ratio	none	m/z	S MCH=100
/MFD (or /MFS)	Magnetic Flux Density	Tesla	T	S MFD>102
/MFR (or /MFL)	Mass Flow Rate	Kilogram/Second	kg/s	S MFR<0.1
/MM	Molar Mass	Gram/Mol	g/mol	S 2000-3000 G/MOL/MM
/MOLS	Molality of Substance	Mol/Kilogram	mol/kg	S 01.-10 MOL/KG/MOLS
/MVR	Melt Volume Rate, Melt Flow Rate	none	g/10 min	S 3/MVR
/NUC	Nutrition Content	none	g/100 kcal	S NUC<100 (P) NUTRIENT
/PER	Percent (Proportionality)	none	%	S POLYMER?/AB (5A) 4/PER
/PERA	Permittivity, Absolute	Farad/Meter	F/m	S DIELECTRIC/BI (S) 4- 4.1/PERA
/PHV	pH Value	pH	pH	S 7.4-7.6/PHV

## Property Fields (cont'd)

Field Code	Property	Unit	Symbol	Search Examples
/POW	Power	Watt	W	S LIGHT/BI (S) ENERGY/BI (S) 350 WATT/POW
/PRES (or /P)	Pressure	Pascal	Pa	S (VACUUM (5A) DISTILL?)/BI (S) 1000-1100/PRES
/RAD	Radioactivity	Becquerel	Bq	S RAD/PHP
/RES	Electrical Resistance	Ohm	Ohm	S SENSOR /BI (S) 10- 100/RES
/RSP	Rotational Speed	Revolution/Minute	rpm	S 2-100/RSP (S) MACHINE/AB
/SAR	Area /Surface Area	Square Meter	m <sup>2</sup>	S (COATING? OR FOIL?)/BI (S) 10-100/SAR
/SOL	Solubility	Gram/100 gram	g/100 g	S SOL>20 (10W) WATER
/STSC	Surface Tension	Joule /Square Meter	J/m <sup>2</sup>	S 60 J/M**2/STSC
/TCO	Thermal Conductivity	Watt/Meter * Kelvin	W/m * K	S 1/TCO (S) HEAT?
/TEMP (or /T)	Temperature	Kelvin	K	S (REACTION? (10A) ENZYM?) (S) 5/TEMP
/TIM	Time	Second	s	S ?INCUB?/BI (10A) 10-50/TIM
/VEL (or /V)	Velocity	Meter per Second	m/s	S REDUC?/BI (S) 1E-3-5E-3/VEL
/VELA	Velocity, angular	Radian/Second	rad/s	S VELA>10
/VLR	Volumetric Flow Rate	Cubic Meter/Second	m <sup>3</sup> /s	S 1-2/VLR (5A) POWDER
/VOL	Volume	Cubic Meter	m <sup>3</sup>	S 1E-8-2E-8/VOL.EX
/VOLT	Voltage	Volt	V	S POTENTIAL (10A) 5E-3 V <VOLT<7E-3 V

- 1) Exponential format is recommended for the search of particularly high or low values, e.g. 1.8E+7 or 1.8E7 (for 18000000) or 9.2E-8 (for 0.000000092).

**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 AU, and CS. Highlighting must be ON during SEARCH to use the HIT, KWIC, and OCC formats.

<b>Format</b>	<b>Content</b>	<b>Examples</b>
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) MY (1) PB (1) PY (1) SO TI UP WC.T (1)	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 Meeting Year Publisher Publication Year Source Title Update Date Word Count, Title	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 MY D PB D PY D SO D TI 2 D UP D WC.T
ABS ALL DALL IALL BIB 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 ALL, delimited for post processing. ALL, indented with text labels AN, DN, CR, TI, AU, CS, SO, CY, DT, FS, LA, ED (default) 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 DALL D IALL 3 D BIB D L4 IBIB 2 5 D IND L8 D SCAN D TRIAL
HIT KWIC OCC	Fields containing hit terms Hit term with 50 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
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 2021:3707 1MOBILITY  
DN 21AVEP11\_05  
TI ADAS Over the Horizon  
AU Brooke, Lindsay  
SO (1 Nov 2021)  
ISSN: 2642-09022642-0910  
Published by: SAE International, 400 Commonwealth Drive, Warrendale, PA,  
United States  
CY United States  
DT Journal; (Magazine Article)  
FS SAE  
LA English  
ED Entered STN: 3 Dec 2021  
Last updated on STN: 3 Dec 2021  
AB Continental's new ADAS boss shines a lidar on next steps in  
automated-driving technology.  
Increasing data processing power, sensor fusion, the role of lidar,  
artificial intelligence and SAE's six levels of driving automation are  
key factors shaping the future direction of ADAS (advanced  
driver-assistance systems), said Frank Petznick, the new head of  
Continental's ADAS business unit. An electrical engineer and industry  
veteran, Petznick is an expert in electronics and sensors who started  
his career at Volkswagen and most recently served on Hella's Electronics  
Executive Board. In an interview with SAE Media at the 2022 IAA in  
Munich, he detailed the dynamics of ADAS development and how it aligns  
with that of vehicle autonomy.  
"ADAS technology is evolving very quickly," Petznick asserted.  
Referencing the SAE J3016 standard, he described how automakers are  
enhancing Level 2 (the foundation of ADAS) to create their own  
unofficial "Level 2 Plus-Plus-Plus - or as some Asian markets call it,  
Level 2-99'," he said. Increasingly, OEMs there are "putting various  
[SAE] Level 3 functions under the umbrella of Level 2 ADAS because it  
has different implications for the driver and for the automaker's  
liability for whatever happens in the vehicle. Those OEMs are, in  
effect, test driving' Level 3 functions while under the protection of  
Level 2," Petznick explained. This helps them gain experience in their  
Level 4 autonomous tech developments.  
CC Automotive



## DISPLAY BIB

AN 2022:2271 1MOBILITY  
DN 12-05-03-0022  
TI A Receding Horizon Autopilot for the Two-Lane Highway Automated Driving Application through Synergy between the Robust Behavior Planner and the Advanced Driver Assistance Features  
AU Waghchoure, Mayur Rajendra(1); Patel, Jash Kiritbhai(2); Sanghai, Nikunj(3); Kanoun, Sara(4); John, Reuben Thomas(5); Gupta, Gaurav(5); Deshpande, Bhargav Narsinha(5); Dorle, Aniruddha(6)  
CS (1)Driver Assisted Systems, Dorle Controls Pvt Ltd, India  
(2)University of Michigan-Dearborn, USA  
(3)University of California, USA  
(4)University Gustave Eiffel, France  
(5)Dorle Controls Pvt. Ltd., USA  
(6)Dorle Controls LLC, USA  
SO (25 Aug 2022), pp. 271  
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Published by: SAE International, 400 Commonwealth Drive, Warrendale, PA, United States  
CY United States  
DT Journal  
FS SAE  
LA English  
ED Entered STN: 5 Sep 2022  
Last updated on STN: 4 Oct 2022

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**In North America**

CAS Customer Center  
P.O. Box 3012  
Columbus, Ohio 43210-0012  
U.S.A.

Phone: 800-753-4227 (North America)  
614-447-3731 (worldwide)  
Email: [help@cas.org](mailto:help@cas.org)  
Internet: [www.cas.org](http://www.cas.org)

**In EMEA**

CAS Customer Center EMEA  
(represented by FIZ Karlsruhe)  
P.O. Box 2465  
76012 Karlsruhe  
Germany

Phone: +49-7247-808-555  
E-mail: [EMEAhelp@cas.org](mailto:EMEAhelp@cas.org)

**In Japan**

JAICI (Japan Association for International Chemical Information)  
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)  
Email: [support@jaici.or.jp](mailto:support@jaici.or.jp) (Technical Service)  
[customer@jaici.or.jp](mailto:customer@jaici.or.jp) (Customer Service)  
Internet: [www.jaici.or.jp](http://www.jaici.or.jp)