FSTA (Food Science and Technology Abstracts)

Subject Coverage	• Additives, spices and condiments • Alcoholic and non-alcoholic beverage • Biotechnology • Breeding • Catering, speciality and multi-component foods • Cereals and bakery products • Cocoa, chocolate and sugar confectionary products • Economics • Eggs and egg products • Engineering • Enology • Fats, oils and margarine	• Fish and marine products • Food sciences • Fruits, vegetables and nuts • Hygiene and toxicology • Meat, poultry and game • Microbiology of wine • Milk and dairy products • Morphology • Packaging • Physiology • Plant pathology • Soils • Sugars, syrups and starches • Viticulture

File Type	Bibliographic

Features

Thesaurus	Controlled Term (/CT)		
Alerts (SDIs)	Weekly		
CAS Registry Number® Identifiers	☐	Page Images	☐
Keep & Share	☑	SLART	☑
Learning Database	☐	Structures	☐

Record Content	• Bibliographic information, indexing, and in most cases an abstract.

File Size	• More than 1.79 million citations (07/2022)

Coverage	1969-present

Updates	Weekly

Language	English

Database Producer	IFIS The Granary, Bridge Farm Reading Road Arborfield Berkshire, RG2 9HT United Kingdom Phone: +44 118 9883895 Fax: +44 118 9885065 Email: IFIS@IFIS.ORG Copyright Holder

Sources	• About 4,500 Journals
	• Books
	• Conference proceedings
	• Reports
	• Patents
	• Pamphlets
	• Legislation
	• Dissertations

User Aids	• FSTA Thesaurus*
	• Online Helps (HELP DIRECTORY lists all help messages available)
	• STNGUIDE
	* Available at producer and online

Cluster	• AGRICULTURE
	• ALLBIB
	• AUTHORS
	• BIOSCIENCE
	• CORPSOURCE
	• FOOD
	• HPATENTS
	• PATENTS
	• TOXICOLOGY
	STN Database Cluster information

Search and Display Field Codes

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

General Search Fields

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index* (contains single words from title (TI), abstract (AB), controlled term (CT) and trade name (TN) fields)	None or /BI	S JUICE EXTRACT? S BEEF (L) ROUTINE TEST? S SWEETZYME T S ?FISH?	AB, CT, TI TN
Abstract*	/AB	S ?POLYPHENOL/AB	AB
Accession Number	/AN	S "2001(12):T1157"/AN S 2002:A0009/AN	AN
Author (includes Inventor)	/AU	S MARTH, E H/AU S MARTH E H/AU	AU, SO, IN
Classification Code (code and text) **(1)**	/CC	S A#/CC S AE/CC S DOG FOODS/CC	CC
Controlled Term	/CT	S PROTEIN PRODUCTS/CT	CT
Controlled Word	/CW	S ACID/CW	CT
Corporate Source (includes Patent Assignee) **(1)**	/CS	S KYOTO UNIV?/CS	CS, PA
Digital Object Identifier	/FTDOI	S 10.1001/JAMA,2008/755/FTDOI	FTDOI, SO
Document Number	/DN	S 2012-05-CD1094/DN	DN
Document Type (code and text)	/DT (or /TC)	S L1 AND PATENT/DT	DT
Entry Date	/ED	S ED=20120	ED
Field Availability	/FA	S L2 AND AB/FA	FA
International Standard (Document) Number	/ISN	S 0105-6883/ISN S 3110034956/ISN	ISN, SO
Inventor	/IN	S MANADA N/IN	IN
Journal Title	/JT	S FOOD MANUFACTURE/JT	JT, SO
Language (ISO code and text)	/LA	S L1 AND ENGLISH/LA	LA
Patent Assignee **(1)**	/PA	S HENKEL/PA	PA
Patent Country	/PC	S US/PC	PI
Patent Kind Code	/PK	S ATU1/PK	PI
Patent Number**(2)**	/PN (or /PATS)	S EP50394/PN S EP—50394/PATS	PI
Patent Number Kind Code	/PNK	S US20010001470 A1/PNK	PNK
Patent Number, Original	/PNO	S AT009008/PNO	PNO
Priority Country **(3)**	/PRC	S L1 AND JP/PRC	PRAI
Priority Date **(3,4)**	/PRD	S PRD=JAN 2003	PRAI
Priority Number **(2,3)**	/PRN (or /APPS)	S CA1982-406357/PRN	PRAI
Priority Number, Original	/PRNO	S CA2 067 256/PRNO	PRNO
Priority Year **(3,4)**	/PRY	S 1991/PRY	PRAI
Publication Year **(4)**	/PY	S 2010-2011/PY	PY, SO, PI
Reference Count **(4)**	/REC (or /RE.CNT)	S REC=10	REC, SO
Source (contains journal name, ISSN, volume, issues, pages, DOI, ISBN, No. of references)	/SO	S FOOD MANUFACTURE/SO S 1990/SO	SO
Summary Language (ISO code and text)	/SL	S L1 AND ENGLISH/SL S L1 AND EN/SL	SL
Title*	/TI	S CITRUS FRUIT#/TI	TI
Trade Name	/TN (or/CN)	S SWEETZYME T/TN	TN
Update Date **(4)**	/UP	S UP>MAY 2012	ED
Word Count, Title **(4)**	/WC.T	S WC.T=>15	WC.T

General Search Fields (cont'd)

(1) Search with implied (S) proximity is available.

(2) Patent and priority numbers are available in Derwent and STN format. STN is the default. Enter SET PAT DERWENT to change to the Derwent format. To return to the STN format, enter SET PAT STN.

(3) Priority information is available for records since 1988 only.

(4) Numeric search field that may be searched with numeric operators or ranges.

Property Fields[1)

In FSTA a numeric search for a specific set of physical properties (/PHP) is available within the basic index, title, and abstract fields. 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 the abstract and title fields. The /PHP index contains a complete list of codes and related text for all physical properties available for numeric search.

Field Code	Property	Unit	Search Examples
/AOS	Amount of substance	Mol	S 10 /AOS
/BIR	Bit Rate	Bit (Bit)	S 33/BIR
/BIT	Stored Information	Bit	S BIT > 3 MEGABIT
/CAP	Capacitance	Farad	S 1-10 MF/CAP
/CDN	Current Density	Ampere/Square Meter	S CDN>10 A /M**2
/CMOL	Molarity (Concentration, amount of substance)	mol/l	S MOLYBD?/BI (S) 2/CMOL
/CON	Conductance	S (Siemens)	S 1S-3/CON
/DB	Decibel	Decibel	S DB>50
/DEG	Degree	Degree	S MEDIUM RARE/BI (S) 5/DEG
/DEN	Density (Mass Density)	Kg/m3	S (CELL? (S) RECOMBIN?)/AB (S) 5E-3-10E-3/DEN
/DEQ	Dose Equivalent	Sievert	S DEQ>0.5 (S) RADIATION
/DOS	Dosage	Milligram/Kilogram	S DOS>0.8
/DV	Viscosity, dynamic	Pa * s (Pascal * second)	S DV>5000
/ECH	Electric Charge	Coulomb	S 4000/ECH.EX (XA) ENZYME
/ECO	Electrical Conductivity	Siemens/Meter	S ECO>800 (XA) MINERAL
/ELC	Electric Current	Ampere	S 1-10/ELC
/ELF	Electric Field	Volt/Meter	S 650-700/ELF
/ENE	Energy	J (Joule)	S PROTEIN AND 22/ENE
/ERE	Electrical Resistivity	Ohm * Meter	S ERE>2 (p) CITRATE
/FOR	Force	N (Newton)	S 50 N /FOR
/FRE	Frequency	Hz (Hertz)	S ANALY?/AB (10A) 0-3/FRE
/IU	International Unit	none	S IU>1000 (P) ANTIBIOTIC
/KV	Viscosity, kinematic	m2/s	S FRUITS/AB (S) 10E-5/KV
/LEN (or /SIZ)	Length	Meter	S 1-4/LEN
/LUME	Luminous Emittance/Illuminance	Lux	S 10-50/LUME
/LUMF	Luminous Flux (Luminous Power)	Lumen	S LUMF>1000
/LUMI	Luminous Intensity	Candela	S LUMI<4
/M	Mass	Kg (Kilogram)	S ALLOY/BI (30A) 1E-10-1E-5/M
/MCH	Mass to Charge Ratio	none	S MCH=3
/MFD (or /MFS)	Magnetic Flux Density	Tesla	S MFD>102 (S) LEMON
/MFR (or /MFL)	Mass Flow Rate	Kilogram/Second	S MFR<0.1
/MM	Molar Mass	g/mol	S 2000-3000 G/MOL/MM
/MOLS	Molality of Substance	mol/kg	S 01.-10 MOL/KG/MOLS
/MVR	Melt Volume Rate	none	S 5-10 /MVR

Property Fields[1] (cont'd)

Field Code	Property	Unit	Search Examples
/NUC	Nutrition Content	none	S NUC<100 (XW) NUTRIENT
/PER	Percent (Proportionality)	Percent	S (MOLECULAR (3A) POLYMER?)/AB (S) 4/PER
/PHV	pH	pH	S 7.4-7.6/PHV
/POW	Power	W (Watt)	S (ICE? OR WATER EXTRACT?)/BI (10A) 350/POW
/PRES (or /P)	Pressure	Pa (Pascal)	S (VACUUM (5A) DISTILL?)/BI (S) 1000-1100/PRES
/RAD	Radioactivity	Bq (Becquerel)	S RADI?/BI (P) 10-100/RAD
/RES	Electrical Impedance/resistance	Ohm	S MILK CONDUCTIVITY/AB (P) 10-100/RES
/RSP	Rotational Speed	Revolution/Minute	S 2-100/RSP AND MACHINE
/SAR	Area /Surface Area	m2	S (COATING? OR FOIL?)/BI (S) 10-100/SAR
/SOL	Solubility	Gram/100 gram	S SOL>20 (10W) WATER
/STSC	Surface Tension	J/m2	S 60 J/M**2/STSC
/TCO	Thermal Conductivity	K (Kelvin)	S 0.2-0.4/TCO (S) HEAT?
/TEMP (or /T)	Temperature	K (Kelvin)	S (REACTION? (25A) ENZYM?) (S) 5/TEMP
/TIM	Time	S (Second)	S ?INCUB?/AB (10W) 10-50/TIM
/VEL (or /V)	Velocity	m/s (Metre per Second)	S REDUC?/BI (S) 1E-3-5E-3/VEL
/VELA	Velocity, angular	rpm	S ANG?/AB (S) VELA>10
/VLR	Volumetric Flow Rate	Cubic Meter/Second	S 1-2/VLR (XA) POWDER
/VOL	Volume	m3	S ?FUSION?/BI (15A) 1E-8-2E-8/VOL
/VOLT	Voltage	V (Volt)	S CALIBRAT?/BI (10A) 5E-3<VOLT<7E-3

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

Controlled Term (/CT) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command in the /CT thesaurus.

Code	Content	Examples
ALL	All Associated Terms (BT, SELF, HNTE, NOTE, USE, UF, NT, RT)	E FRUIT JUICES+ALL/CT
AUTO **(1)**	Automatic Relationship (SELF, USE, UF)	E JACK BEANS+AUTO/CT
BT	Broader Terms (BT, SELF)	E FROZEN YOGHURT+BT/CT
HIE	Hierarchy Terms (all Broader and Narrower Terms) (BT, SELF, NT)	E YOGHURT+HIE/CT
HNTE	History Note (SELF, HNTE)	E JAPAN+HNTE/CT
KT	Keyword Terms (SELF, KT)	E MUSTARD+KT/CT
NOTE	Scope Note (SELF, NOTE)	E LYASES+NOTE/CT
NT	Narrower Terms (SELF, NT)	S LYASES+NT/CT
RT	Related Terms (SELF, RT)	S DIFFUSION+RT/CT
UF	Preferred and Forbidden Terms (SELF,UF)	E F+UF/CT
USE	Forbidden and Preferred Terms (SELF,USE)	E COW CHEESE+USE/CT

(1) Automatic Relationship is SET OFF. In case of SET REL ON the result of EXPAND or SEARCH without any relationship code is the same as described for AUTO.

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	Abstract	D AB, TI
AN	Accession Number	D 1-5 AN
AU	Author	D AU 5 6 8-10
CC	Classification Code	D CC, TI
CS	Corporate Source	D TI AU CS
CT	Controlled Term	D CT, TI
DN	Document Number	D DN
DT	Document Type	D DT, SO
ED (UP)	Entry Date	D ED
FTDOI **(1)**	Digital Object Identifier	D FTDOI
ISN **(1)**	International Standard (Document) Number	D ISN
IN	Inventor	D IN
JT **(1)**	Journal Title	D JT
LA	Language	D LA, TI
PA	Patent Assignee	D PA
PI (PN, PATS) **(2)**	Patent Information	D PI, SO
PNO (PIO)	Patent Number, Original	D PNO
PRAI (PRN, APPS) **(2)**	Priority Information	D PRAI, SO
PRNO (PRAO)	Priority Number, Original	D PRNO
PY **(1)**	Publication Year	D PY
REC (RE.CNT) **(1)**	Reference Count	D REC
SL	Summary Language	D SL, TI
SO	Source	D SO
TI	Title	D TI, SO
TN (CN)	Trade Name	D TN
WC.T **(1)**	Word Count, Title	D WC.T
ABS	AN, AB	D ABS
ALL **(2)**	AN, DN, TI, AU, IN, CS, PA, SO, PI, PRAI, DT, LA, SL, AB, CC, CT, TN	D ALL 5-10
DALL **(2)**	ALL, delimited for post processing	D DALL
IALL **(2)**	ALL, indented with text labels	D IALL
BIB **(2)**	AN, DN, TI, AU, IN, CS, PA, SO, PI, PRAI, DT, LA, SL (BIB is the default)	D BIB 1-10
IBIB **(2)**	BIB, indented with field labels	D IBIB
IND	AN, CC, CT, TN	D IND
SCAN **(3)**	TI, CC, CT (random display without answer numbers)	D SCAN
TRIAL (TRI, SAMPLE, SAM, FREE)	AN, TI, CC, CT	D TRI
HIT	Hit term(s) and field(s)	D HIT
KWIC	Up to 50 words before and after hit term(s) (KeyWord-In-Context)	D KWIC
OCC	Number of occurrences of hit term(s) and field(s) in which they occur	D OCC

(1) Custom display only.
(2) By default, patent numbers and priority numbers are displayed in STN format. To display them in Derwent format, enter SET PATENT DERWENT at an arrow prompt. To reset display to STN format, enter set PATENT STN.
(3) 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 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	Y
Author	AU	Y	Y
Citation	CIT	Y **(3,4)**	N
Classification Code	CC	Y	N
Controlled Term	CT	Y	N
Corporate Source	CS	Y	Y
Digital Object Identifier	FTDOI	N	Y
Document Number	DN	Y	Y
Document Type	DT (TC)	Y	Y
Index Term	IT	Y	N
International Standard (Document) Number	ISN	Y **(5)**	N
Inventor	IN	Y	Y
Journal Title	JT	Y	Y
Language	LA	Y	Y
Occurrence Count of Hit Terms	OCC	N	Y
Patent Assignee	PA	Y	Y
Patent Country	PC	Y	Y
Patent Kind Code	PK	Y	Y
Patent Number	PN (PI, PATS)	Y **(6)**	N
Patent Number, Original	PNO (PIO)	Y	Y
Priority Country	PRC	Y	Y
Priority Date	PRD	Y	Y
Priority Number	PRN (PRAI, APPS)	Y **(6)**	Y
Priority Number, Original	PRNO (PRAO)	Y	Y
Priority Year	PRY	Y	Y
Publication Year	PY	Y	Y
Reference Count	REC (RE.CNT)	Y	Y
Source	SO	Y **(7)**	N
Summary Language	SL	Y	Y
Title	TI	Y (default)	Y
Trade Name	TN (CN)	Y	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 CIT allows you to extract the reference data from the source documents in this file and have them automatically converted to a citation format for searching in the SCISEARCH file. SEL CIT selects first author, publication year, volume, first page, and a truncation symbol with /RE appended.
(4) SELECT HIT or ANALYZE HIT are not valid with this field.
(5) Selects ISSN and ISBN with /ISN appended to the terms created by SELECT.
(6) SELECTed, ANLYZed and SORTed patent and priority numbers are in the format set by the Messenger SET PATENT command either Derwent or STN.
(7) Selects ISSN and ISBN with /SO appended to the terms created by SELECT.

Sample Records

DISPLAY BIB OF BOOK

```
AN      2012:C1094   FSTA
DN      2012-05-Cd1094
TI      Handbook of food safety engineering.
AU      Editor(s): Da-Wen Sun
CS      Univ. Coll. Dublin, Dublin, Republic of Ireland; The Atrium, Southern
        Gate, Chichester, PO19 8SQ, UK; Wiley-Blackwell. Tel. +44 01243 779777.
        Fax +44 01243 775878. E-mail cs-books@wiley.co.uk. www.wiley.com. Price
        GBP 249.99, EUR 300.00
SO      (2011), 864 p.
        ISBN: 9781444333343
DT      Book
LA      English
ED      Entered STN: 13 Feb 2012
        Last updated on STN: 11 Apr 2012
```

DISPLAY ALL OF JOURNAL

```
AN      2008:W0102   FSTA
DN      2008-07-Wd0102
TI      Chemical composition, in vitro fermentation characteristics, and in vivo
        digestibility responses by dogs to select corn fibers.
AU      Guevara, M. A.; Bauer, L. L.; Abbas, C. A.; Beery, K. E.; Holzgraefe, D.
        P.; Cecava, M. J.; Fahey, G. C., Jr.
CS      Correspondence address, G. C. Fahey, Jr., Dep. of Animal Sci., Univ. of
        IIlinois, Urbana, IL 61801, USA. Tel. 217 333-2361. Fac 217 333-7861.
        E-mail gcfahey@uiuc.edu
SO      Journal of Agricultural and Food Chemistry (2008), Volume 56, Number 5,
        pp. 1619-1626, 32 refs.
        ISSN: 0021-8561
        DOI: 10.1021/jf073073b
DT      Journal
LA      English
ED      Entered STN: 28 Apr 2008
        Last updated on STN: 16 May 2012
AB       The objective of this study was to examine the chemical composition, in
         vitro fermentation characteristics, and in vivo digestibility responses
         of fibre-rich corn coproducts resulting from corn wet milling. Native
         corn fibres, native corn fibres with fines, hydrolysed corn fibers and
         hydrolysed extracted corn fibres were analysed chemically and their
         capacity to produce short-chain fatty acids determined. Ash content was
         low (<1.2%), crude protein content varied little, but fat and fibre
         concentration varied widely. Most fibre was in the insoluble form, with
         glucose being predominant followed by xylose. Total short-chain fatty
         acid production ranged from 211.6 to 699.52 µmol/g of dry matter, whereas
         branched-chain fatty acid production was low. 4 corn fibres (native and
         processed) were included in a canine diet matrix at the 7% inclusion
         level. Nutrient digestibility, food intake and faecal characteristics
         were not affected by corn fibre inclusion in canine diets, suggesting
         that they should be considered as potential dietary fibre sources in dog
         foods.
CC      Wd Pet foods : Dog foods
CT      CORN; DIGESTIBILITY; FIBRE; MILLING; WET MILLING; PET FOODS; DOG FOODS
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DISPLAY IALL OF PATENT

```
ACCESSION NUMBER:       2012:W0099  FSTA
DOCUMENT NUMBER:        2012-07-Wv0099
TITLE:                  Formed jerky treats formulation and method.
INVENTOR(S):            Weinberg, B.; Saxe, L.
PATENT ASSIGNEE(S):     GlobalOne Pet Products Inc.; GlobalOne Pet Products,
                        Southlake, TX, USA
PATENT INFORMATION:     US 20120082762              A1
PRIORITY INFO.:         US 2010-388144             20100930
SOURCE:                 United States Patent Application Publication (2012)
DOCUMENT TYPE:          Patent
LANGUAGE:               English
ENTRY DATE:             Entered STN: 23 Apr 2012
                        Last updated on STN: 16 May 2012
```

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ABSTRACT:               Pet treats containing unprocessed meat, and methods for
                        their manufacture are described. The method involves
                        combining meat that has not been extruded, ground,
                        emulsified, liquefied or formed into a powder, with at
                        least one binding agent and, optionally, one or more
                        preservative. The resultant mixture is then shaped.
```

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CLASSIFICATION CODE:    Wv Pet foods : Patents
CONTROLLED TERM:        PATENTS; PET FOODS; PET TREATS
```