INSPEC

Subject Coverage

- Atomic and molecular physics
- Circuit theory and circuits
- Classical areas of phenomenology
- Communications
- Components, electronic devices and materials
- Computer applications
- Computer hard- and software
- Condensed matter: structure, mechanical properties, electronic structures, electrical, magnetic, and optical properties
- Control technology
- Cross-disciplinary physics and related areas of science and technology
- Electromagnetic fields
- Engineering mathematics, materials science
- Fluids, plasmas, electric discharges
- General and management aspects and applications
- Geophysics, astronomy, astrophysics
- Information technology
- Instrumentation and special applications
- Magnetic and superconducting materials and devices
- Mechanical engineering
- Nuclear physics
- Numerical analysis and theoretical computer topics
- Office automation - communications, computing
- Optical materials and applications, electro-optics and optoelectronics
- Physics of elementary particles and fields
- Power systems and applications
- System and control theory

File Type

Bibliographic

Features

Thesaurus	Controlled Term (/CT), International Patent Classification (/IPC), Physical Properties (/PHP)				
Alerts (SDIs)	Weekly				
CAS Registry Number® Identifiers	☐	• Page Images	☐	STN® AnaVist™	☐
Keep & Share	☑	• SLART	☑	STN Easy®	☑
Learning Database	☑	• Structures	☐		

Record Content

- Bibliographic information, indexing terms, abstracts, property information, element terms, and International Patent Classification, where applicable.
- INSPEC also includes an archive from 1898-1968. This archive provides access to Science Abstracts Journals from 1898-1968, and contains over 873,700 records with tables, graphs and figures from the original source document in many cases, the original value-added indexing and classifications, as well as enhancements in the form of the nearest equivalent current INSPEC Thesaurus terms and INSPEC Classification Codes.
- IPC codes are available from 2010 onwards.

File Size

More than 18.5 million citations, 2902 images (04/2018)

Coverage	1898-present
Updates	Weekly
Language	English
Database Producer	The Institution of Engineering and Technology (IET) Michael Faraday House, Six Hills Way Stevenage, Herts SG1 2AY, United Kingdom Phone: +44 1438/313311 Fax: +44 1438/742840 Email: inspec@theiet.org Copyright Holder The Institution of Engineering and Technology is registered as a Charity in England & Wales (no 211014) and Scotland (no SC038698)."
Database Supplier	FIZ Karlsruhe P.O. Box 2465 76012 Karlsruhe Germany Phone: +49 7247 808-555 Fax: +49 7247 808-259 Email: helpdesk@fiz-karlsruhe.de
Sources	• Journals • Reports • Conferences • Books • Dissertations • Patents (until 1976)
User Aids	• Inspec List of Journals * • Inspec Classification * • Inspec Thesaurus * ** IPC Codes Applied in Inspec Records http://www.theiet.org/publishing/inspec/about/records/IPC.cfm • Online Helps (HELP DIRECTORY lists all help messages available) • STNGUIDE * available printed at producer and online ** available at producer

Clusters

- AEROTECH
- ALLBIB
- AUTHORS
- CHEMENG
- CHEMISTRY
- COMPUTER
- CORPSOURCE
- ELECTRICAL
- ENGINEERING
- ENVIRONMENT
- FUELS
- GEOSCIENCE
- GOVREGS
- MATDATA
- MATERIALS
- MEETINGS
- METALS
- METDATA
- PETROLEUM
- PHYSICS
- SAFETY

STN Database Clusters information (PDF)

Related Databases

LINSPEC
INSPHYS

Pricing

Enter HELP COST at an arrow prompt.

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 abstract (AB), controlled term (CT), supplementary term (ST), controlled term original (CTO), and title (TI) fields)	None or /BI	S MICROELECTRON? S QUANTUM HALL S LIQUID(A)CRYST? S AL203-NA20 S ?LASER?	0AB, CT, CTO, ST, TI
Abstract*	/AB	S NEUTRON ?RADIATION?/AB	AB
Accession Number	/AN	S 1990:3615482/AN	AN
Application Date **(1)**	/AD	S AD = APR 1969	AI
Application Year **(1)**	/AY	S AY = 1970	AI
Astronomical Object	/AO	S WESTERBORK-53 80/AO S “1130+34”/AO	AO
Author (editor, patent inventor)	/AU	S SMITH S/AU S SMITH, S/AU	AU
Availability **(2)**	/AV	S NASA CENTER/AV	AV
Chemical Indexing **(5,6)**	/CHI (or /MAI)	S BA DOP/CHI S CU SS/CHI S (IN SS(S)GS SS(S)AS SS)/CHI S (LA(S)CU(S)O)/CHI(L)ELC=3	CHI
Classification Code (contains INSPEC classification, and IPC text) **(3)**	/CC	S A9110Q/CC S A4/CC S A41/CC S OPTICAL DEVICE?/CC	CC
Classification Code, Original **(3,4)**	/CCO	S MATHEMATICAL PHYSICS7CCO S 621.791/CCO	CCO
Controlled Term **(7)**	/CT	S MAGNETIC LEVITATION/CT	CT
Controlled Term, Original **(4)**	/CTO	S MANGANESE BISMUTHIDE/CTO	CTO
Controlled Word	/CW	S MAGNETIC/CW	CT, CTO
Corporate Source (incl. affiliation, patent assignee)	/CS	S (NAT(W)BUR?(2W)WASH?)/CS S GAIN ELECTRON?/CS	CS, AU
Country of Publication (ISO code and text)	/CY	S NL/CY S AUSTRALIA/CY	CY
Digital Object Identifier	/FTDOI	S DOI:10.1007/978-3-642-03688-0_14/FTDOI	FTDOI
Document Number (abstract journal)	/DN	S C1983-014353/DN	DN
Document Type (code and text)	/DT (or /TC)	S Book/DT	DT
E-mail Address **(3)**	/EML	S HEIDEL IBM/EML	AU, EML
Element Terms (contains chem. elements, formulas, compounds (CP), materials (SY: >=2 metals dopings, ions neg. (IN), ions pos. (IP), isotopes (IS), nuclear reactions (target T, reaction R, final nucleaus F)) **(8)**	/ET	S LA2CUO4/ET S CL*XE/ET S LA CP/ET S CU SY 3/ET S SI:H/ET S CA IP 2/ET S PB IS/ET S 6LI R/ET	ET
Entry Date **(1)**	/ED	S ED>JAN 2006	ED
File Segment	/FS	S B/FS AND SAFETY	FS
Graphic Image, Size **(1,4)**	/GIS	S 10057/GIS	GIS
Graphic Image, Type **(4)**	/GIT	S GIF/GIT	GIT
International Patent Classification **(2,7)**	/IPC	S B82-B0001-00/IPC	IPC
International Standard (Document) Number (contains ISSN, ISBN, and CODEN) **(2)**	/ISN	S 1220-3033/ISN S 1 88044 651 0/ISN S AABNAC/ISN	SO, ISN

General Search Fields (cont'd)

Search Field Name	Search Code	Search Examples	Display Codes
Issue **(1)**	/IS	S IS=8	SO
Journal Title (contains full and abbreviated titles)	/JT	S CREATIVE COMPUT?/JT	JT, JTA, JTF, SO
Language (ISO code and text)	/LA	S GERMAN/LA S RU/LA	LA
Meeting Date **(1)**	/MD	S 15 DEC 1999/MD	MD, SO
Meeting Location **(3)**	/ML	S NANTES/ML	ML, SO
Meeting Title	/MT	S SYSTEM STRUCTURE/MT	MT, SO
Meeting Year **(1)**	/MY	S 1983-1984/MY	MY, SO
Note **(3,4)**	/NTE	S ALSO PUBLISHED/NTE	NTE
Number of Contract	/NC	S 016-77-1 RPU B/NC	NC
Number of Report (number and prefix)	/NR	S GEPP-8/NR S GEPP/NR	NR
Patent Assignee **(3,8)**	/PA	S BATTELLE CORP/CS	PA
Patent Country (WIPO code and text) **(8)**	/PC	S GB/PC	PNO
Patent Number, Original **(8)**	/PNO (or /PATS)	S GB1 122 151/PNO	PNO
Periodic Group **(7)**	/PG	S A8/PG	not displayed
Physical Properties **(2,7,9)**	/PHP (or /FA)	S EXCIMER LASERS/CT AND 2.48E-07-3.52E-07/W	PHP
Priority Country (WIPO code and text) **(8)**	/PRC	S CA/PRC S CANADA/PRC	PRAO
Priority Date **(1,8)**	/PRD	S DEC 1960/PRD	PRAO
Priority Number, Original **(8)**	/PRNO	S AT-6652/PRNO	PRAO
Priority Year **(1,8)**	/PRY	S PRY>1965	
Publication Date **(1)**	/PD	S JAN 2004-MAR 2004/PD	PD, SO
Publication Year **(1)**	/PY	S 2004-2005/PY	SO, PNO
Publisher **(3)**	/PB	S MCGRAW LONDON/PB	PB, SO
Reference Count **(1)**	/REC (or /RE.CNT)	S L1 AND REC<10	REC, SO
Source (contains CODEN, journal title and other higher level titles, ISBN, ISSN, SICI, Internet URL, publisher, meeting information, number of contract, number of report)	/SO	S EARTH PLANET/SO S (CREATIVE COMP?(L)USA)/SO S 0031-9201/SO S WWW.COMPUTER.ORG/SO S AABNAC/SO	SO
Supplementary Term **(10)**	/ST	S AL2O3-NA2O/ST S MEASUR? DEVICE#/ST	ST
Title*	/TI	S GRAVITY PARAMETERS/TI	TI
Total Element Count **(6,11)**	/ELC	S CA/CHI(L)ELC>2	not displayed
Treatment Code (code and text)	/TC	S GENERAL REVIEW/TC	TC
Uniform Resource Locator **(3)**	/URL	S JHEP ARCHIVE/URL	URL, SO
Update Date **(1)**	/UP	S UP=FEB 2009	UP
Volume **(1)**	/VL	S VL=5	SO
Word Count, Title **(1)**	/WC.T	S L1 AND WC.T>10	WC.T

(1) Numeric search field that may be searched using numeric operators or ranges.
(2) Field available for data since 1969 only.
(3) Search with implied (S) proximity is available in this field.
(4) Field available for data 1898-1969 only.
(5) Search with or without role indicators (see list on page 3); valid for records since 1987. All single elements belonging to one formula including their role indicators can be searched separately and combined with (S)-proximity.
(6) The Total Element Count (/ELC) is linked by (L)-proximity to elements in /CHI.
(7) An online thesaurus is available in this field.
(8) Field available until 1976.
(9) For physical properties see list on page 3; valid for records since 1987.
(10) Alloys are indexed as bound phrase only.
(11) Elements cited in Hill System order with an asterisk (*) between element terms.

Property Fields 1,2)

Field Code	Property	Unit	
/AGE	Age	yr	(Year)
/ALT	Altitude	M	(Metre)
/BAW	Bandwidth	Hz	(Hertz)
/BIR	Bit Rate	bit/s	(Bit per Second)
/BYR	Byte Rate	Byte/s	(Byte per Second)
/CAP	Capacitance	F	(Farad)
/COE	Computer Execution Rate	IPS	(Instruct. per Second)
/CON	Conductance	S	(Siemens)
/COS	Computer Speed	FLOPS	(Floating Point Operations per Second)
/CUR	Curren	A	(Amp)
/DEP	Depth	m	(Metre)
/DIS	Distance	m	(Metre)
/ECND	Electric Conductivity	S/m	(Siemens per Metre)
/EEV	Electron Volt Energy	eV	(Electron Volt)
/EFF	Efficiency	percent	
/ENE	Energy	J	(Joule)
/EREST (or /REE)	Electrical Resistivity	Ohm	(Ohm Metre)
/FRE	Frequency	Hz	(Hertz)
/GAD	Galactic Distance	Pc	(Parsec)
/GAI	Gain	dB	(Decibel)
/GED	Geocentric Distance	M	(Metre)
/HED	Heliocentric Distance	AU	(Astronomical Unit)
/LOS	Loss	dB	(Decibel)
/M	Mass	Kg	(Kilogram)
/MES	Memory Size	Byte	
/MFD (or /B)	Magnetic Flux Density	T	(Tesla)
/NOF	Noise Figure	dB	(Decibel)
/PIS	Picture Size	Pixel	(Picture Element)
/POA	Apparent Power	VA	(Volt-Amps)
/POR	Reactive Power	VAr	(Volt-Amp (reactive))
/POW	Power	W	(Watt)
/PRES (or /P)	Pressure	Pa	(Pascal)
/PRSP (or /PRS)	Printer Speed	Cps	(Character per Second)
/RAD	Radioactivity	Bq	(Becquerel)
/RADA	Radiation Absorbed Dose	Gy	(Gray)
/RADE	Radiation Dose Equivalent	Sv	(Sievert)
/RAE	Radiation Exposure	C/kg	(Coulomb per Kilogram)
/RES	Resistance	ohm	
/SCA	Storage Capacity	bit	
/SIZ	Size	m	(Metre)
/STM	Stellar Mass	Msol	(Solar Mass)
/TEMP (or /T)	Temperature	K	(Kelvin)
/TIM	Time	S	(Second)
/VEL (or /V)	Velocity	m/s	(Metre per Second)
/VOLT	Voltage	V	(Volt)
/WOL	Word Length	bit	
/WVL (or /w)	Wavelength	M	(Metre)

(1) Physical properties are displayed in the field PHP.
(2) Exponential format is recommended for the search of values, e.g. 1.8E+4 or 1.8E4 (for 18000) and 9.2E-1 (for 0.92).

Role Indicators

Code	Content
ADS	Absorbate, or any sorbate being (ad)sorbed onto a substance
BIN	Binary system
DOP	Dopant
EL	Element
INT	Interface System
SS	System with 3 or more components
SUR	Surface or substrate

Controlled Term (/CT) Thesaurus

All Relationship Codes can be used with both the SEARCH and EXPAND command.

Code	Content	Examples
ALL	All Associated Terms	E ALUMINIUM COMPOUNDS+ALL/CT
AUTO **(1)**	Automatic Relationship (SELF, USE, UF)	S POWDER SPRAYING+AUTO/CT
BT	Broader Terms (also BT1, BT2 etc. possible)	E TERBIUM ALLOYS+BT/CT
HIE	Hierarchy (all Broader and Narrower Terms)	E SHOCK WAVES+HIE/CT
KT	Keyword Terms (Multi-word Phrases containing the specified Keyword Term)	E POWDER+KT/CT
NOTE	Notes associated with Terms (SELF, DA, CC)	E ELECTRIC MACHINES+NOTE/CT
NT	Narrower Terms (also NT1, NT2 etc. possible)	S ACOUSTIC TRANSDUCERS+NT/CT
PFT	All Preferred, Forbidden Terms, and Dates (SELF, DA, USE, UF)	E POWER AMPLIFIERS+PFT/CT
PT	Prior Terms	E DATABASE MANAGEMENT SYSTEMS+PT/CT
RT	Related Terms (see also)	E TRANSIENT ANALYSERS+RT/CT
STD	Standard (all Broader, Narrower, Related, and Prior Terms)	E TRANSFER FUNCTIONS+STD/CT
UF	Used For (Preferred and Forbidden Terms)	E TRANSDUCERS+UF/CT
USE	Use (Forbidden and Preferred Terms)	E SOLIONS+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.

International Patent Classification (/IPC) Thesaurus

The classifications, validity and catchwords for the main headings and subheadings from the current (8th) edition of the WIPO International Patent Classification (IPC) manual are available. The classifications from the previous editions (1-7) are also available as separate thesauri. To EXPAND and SEARCH in the thesauri for editions 1-7, use the field code followed by the edition number, e.g., /IPC2, for the 2nd edition. Catchwords are included only in the thesauri for the 8th, 7th, 6th, and 5th editions.

Code	Content	Examples
ADVANCED (ADV)	Advanced Codes for the Core Level IPC Code	E A61K0006-02+ADVANCED/IPC
ALL	All Associated Terms (BT, SELF, NT, RT)	E C01C003-00+ALL/IPC
BRO (MAN)	Complete Class	E C01C+BRO/IPC
BT	Broader Term (BT, SELF)	E C01F001-00+BT/IPC
CORE (COR)	Core Codes for the Advanced Level IPC Code	E G08C0019-22+CORE/IPC
ED	Complete title of the SELF term and IPC manual edition	E C01F001-00+ED/IPC
HIE	Hierarchy Term (Broader and Narrower Term) (BT, SELF, NT)	E C011003-00+HIE/IPC
INDEX	Complete title of the SELF term	E C01F001-00+INDEX/IPC

International Patent Classification (/IPC) Thesaurus (cont'd)

Code	Content	Examples
KT	Keyword Term (catchwords) (SELF, KT)	E CYANOGEN+KT/IPC
NEXT	Next Classification	E C01C001-00+NEXT5/IPC
NT	Narrower Terms (SELF, NT)	E C01C+NT/IPC
PREV	Previous Classification	E C01C001-12+PREV10/IPC
RT (SIB)	Related Terms (SELF, RT)	E C01C003-20+RT/IPC
TI	Complete Title of the SELF Term and Broader Terms (BT, SELF)	E C01F001-00+TI/IPC

Physical Properties (/PHP) Thesaurus

Code	Content	Examples
ALL	All Associated Terms	E CURRENT+ALL/PHP
NOTE	Notes associated with the Terms (SELF, INSPEC, CGS, ENG, FPS, MKS, SI, STN, OTHERS, DEF, DA)	E ALTITUDE+NOTE/PHP
PFT	All Preferred, Forbidden Terms (SELF, UTP, USE, UF)	E APPARENT POWER+PFT/PHP
UF	Used For (Preferred and Forbidden Terms)	E SIZE+UF/PHP
UNITE	Unit (SELF, FQS, INSPEC, CGS, ENG, FPS, MKS, SI, STN, OTHERS)	E STORAGE CAPACITY+UNIT/PHP
USE	Use (Forbidden and Preferred Terms)	E RADIUS+USE/PHP

PHP Thesaurus Field Descriptors

Code	Content
SELF	Self Term, Descriptor
FQS	Field Qualifier Search
INSPEC	Unit given by INSPEC
CGS	CGS Unit Symbol
ENG	Engineering Unit Symbol
FPS	FPS Unit Symbol
MKS	MKS Unit Symbol
SI	SI Unit Symbol
STN	STN Unit Symbol
OTHERS	Units mentioned in printed version besides those already given
DA	Date of Introduction of Descriptor
DEF	Definition
UTP	USE: Unit to Property
USE	Forbidden to Allowed Property Name
UF	Allowed Property Name

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 TI AB
AI	Application Information	
AN	Accession Number	D 1-5 AN
AO	Astronomical Object	D AO
AU	Author	D AU TI
CC	Classification Code	D CC
CCO	Classification Code, Original	D CCO
CHI	Chemical Indexing	D CHI
CS	Corporate Source (format includes AU)	D CS
CT	Controlled Term	D CT
CTO	Controlled Term, Original	D CTO
CY	Country	D CY
DN	Document Number	D AN DN
DT	Document Type (incl. Treatment Code)	D DT
ED	Entry Date	D ED
EML **(1)**	E-mail Address	D EML
ET	Element Terms	D ET
FS **(1)**	File Segment	D FA
FTDOI **(1)**	Digital Object Identifier	D FTDOI
GI	Graphic Image	D GI
GIS	Graphic Image, Size	D GIS
GIT **(1)**	Graphic Image, Type	D GIT
IPC	International Patent Classification	D IPC
ISN **(1)**	International Standard (Document) Number	D ISN
JT **(1)**	Journal Title	D JT
JTA **(1)**	Journal Title, Abbreviated	D JTA
JTF **(1)**	Journal Title, Full	D JTF
LA	Language	D LA TI
MD **(1)**	Meeting Date	D MD
ML **(1)**	Meeting Location	D ML
MT **(1)**	Meeting Title	D MT
MY **(1)**	Meeting Year	D MY
NC	Number of Contract	D NC
NR	Number of Report	D NR
NTE	Note	D NTE
PA	Patent Assignee	D PA
PB **(1)**	Publisher	D PB
PD **(1)**	Publication Date	D PD
PHP	Physical Properties	D PHP
PNO	Patent Number, Original	D PNO
PRAO	Priority Information, Original	D PRAO
PY **(1)**	Publication Year	D PY
RE (RE.CNT) **(1)**	Reference Count	
SO	Source (includes NR)	D SO
ST	Supplementary Term	D ST
TC	Treatment Code (incl. Document Type)	D TC
TI	Title	D TI
UP (ED) **(1)**	Update Date	D UP
URL **(1)**	Uniform Resource Locator	D URL
WC.T **(1)**	Word Count, Title	D WC.T

DISPLAY and PRINT Formats (cont'd)

Format	Content	Examples
ABS	AN, DN, AB	D ABS
ALL	BIB, AB, CC, CCO, CT, CTO, ST, IPC, AO, CHI, PHP, ET	D 1-3 ALL
ALLG	ALL, plus image	D ALLG
DALL	ALL, delimited for post-processing	D DALL
IALL	ALL, indented with text labels	D IALL
BIB	AN, DN, TI, AU, CS, NC, NR, SO, AV, DT, TC, CY, LA, GIS Patents: AN, DN, TI, IN, PA, PNO, AI, PRAO, DT, TC, CY, LA, GIS (BIB is default)	D BIB
BIBG	BIB, plus image	D BIBG
IBIB	BIB, indented with text labels	D IBIB
IND	AN, DN, CC, CCO, CT, CTO, ST, IPC, AO, CHI, PHP, ET	D IND
SCAN **(2)**	TI, CT (random display without answer numbers)	D SCAN
TRIAL (TRI, SAMPLE, SAM, FREE)	TI, CC, CCO, CT, CTO, ST, IPC, AO, CHI, PHP, ET	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) 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	N
Accession Number	AN	Y	N
Application Date	AD	Y	Y
Astronomical Object	AO	Y	Y
Author (patent inventor)	AU (IN)	Y	Y
Chemical Indexing	CHI	Y	N
Citation	CIT (RE)	Y **(2,3)**	N
Classification Code	CC	Y	Y
Classification Code, Original	CCO	Y	Y
CODEN	CODEN	N	Y
Controlled Term	CT	Y	N
Controlled Term, Original	CTO	Y	N
Corporate Source (patent assignee)	CS (PA)	Y	Y
Country of Publication	CY	Y	Y
Document Number	DN	Y	Y
Document Type	DT (TC)	Y	Y
E-mail Address	EML	Y	Y
Element Terms	ET	Y	N
Entry Date	ED	Y	Y
Graphic Image, Size	GIS	Y	N
Graphic Image, Type	GIT	Y	N
International Patent Classification	IPC	Y	N

SELECT, ANALYZE, and SORT Fields (cont'd)

Field Name	Field Code	ANALYZE/ SELECT (1)	SORT
International Standard (Document) Number	ISN	Y **(4)**	Y
International Standard Book Number	ISBN	N	Y
International Standard Serial Number	ISSN	N	Y
Journal Title	JT	Y	Y
Journal Title, Abbreviated	JTA	Y **(5)**	Y
Journal Title, Full	JTF	Y **(5)**	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
Note	NTE	Y	Y
Number of Contract	NC	N	Y
Number of Report	NR	Y	Y
Occurrence Count of HIT Terms	OCC	N	Y
Patent Country	PC	Y	Y
Patent Number, Original	PNO	Y	Y
Priority Country	PRC	Y	Y
Priority Date	PRD	Y	Y
Priority Information, Original	PRAO	N	Y
Priority Year	PRY	Y	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y	Y
Publisher	PB	Y	Y
Reference Count	REC (RE.CNT)	Y	Y
Source	SO	Y **(6)**	N
Supplementary Term	ST	Y	N
Title	TI	Y (default)	Y
Treatment Code	TC	Y	Y
Uniform Resource Locator	URL	Y	Y
Update Date	UP	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) SELECT HIT and ANALYZE HIT are not valid with this field.
(3) SELECT HIT or ANALYZE CIT allows you to extract the reference from the source documents in this file and have them automatically converted to a citation format for searching in the SCISEARCH file. SEL or ANALYZE CIT extracts first author, publication year, volume, first page, with a truncation symbol and with /RE appended to the terms created by SELECT.
(4) Selects or analyzes CODEN, ISSN, and ISBN, and appends /ISN to the terms created by SELECT.
(5) Appends /JT to the terms created by SELECT.
(6) Selects or analyzes CODEN, ISSN and ISBN, and appends /SO to the terms created by SELECT.

Sample Records

DISPLAY ALL OF JOURNAL

```
AN    2010:11074210  INSPEC
TI    New reconfigurable architectures for implementing FIR filters with low
      complexity
AU    Mahesh, R.; Vinod, A.P. (Sch. of Comput. English, Nanyang Technol.
University,
      Singapore, Singapore)
      Email: rpmahesh@ntu.edu.sg; asvinod@ntu.edu.sg
SO    IEEE Transactions on Computer-Aided Design of Integrated Circuits and
      Systems (Feb. 2010), vol.29, no.2, p. 275-88, 37 refs.
      CODEN: ITCSDI, ISSN: 0278-0070
      Price: 0278-0070/$26.00
```

INSPEC

Published by: IEEE, USA
DT Journal
TC Practical
CY United States
LA English
AB Reconfigurability and low complexity are the two key requirements of finite impulse response (FIR) filters employed in multistandard wireless communication systems. In this paper, two new reconfigurable architectures of low complexity FIR filters are proposed, namely constant shifts method and programmable shifts method. The proposed FIR filter architecture is capable of operating for different wordlength filter coefficients without any overhead in the hardware circuitry. We show that dynamically reconfigurable filters can be efficiently implemented by using common subexpression elimination algorithms. The proposed architectures have been implemented and tested on Virtex 2v3000ff1152-4 field-programmable gate array and synthesized on 0.18 μm complementary metal-oxide-semiconductor technology with a precision of 16 bits. Design examples show that the proposed architectures offer good area and power reductions and speed improvement compared to the best existing reconfigurable FIR filter implementations in the literature.
CC B6250F Mobile radio systems; B1270F Digital filters; B1265B Logic circuits; B2570D CMOS integrated circuits; B1265A Digital circuit design, modelling and testing; C5220 Computer architecture; C5240 Digital filters; C5120 Logic and switching circuits
G06F0015/76 Architectures of general purpose stored programme computers
H01L0027/085 Including field-effect components only
H03K0019/00 Logic circuits, i.e. having at least two inputs acting on one output; Inverting circuits
H04B0007/00 Radio transmission systems, i.e. using radiation field
H04W Wireless communication networks
CT CMOS integrated circuits; field programmable gate arrays; FIR filters; integrated circuit design; mobile communication; reconfigurable architectures
ST reconfigurable architectures; FIR filters; finite impulse response filters; multistandard wireless communication systems; programmable shifts method; FIR filter architecture; wordlength filter coefficients; hardware circuitry; subexpression elimination algorithms; Virtex 2v3000ff1152-4; field-programmable gate array; complementary metal-oxide-semiconductor technology
IPC G06F0015-76; H01L0027-085; H03K0019-00; H04B0007-00; H04W

DISPLAY ALL (ARCHIVE RECORD)

AN 1899:A00035 INSPEC DN 1899A00035
TI New radio-active element in pitch blende
AU Curie, P.; Sklodowska-Curie, Mme.
SO Comptes Rendus Hebdomadaires des Seances de l'Academie des Sciences (1898), vol. 127, p. 175-178
DT Journal
CY France
LA English
AB The suggestion that pitch blende contains some substance more active than uranium (see Abstract Number 1898A01224) has been followed up and found to be true. It is present in the sulphides precipitated by sulphuretted hydrogen from an acid solution of pitch blende, and is so in company with lead, bismuth, copper, arsenic, and antimony. Sulphide of ammonium removes the arsenic and the antimony, nitric acid dissolves the remaining sulphides, and sulphuric acid removes the lead; the sulphate of lead should be well washed with dilute sulphuric acid in order to recover the portion of the element sought for, which is carried down by the

precipitate. There remains in solution the new element, with bismuth and copper: ammonia in excess precipitates the two former. No good method has been found for completely separating these by wet methods, but the two sulphides have different volatilities, and when sublimed in a vacuum tube condense at different parts of the tube. The ultimate product is a sulphide 400 times as active as uranium, and appears to be that of a new metal, analytically related to bismuth: name proposed, Polonium. There is, however, no characteristic ray in its spectrum; but this is the character of the spectra of uranium, thorium, and tantalum, which present merely innumerable very fine lines, difficult to recognise.

CC A4200 Optics
CCO Light
CT rays
CTO rays

DISPLAY IND

AN 2010:11070133 INSPEC
CC A8760I Medical magnetic resonance imaging and spectroscopy; A8770E Patient diagnostic methods and instrumentation; A8760M Radiation dosimetry in medical physics; A8750E Bio-optics (effects of microwaves, light, laser and other electromagnetic waves); B7510N Biomedical magnetic resonance imaging and spectroscopy; B6135 Optical, image and video signal processing; B7530B Radiation protection and dosimetry; C7330 Biology and medical computing; C5260B Computer vision and image processing techniques
A61B0005/055 Involving electronic [emr] or nuclear [nmr] magnetic resonance, e.g. magnetic resonance imaging
G06F0019/00 Digital computing or data processing equipment or methods, specially adapted for specific applications
G06T Image data processing or generation, in general
CT biological organs; biological tissues; biomedical MRI; dosimetry; electromagnetic waves; feature extraction; image reconstruction; image segmentation; physiological models
ST surface-based anatomical models; dosimetric simulations; electromagnetic exposure; optimized evaluation; high resolution magnetic resonance images; tissue; image segmentation; semiautomated tool; organs; image reconstruction; three-dimensional unstructured triangulated surface objects; high precision images; body features; meshing flexibility; traditional voxel-based representation; anatomical models; conformal computational techniques; virtual family; age 34 yr; age 26 yr; age 11 yr; age 6 yr
IPC A61B0005-055; G06F0019-00; G06T
PHP age 3.4E+01 yr; age 2.6E+01 yr; age 1.1E+01 yr; age 6.0E+00 yr
ET D