

## ANABSTR (Analytical Abstracts)

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<b>Subject Coverage</b>	<ul style="list-style-type: none"> <li>• Applied and industrial analysis</li> <li>• Chromatography and electrophoresis</li> <li>• Clinical and biochemical analysis</li> <li>• Environment, agriculture, and food</li> <li>• General analytical chemistry</li> <li>• Inorganic and organic analysis</li> <li>• Pharmaceutical analysis</li> <li>• Spectroscopy and radiochemical methods</li> </ul>																
<b>File Type</b>	Bibliographic																
<b>Features</b>	<table border="0"> <tr> <td><a href="#">Alerts (SDIs)</a></td> <td>Weekly</td> <td></td> <td></td> </tr> <tr> <td>CAS Registry Number® Identifiers</td> <td><input type="checkbox"/></td> <td>Page Images</td> <td><input type="checkbox"/></td> </tr> <tr> <td><a href="#">Keep &amp; Share</a></td> <td><input checked="" type="checkbox"/></td> <td>SLART</td> <td><input checked="" type="checkbox"/></td> </tr> <tr> <td>Learning Database</td> <td><input type="checkbox"/></td> <td>Structures</td> <td><input type="checkbox"/></td> </tr> </table>	<a href="#">Alerts (SDIs)</a>	Weekly			CAS Registry Number® Identifiers	<input type="checkbox"/>	Page Images	<input type="checkbox"/>	<a href="#">Keep &amp; Share</a>	<input checked="" type="checkbox"/>	SLART	<input checked="" type="checkbox"/>	Learning Database	<input type="checkbox"/>	Structures	<input type="checkbox"/>
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Learning Database	<input type="checkbox"/>	Structures	<input type="checkbox"/>														
<b>Record Content</b>	<ul style="list-style-type: none"> <li>• Bibliographic information, abstracts (since 1984), names of chemical substances, as well as index terms.</li> <li>• With the help of those index terms the identified elements and compounds (Analyte), the analysed media (Matrix) or the applied analytical methods (Concepts) can be searched.</li> </ul>																
<b>File Size</b>	<ul style="list-style-type: none"> <li>• More than 507,500 citations (04/2021)</li> </ul>																
<b>Coverage</b>	1980-present																
<b>Updates</b>	Updated weekly																
<b>Language</b>	English																
<b>Database Producer</b>	The Royal Society of Chemistry Thomas Graham House, Milton Road Cambridge CB4 4WF Great Britain Phone: +44 1223 432110 Fax: +44 1223 423429 Email: <a href="mailto:marketing@rsc.org">marketing@rsc.org</a> Copyright Holder																
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**Sources**

- Journals
- 

**User Aids**

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

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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 (\*).

### General Search Fields

Search Field Name	Search Code	Search Examples	Display Codes
Basic Index* (contains single words from the title (TI), abstract (AB), and chemical name (CN,CNA,CNM) and index term (CT) fields)	None or /BI	S BIENZYMIC ELECTRODE# S CHROMATOG?(A)GAS S ELECTROPHORE?(L)REVIEW S ?SPECTR?	TI, AB, CN, CNA, CNM, CT, IT
Abstract*	/AB	S ?ANTIBODIES/AB	
Accession Number	/AN	S 2021001277/AN	AN
Author	/AU	S BRIDGER, N?/AU	AU
Chemical Name	/CN	S DOPA?/CN	CN,IT
Chemical Name, Analyte	/CNA	S GOLD/CNA	CNA,IT
Chemical Name, Matrix	/CNM	S MINERALS?/CNM	CNM,IT
Classification Code (code, main code and text)	/CC	S (BIOCHEMISTRY OR BIOCHEMICAL)/CC S *F/CC	CC
Controlled Term (Concepts)	/CT	S AUTOMATED ANALYSIS/CT	CT,IT
Corporate Source (1)	/CS	S (FOOD AND RES?)/CS	AU
Document Type (code and text)	/DT	S JOURNAL/DT	DT
Entry Date (2)	(or /TC) /ED	S ED>APR 2021	ED
Journal Title	/JT	S RAPID COMMUN?/JT	SO
Language (code and text)	/LA	S (EN OR DE)/LA	LA
Publication Date (2)	/PD	S Jan 2020/PD	PD, SO
Publication Year (2)	/PY	S 1988-1990/PY	PY, SO
Source (contains journal title, and pagination)	/SO	S (ANAL?(W)SCI?)/SO	SO
Title*	/TI	S RIMS/TI	TI
Update Date (2)	/UP	S MAY 2021/UP	UP

(1) Implied (S) proximity is available in this field.

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

## Property Fields<sup>1)</sup>

In ANABSTR a numeric search for a specific set of physical properties (/PHP) is available within the text fields (TI, AB, 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 8000-10000/BIR
/BIT	Stored Information	Bit	Bit	S BIT > 3 MEGABIT
/CAP	Capacitance	Farad	F	S 1-10 MF/CAP
/CATA	Catalytic Activity	Katal	kat	
/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) 8/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 (/C)	Density (Mass Concentration)	Kilogram/Cubic Meter	kg/m <sup>3</sup>	S 5E-3-10E-3/DEN
/DEQ	Dose Equivalent	Sievert	Sv	S 100/DEQ
/DOA	Dosage	Milligram/Kilogram/Day	mg/day	
/DOS (LD50)	Dose	Milligram/Kilogram	mg/kg	S DOS>0.8
/DV	Viscosity, dynamic	Pascal * Second	Pa * s	S DV>5000
/ECH (/CHA)	Electric Charge	Coulomb	C	S 0.0001-0.001/ECH
/ECO (/ECND)	Electrical Conductivity	Siemens/Meter	S/m	S ECO>800 S/M (15A) AQUEOUS
/ELC (/ECC)	Electric Current	Ampere	A	S 1-10/ELC
/ELF (/ECF)	Electric Field	Volt/Meter	V/m	S 200/ELF
/ENE	Energy	Joule	J	S DROPLETS (10A) 40 JOULE - 70 JOULE /ENE
/ERE (/ERES)	Electrical Resistivity	Ohm * Meter	Ohm * m	S ERE>0.1
/FOR	Force	Newton	N	S 50 N /FOR
/FRE (/F)	Frequency	Hertz	Hz	S OSCILLAT?/BI (S) 1- 3/FRE
/IU	International Unit	none	IU	S IU>1000 (P) VITAMIN A
/KV	Viscosity, kinematic	Square Meter/Second	m <sup>2</sup> /s	S METHYLPOLYSILOXANES/BI (10A) 200-300 CST /KV
/LEN (/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=1
/MFD (/MFS)	Magnetic Flux	Tesla	T	S MFD>102
/MFR (/MFL)	Density			
/MFR (/MFL)	Mass Flow Rate	Kilogram/Second	kg/s	S MFR<0.1
/MFST	Magnetic Field Strength	Ampere/Meter	A/m	

Property Fields<sub>1)</sub> (cont'd)

Field Code	Property	Unit	Symbol	Search Examples
/MM (/MW, /MOM)	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
/PER	Percent (Proportionality)	none	%	S POLYMER?/AB (5A) 4/PER
/PHV (/PH)	pH Value	pH	pH	S 7.4-7.6/PHV
/POW (/PW)	Power	Watt	W	S "HG-XE-?"/BI (S) 100-200 WATT/POW
/PPM	Parts per million	Ppm	ppm	S 100 PPM /PPM (10A) ADDITIVE/BI
/PRES (/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
/RI	Refractive Index	none		S 3-4/RI
/RSP	Rotational Speed	Revolution/Minute	rpm	S 2 RPM - 100 RPM /RSP (S) ENGINE/BI
/SAR	Area /Surface Area	Square Meter	m <sup>2</sup>	S PLATE/BI (S) 10 M**2 - 100 M**2 /SAR
/SOL (/SLB)	Solubility	Gram/100 gram	g/100 g	S SOL>20 G/100G (5A) WATER
/SSAM	Specific Surface Area, Mass	Square Meter/Kilogram	M2/kg	
/STSC (/ST)	Surface Tension	Joule /Square Meter	J/m <sup>2</sup>	S 60 J/M**2/STSC
/TCO (/TCND)	Thermal Conductivity	Watt/Meter * Kelvin	W/m * K	S 1/TCO (S) HEAT?
/TEMP (/T)	Temperature	Kelvin	K	S 20-25/TEMP
/TEX	Tex	Gram/Kilometer	g/km	
/TIM	Time	Second	s	S ?INCUB?/BI (10A) 50 S - 150 S /TIM
/VEL (/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 M**3/S - 2 M**3/S /VLR (S) ABRASIVE
/VOL	Volume	Cubic Meter	m <sup>3</sup>	S 1E-8-2E-8/VOL.EX
/VOLT	Voltage	Volt	V	S TENSION/BI (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).

## 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 searching in the basic index. Highlighting must be ON during SEARCH to use the HIT, KWIC, and OCC formats.

Format	Content	Examples
AB AN AU CC CN CNA CNM CS CT DN DT (TC) ED IT  LA PD PY SO TI UP	Abstract Accession Number Author Classification Code Chemical Name Chemical Name, Analyte Chemical Name, Matrix Corporate Source Controlled Term (Concept) Document Number Document Type Entry Date Index Term (incl. chemical names for Analyte(s), and Matrix and Concepts) Language Publication Date Publication Year Source Title Update Date	D TI AB D 1-5 AN D AU TI D CC D CN D CNA D CNM D CS D CT D 1-5 DN D DT D ED D IT  D LA D PD D PY D SO D TI 1-10 D UP
ALL DALL IALL BIB IBIB IND SCAN (1) TRIAL (TRI, SAM, SAMPLE, FREE)	AN, DN, TI, AU, SO, DT, LA, AB, CC, IT ALL, delimited for post-processing ALL, indented with text labels AN, DN, TI, AU, SO, DT, LA (BIB is the default) BIB, indented with text labels AN, CC, IT TI, IT (random display without answer numbers) TI, CC, IT	D 1-3 ALL D 1-3 DALL D IALL D 8 BIB D 8 IBIB D 2-3 IND  D L7 1-2 TRI
HIT KWIC OCC	Hit term(s) and field(s) Up to 50 words before and after hit term(s) (KeyWord-In-Context) Number of occurrences of hit term(s) and field(s) in which they occur	D HIT D KWIC D OCC

(1) 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
Author	AU	Y	Y
Chemical Name	CN	Y	Y
Chemical Name, Analyte	CNA	Y	Y
Chemical Name, Matrix	CNM	Y	Y
Citation	CIT	Y (2)	N
Classification Code	CC	Y	Y
Controlled Term (Concept)	CT	Y	Y
Corporate Source	CS	Y	Y
Document Type	DT (TC)	Y	Y
Entry Date	ED	Y	Y
Journal Title	JT	Y	Y
Language	LA	Y	Y
Occurrence Count of Hit Terms	OCC	N	Y
Publication Date	PD	Y	Y
Publication Year	PY	Y	Y
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 AU.

(2) 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.

## Sample Records

### Display ALL

```
AN 2018007456 ANABSTR
DN cm000000756681
TI Towards cancer diagnostics - an .alpha.-feto protein electrochemical
immunosensor on a manganese(IV) oxide/gold nanocomposite
immobilisation layer
AU Idris, Azeez O.; Mabuba, Nonhlangabezo; Arotiba, Omotayo A.
SO RSC Adv. (23 Oct 2018), Volume 8, Number 54, pp. 30683-30691
DT Journal
ED Entered STN: 5 Jan 2021
Last updated on STN: 24 Feb 2021
AB A novel electrochemical immunosensor for the quantification of
.alpha.-feto protein (AFP) using a nanocomposite of manganese(IV) oxide
nanorods (MnO2NRs) and gold nanoparticles (AuNPs) as the
immobilisation layer is presented. The MnO2NRs was synthesised using a
hydrothermal method and AuNPs were electrodeposited on a glassy carbon
electrode surface. The MnO2NRs were characterised with scanning electron
microscopy (SEM), high-resolution transmission electron microscopy
(HRTEM) and X-ray powder diffraction (XRD). Cyclic voltammetry (CV) and
electrochemical impedance spectroscopy (EIS) were used to characterise
the immunosensor at each stage of the biosensor preparation. The MnO2
nanorods and AuNPs were applied as the immobilisation layer to
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**ANABSTR**

efficiently capture the antibodies and amplify the electrochemical signal. Under optimised conditions, the fabricated immunosensor was utilised for the quantification of AFP with a wide dynamic range of 0.005 to 500 ng mLsup-1 and detection limits of 0.00276 ng mLsup-1 and 0.00172 ng mLsup-1 (S/N = 3) were obtained from square wave anodic stripping voltammetry and EIS respectively. The nanocomposite modifier enhanced the immunosensor performance. More so, this label-free immunosensor possesses good stability over a period of two weeks when stored at 4 °C and was selective in the presence of some interfering species.

CC \*F Clinical and Biochemical Analysis (70000)

IT Concepts: immunosensors; biosensor; voltammetry, anodic-stripping, square-wave; spectrometry, electrochemical-induced impedance  
Analyte(s): .alpha.-fetoprotein

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