

SUBJECT INDEX VOLUME 1

Advanced oxidation procedures (AOP)	267	Carbohydrates	50
Amino acid sequences	355	analysis with ESI-QTOF	51
formats to write	355	use of acid hydrolysis for analysis of	51
Analytical chemistry	193	use of ESI-IT	50
ultrasonic bath in	194	Carotenoids	93
Analytical techniques	376	detection of	97
atomic absorption spectrometry as	376	determination of	97
atmospheric aerosol analysis by	377	electrochemical detection of	98
Anion sensing	157	involving high-performance separations	97
and bromide	159	properties of	93
and chloride	159	separation of	97
using BAQ/BAQBA probes	161	Carotenoid analyses	93
using BMOQ/BMOQBA probes	160	by mass spectrometry	99
using BMQ/BMQBA probes	159	by nuclear magnetic resonance	99
using quinolinium based boronic acid probes	157	by thermal lens spectrometry	98
Atmospheric aerosols	381	implications for	94
atomic fluorescence spectroscopy for	389	pretreatment/preconcentration of analytical samples in	95
plasma-based techniques applied to	381	reliability of	93
total reflection X-ray fluorescence spectrometry for	390	role of UV/VIS photometry	98
Atomic spectrometric techniques	373	Chemometric approaches	181
determination of chemical elements in atmospheric-		detection of nuclear material losses by	181
aerosols by	373	role of material balance equation	183
role of	373	role of neural networks	185
sample collection of	374	Chip-based microfabricated-GC advances (MGC)	143
sample preparation of	375	column channel design of	144
BAQBA probes	167	column interfaces of	144
in cyanide sensing	168	fabrication of	144
in fluoride sensing	167	novel stationary phases of	143
Boronic acid based probes	157	Chromatographic enantioseparations	59
Calcium phosphite nano-composites	187	applications of	70
analysis of particle growth kinetics by	188	Cyanide sensing	163
fabrication of	187	fluorescence lifetime-based	164,166
for smart delivery of DNA/-RNA to mammalian		intensity based	163,165
cells	187	Derived protein structure databases	363
in regulation of particle growth	187	Diffusion NMR	289
for effective cellular mechanism of DNA/-RNA		analysis of	295
delivery by	187	application for polymers	291
optimization of precipitate formation conditions of ...	188	applications of	289
processing of DNA by	188	applications to analytical problems	290
role of block copolymer	189	data processing of	295
Ca-Mg phosphate nano-particle	189	determination of molecular interactions by	294
chemical characterization of	189	determination of purity by	290
generation of	189	molecular weight determination by	293
regulating growth kinetics of	189	processing methods of	289
sizes of particles of	189	pulse sequences using	289
Capillary electrophoresis	41,321	special applications of diffusion measurements of ...	295
coupling of ESI-MS with	41	to find binding affinities	294
in biological/food samples	324	to study complex mixtures	293
in environmental analysis	325	Direct mode enantioseparations	60
in medicinal/pharmaceuticals	326	mechanisms of enantioseparation in	62
		new chiral stationary phases (CSPs) in	60
		preparative enantioseparations in	64
		DNA isolation	207
		from food matrices	207

Dosy-like methods	297	ultratrace determination of	129
Droplet method	177	validation procedure of	131
apparatus used in	177	Full evaporation headspace technique	79
for determination of nitrogen dioxide in atmosphere	177	Gas chromatography	135
reagent used in	177	advances in	135
Dual-opposite injection capillary electrophoresis	149	advances in silica capillaries of	140
applications of	154	column advances in	140
contactless conductivity detection in	154	detection in	138
control of separation selectivity in	151	hardware advances in	136
detection in	153	heating technology in	137
precision of sample introduction in	150	instrumentation for	135
principles of	149	stationary phases of	141
separation of anionic/cationic compounds by	149	using injection technology	136
UV detection in	153	using portable instruments	139
Enantioseparations	65	GC/MS	267
of amino acids	65	identification of degradation products by	267
of chiral compounds	65	to analyze azo-dyes	271
of chiral drugs	65	to analyze dyes	270
of other compounds	69	to identify acid blue 80	276
ESI-MS	49	to identify acid green 25	276
ionization of carbohydrates by	49	to identify acid orange 7	272
FAB-MS	32	to identify acid red 88	273
identifying <i>N</i> -glycosylation sites by	35	to identify analgesics	280
identifying <i>O</i> -glycosylation sites by	36	to identify anthraquinonic dyes	276
Fast magic-angle spinning (MAS)	3	to identify antiepileptic drug	276
creation of coherent spin states in	7	to identify anti-inflammatory drug	278
directed recoupling/inverse detection by	12	to identify anti-microbial drug	279
double-quantum coherences in	9	to identify anti-psychotic drug	279
probing molecular orientation of	14	to identify anti-pyretic drug	280
recoupling schemes in	8	to identify anxiolytic drug	280
resolution enhancement by	6	to identify benzimidazoles drug	281
rotor-modulated interactions of	8	to identify carbamates	281
scaling of couplings by	15	to identify chlorocetamides	281
signal selection/suppression using PFGs in	13	to identify congo red	273
Flow injection	321	to identify drugs	276
applications of	322	to identify hormones	280
Flow injection-capillary electrophoresis (FI-CE)	321	to identify indigoid dyes	273
advances in	321	to identify methyl-orange	273
applications of	321,322	to identify <i>N</i> -heterocycles	281
future trends in	326	to identify organophosphorics	282
in biological/food samples	324	to identify pesticides	280
in environmental analysis	325	to identify procion red MX-5B	273
in medicinal/pharmaceuticals	326	to identify Remazol Brilliant Blue R	276
principles of	321	to identify strobilurins	282
Flow injection/sequential injection analysis	329	to identify thiazines	274
Fluoride/cyanide sensing	162	to identify triazines	282
using BMQBA probes	163	to identify triphenylmethane	276
Fluoride sensing	163	Gel-separated proteins	51
using BMOQBA probes	164	glycosylation analysis of	51
Formaldehyde	129	Genetically modified organisms	203
GC-ITMS/MS analysis of	129	analytical tools of	206
in frozen fish	129	applications for risk analysis	206
innovative method for	129	biotechnological trends for	217
SPME extraction of	129	characterization of	205
		Crop's transformation process of	205
		detection of	203
		diagnosis of	215
		DNA-based methodologies for	207
		identification of	203

methodology for	203	to identify benzimidazoles	281
other DNA techniques for	211	to identify carbamates	281
PCR technique for	208	to identify chlorocetamides	281
protein-based methodologies for	207	to identify congo red	273
quantification analysis using RTi-PCR	210	to identify drugs	276
quantification of	203	to identify hormones	280
real-time PCR for	209	to identify indigoid dyes	273
role of ELISA/-lateral flow strips	207	to identify methyl-orange	273
role of fluorescent detection probes	209	to identify <i>N</i> -heterocycles	281
safety assessment of	205	to identify organophosphorics	282
Glycan mixtures	43	to identify pesticides	280
analysis of	43	to identify procion red MX-5B	273
fragmentation of	46	to identify Remazol Brilliant Blue R	276
role MALD-MS	43	to identify strobilurins	282
role of FAB-MS	43	to identify thiazines	274
role of matrixes	43	to identify triazines	282
use of alkaline degradation for analysis of	46	to identify triphenylmethane	276
use of exoglycosidases for analysis of	45	ICP OES technique	171
Glycoproteins	29	elemental analysis procedure based on	171
analysis of	33	for titanium phenylphosphonate/titanium phenyl-	
characterization of glycosylation sites of diseases	37	larsonate	171
coupled methods for	37	to determine arsenic/phosphorus/titanium	171
fourier transform ion cyclotron resonance mass		Indirect mode enantioseparations	59
spectrometry of	40	Iterative reversal flow extraction	332
glycan structures of	29	LC-MS-MS	121
identification using tandem MS	38	for cellular kinetics studies	121
mass spectrometric analysis of	29	Liquid chromatography-quadrupole ion trap-mass spect-	
release of glycans from	41	rometry (LC-QIT-MS)	241
release of <i>N</i> -glycans from	41	application of	241
release of <i>O</i> -glycans from	42	endocrine disrupters in	254
role of electrospray ionization mass spectrometry (ESI		in pharmaceuticals	250
MS)	32	to determine organic contaminants in environment/	
role of ESI-MS	34	food	241
role of MALDI-MS	33	to study algae/fish toxins	262
use of exoglycosidases for	35	to study degradation products	259
Glycosaminoglycan disaccharides	237	to study heterocyclic amines	261
on-line chromatography mass spectrometry methods		to study mycotoxins	259
to study	237	to study pesticides	255
quantification analysis of	237	to study surfactants	259
Tandem mass spectrometry methods to study	237	to study transformation products (TPs)	255
Headspace gas chromatography	79	Liquid-state NMR concepts	4
developments in	79	averaging techniques in	5
for solubility determination	81	isotropic/anisotropic interactions of	5
HPLC/MS	267	Liquid-state/solid-state NMR spectroscopy	3
identification of degradation products by	267	in investigation of supra-/biomolecular systems	3
to analyze azo-dyes	271	Mass spectrometry	223
to analyze dyes	270	determination of molecular weight	225
to identify acid blue 80	276	to analyse highly charged sulfated carbohydrates	223
to identify acid green 25	276	Matrix-assisted laser desorption/ionization time-of-flight	
to identify acid orange 7	272	mass spectrometry (MALDI-TOF MS)	32
to identify acid red 88	273	identifying <i>N</i> -glycosylation sites by	35
to identify analgesics	280	identifying <i>O</i> -glycosylation sites by	36
to identify anthraquinonic dyes	276	role of MALDI mass spectrometry	32
to identify antiepileptic drug	276	Measurement of sediment (MESED)	121
to identify anti-inflammatory drug	278	for cellular kinetics studies	121
to identify anti-microbial drug	279		
to identify anti-psychotic drug	279		
to identify anti-pyretic drug	280		
to identify anxiolytic	280		

Membrane-assisted liquid-liquid extraction	330	sequence repositories of	361
Microfluidic devices	345	special purpose sequence databases of	362
characteristics of fluid-particle motion in	347	special purpose structure database of	365
particle separation in	345	structure databases of	355,362
Microfluidics	345	structure of	357
particle separation in	345	Protein data bank	362
Multiple headspace extraction	82	Protein-water exchange (waterLOGSY)	316
for process kinetics study	82	Regularized resolvent transform	298
Nano-apatite	190	Saturation-transfer difference (STD) NMR spectroscopy 307	
high rate cellular uptake of DNA carried by	190	for fast exchange approximation	311
Nano-precipitate	190	in designing competition binding assays	317
notable level of transgene expression mediated by ...	190	in molecular diffusion based screening	315
Nuclear material safeguards	183	in non-specific binding	316
applications to	183	in relaxation for screening mechanism	314
<i>O</i> -Benzyl-(S)-serine	85	ligand based approaches of	314
as chiral selector for ligand-exchange chromatography		ligand screening by	307
of amino acids	85	practical aspects of	313
<i>O</i> -GalNAc glycosylation	39	protein based approaches of	314
determination of sites of	39	screening library of small molecules for	316
On-line solvent extraction	329	theory of	308
advances in	329	to intramolecular/intermolecular magnetization	
fundamental principles of	334	transfer	315
FI solvent extraction versus SI-wetting film		to study equilibrium kinetics of binding	308
extr-salient variants for	330	to transfer of magnetization between sites	309
On-tube detection	332	Single-phase extraction	333
Open tubular capillary electrochromatography	103	SI-wetting film extraction	336
Organic contaminants	241	analytical performance of	336
analyte extraction of	243	Solid-state NMR techniques	15
interfacing systems for	247	creation of coherent spin states in	18
isolation of	243	into high-resolution MAS NMR	15
LC-QIT-MS for	250	quest for spectral resolution of	17
matrix effect using QIT to study	250	rotational resonance in	22
quadrupole ion-TRAP (QIT) description to study	242	rotor encoding/sideband patterns in	22
using liquid chromatographic conditions	245	SPLITT fractionation	345
PFG-NMR sequences	298	particle separation in	345
for diffusion measurement	298	theoretical considerations of	347
Phase reaction conversion headspace technique	80	STI-571	121
Porphyrin	103	in cells with pgp-170 expression	121
analytical applications of	103	Sulfated polysaccharides	223
applications of	106	analysis of	223
based affinity interactions	103	ESI-MS to study	229
chemistry of	104	FAB-MS to study	225
immobilization procedures of	105	MALDI-MS combined with enzymatic digestion for	234
role in amino acids	106	MALDI-MS to study	226
role in carboxylic acids	106	mass spectrometry for	223
role in nucleotides	113	MS determination of	234
role in peptides	110	online chromatography mass spectrometry to study ..	230
Protein	355	other MS techniques to study	233
as amino acid sequences	355	Tandem MS to study	235
features of databases of	359	Transferred NOE	315
sequence databases of	360	Ultrasonic cell washing system	350
sequence of	355		

Ultrasonic probe	196	for analytical chemistry	193
applications of	197	on line applications of	198
current tendencies of	198	performance of	194
electrochemical applications by	198	shortening sequential extraction schemes by	195
extraction of organic species by	197	total solid-liquid elemental extraction by	195
in design of reaction vessel	197	VS other techniques	198
laboratory sonochemical facilities systems of	197	Ultrasounds	193
performance of	196	in analytical laboratory	193
sample throughput of	196	sample throughput in	195
shortening sequential extraction schemes by	197	Wetting-film extraction	337
total solid-liquid elemental extraction by	197	analytical applications of	337
Ultrasonication	193		
applications of	195		
current tendencies of	196		
extraction of organic species by	195		