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1 BOOKS, REVIEWS & SYMPOSIA

Inductively coupled plasma mass spectrometry (Review)
Beauchemin D// Queens Univ, Dept Chem, Kingston, Ontario, Canada K7L 3N6

Anal Chem 2004 **76** (12) 3395

Protein-nucleic acid interactions and the expanding role of mass spectrometry (Review)

Hanson CL, Robinson CV// *Univ Cambridge, Dept Chem, Lensfield Rd, Cambridge CB2 1EW, England

J Biol Chem 2004 **279** (24) 24907

Determination of aminoglycosides and quinolones in food using tandem mass spectrometry: A review

Kotretsou SI// Inst Educat Technol, Food & Technol Dept, Iokastis 49, GR-10444 Athens, Greece

Crit Rev Food Sci Nutr 2004 **44** (3) 173

Electron-capture mass spectrometry: A powerful tool in biomedical trace level analysis

Leis HJ, Fauler G, Rechberger GN, Windischhofer W// Dept Analyt Biochemistry & Mass Spectrometry, Auenbruggerpl 30, AT-8036 Graz, Austria

Curr Med Chem 2004 **11** (12) 1585

Structural change in response to ligand binding (Review)

McCammon MG, Robinson CV// *Univ Cambridge, Chem Lab, Lensfield Rd, Cambridge CB2 1EW, England

Curr Opin Chem Biol 2004 **8** (1) 60

Mass spectrometry of synthetic polymers (Review)

Peacock PM, McEwen CN// *DuPont Co Inc, Corp Ctr Analyt Sci, Expt Stn, Wilmington, De 19880, USA

Anal Chem 2004 **76** (12) 3417

Environmental mass spectrometry: Emerging contaminants and current issues (Review)

Richardson SD// US EPA, National Exposure Research Lab, Athens, Ga 30605, USA

Anal Chem 2004 **76** (12) 3337

Surface-enhanced laser desorption/ionization time-of-flight mass spectrometry (SELDI TOF-MS) and ProteinChip® technology in proteomics research (Review)

Seibert V, Wiesner A, Buschmann T, Meuer J// EUROPROTEOME AG, Neuendorfstr 24b, DE-16761 Hennigsdorf, Germany

Pathol Res Pract 2004 **200** (2) 83

Use of AMS in the marine environment (Review)

Skipperud L, Oughton DH// Agr Univ Norway, Dept Soil & Water Sci, Isotope Lab, POB 5028, NO-1432 As, Norway

Environ Int 2004 **30** (6) 815

2 INSTRUMENTAL TECHNIQUES & METHODS

Influence of droplet size, capillary-cone distance and selected instrumental parameters for the analysis of noncovalent protein-ligand complexes by nano-electrospray ionization mass spectrometry

Benkestock K, Sundqvist G, Edlund PO, Roeraade J// Biovitrum AB, Dept Struct Chem, Biovitrum AB, SE-11276 Stockholm, Sweden

J Mass Spectrom 2004 **39** (9) 1059

Desorption/ionization mass spectrometry on nanocrystalline titania sol-gel-deposited films

Chen CT, Chen YC// *Nat Chiao Tung Univ, Dept Appl Chem, Hsinchu 300, Taiwan

Rapid Commun Mass Spectrom 2004 **18** (17) 1956

Electronic gel protein transfer and identification using matrix-assisted laser desorption/ionization-mass spectrometry

Cooper JW, Gao J, Lee CS// *Univ Maryland, Dept Chem & Biochem, College Park, Md 20742, USA

Electrophoresis 2004 **25** (9) 1379

TANDEM: Matching proteins with tandem mass spectra

Craig R, Beavis RC// *Univ Manitoba, Manitoba Ctr Proteom, Winnipeg, Manitoba, Canada R3T 2N2

Bioinformatics 2004 **20** (9) 1466

Liquid chromatographic-mass spectrometric separation of oligoalanine peptide stereoisomers: Influence of absolute configuration on enantioselectivity and two-dimensional separation of diastereomers and enantiomers

Czerwenka C, Maier NM, Lindner W// *Univ Vienna, Inst Analyt Chem, Wahringerstr 38, AT-1090 Vienna, Austria

J Chromatogr A 2004 **1038** (1-2) 85

On-line atmospheric pressure matrix-assisted laser desorption/ionization mass spectrometry

Daniel JM, Ehala S, Friess SD, Zenobi R// *ETH, Dept Chem & Appl Biosci, CH-8093 Zurich, Switzerland

Analyst 2004 **129** (7) 574

On-line coupling of high-performance liquid chromatography to a continuous-flow enzyme assay based on electrospray ionization mass spectrometry

De Boer AR, Letzel T, Van Elswijk DA, Lingeman H, Niessen WMA, Irth H// Free Univ Amsterdam, Fac Sci, Sect Analyt Chem & Appl Spect, Dept Chem & Pharmaceut Sci, NL-1081 HV Amsterdam, The Netherlands

Anal Chem 2004 **76** (11) 3155

Determination of glycopeptide structures by multistage mass spectrometry with low-energy collision-induced dissociation: Comparison of electrospray ionization quadrupole ion trap and matrix-assisted laser desorption/ionization quadrupole ion trap reflection time-of-flight approaches

Demelbauer UM, Zehl M, Plemat A, Allmaier G, Rizzi A// *Univ Vienna, Inst Analyt Chem, Wahringer Str 38, AT-1090 Vienna, Austria

Rapid Commun Mass Spectrom 2004 **18** (14) 1575

Aptamer-enhanced laser desorption/ionization for affinity mass spectrometry

In order to keep subscribers up-to-date with the latest developments in their field, John Wiley & Sons are providing a current awareness service in each issue of the journal. The bibliography contains newly published material in the field of mass spectrometry. Each bibliography is divided into 11 sections: 1 Books, Reviews & Symposia; 2 Instrumental Techniques & Methods; 3 Gas Phase Ion Chemistry; 4 Biology/Biochemistry: Amino Acids, Peptides & Proteins; Carbohydrates; Lipids; Nucleic Acids; 5 Pharmacology/Toxicology; 6 Natural Products; 7 Analysis of Organic Compounds; 8 Analysis of Inorganics/Organometallics; 9 Surface Analysis; 10 Environmental Analysis; 11 Elemental Analysis. Within each section, articles are listed in alphabetical order with respect to author.

Dick LW, McGown LB*// *Duke Univ, Dept Chem, Box 90346, Durham, NC 27708, USA

Anal Chem 2004 **76** (11) 3037

Controlling matrix suppression for matrix-assisted laser desorption/ionization analysis of small molecules

Donegan M, Tomlinson AJ, Nair H, Juhasz P// Applied Biosystems, 500 Old Connecticut Path, Framingham, Ma 01701, USA

Rapid Commun Mass Spectrom 2004 **18** (17) 1885

Quantitative analysis of tryptic protein mixtures using electrospray ionization Fourier transform ion cyclotron resonance mass spectrometry

Hagman C, Ramstrom M, Hakansson P, Bergquist J*// *Univ Uppsala, Inst Chem, Dept Analyt Chem, Box 599, SE-75124 Uppsala, Sweden

J Proteome Res 2004 **3** (3) 587

MS1, MS2 and SQT - Three unified, compact, and easily parsed file formats for the storage of shotgun proteomic spectra and identifications

Hayes McDonald W, Tabb DL, Sadygov RG, MacCoss MJ, Venable J, Graumann J, Johnson JR, Cociorva D, Yates JR*// *Scripps Res Inst, Dept Cell Biol, 10550 Nth Torrey Pines Rd, La Jolla, Ca, USA

Rapid Commun Mass Spectrom 2004 **18** (18) 2162

Size-selective extraction of peptides from urine for mass spectrometric analysis

Hortin GL, Meilinger B, Drake SK// NIH, Dept Lab Med, Warren G Magnuson Clin Ctr, Bldg 10, Bethesda, Md 20892, USA

Clin Chem 2004 **50** (6) 1092

Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry as a tool for fast identification of protein binders in color layers of paintings

Hynek R, Kuckova S, Hradilova J, Kodicek M// Inst Chem Technol, Dept Biochem & Microbiol, Technicka 5, CZ-16628 Prague 6, Czech Republic

Rapid Commun Mass Spectrom 2004 **18** (17) 1896

Efficacy and compatibility with mass spectrometry of methods for elution of proteins from sodium dodecyl sulfate-polyacrylamide gels and polyvinylidene difluoride membranes

Jorgensen CS, Jagd M, Sorensen BK, McGuire J, Barkholt V, Hojrup P, Houen G*// *Statens Serum Inst, Dept Res & Dev, DK-2300 Copenhagen, Denmark

Anal Biochem 2004 **330** (1) 87

Photoionization pathways and free electrons in UV-MALDI

Knochenmuss R// Novartis Inst Biomed Res, WSJ 503.11.04, CH-4002 Basel, Switzerland

Anal Chem 2004 **76** (11) 3179

Silylation of acrylamide for analysis by solid-phase microextraction/gas chromatography/ion-trap mass spectrometry

Lagalante AF, Felter MA// Villanova Univ, Dept Chem, 800 Lancaster Ave, Villanova, Pa 19085, USA

J Agric Food Chem 2004 **52** (12) 3744

Highly informative proteome analysis by combining improved N-terminal sulfonation for *de novo* peptide sequencing and online capillary reverse-phase liquid chromatography/tandem mass spectrometry

Lee YH, Kim MS, Choie WS, Min HK, Lee SW*// *Korea Univ, Dept Chem, 1,5-Ka, Anam dong, Seoul 136 701, South Korea

Proteomics 2004 **4** (6) 1684

RScore: A peptide randomness score for evaluating tandem mass spectra

Li F, Sun W, Gao Y, Wang J// Chinese Acad Sci, Inst Automation, Lab Complex Systems & Intelligence Sci, CN-100080 Beijing, People's Rep China

Rapid Commun Mass Spectrom 2004 **18** (14) 1655

Flow-rate characterization of microfabricated polymer microspray emitters

Lion N, Gellon JO, Girault HH*// *Ecole Polytech Fed Lausanne, Lab Electrochim Phys & Analyt, CH-1015 Lausanne, Switzerland

Rapid Commun Mass Spectrom 2004 **18** (14) 1614

Comparison of laser-induced dissociation and high-energy collision-induced dissociation using matrix-assisted laser desorption/ionization tandem time-of-flight (MALDI-TOF/TOF) for peptide and protein identification

Macht M, Asperger A, Deininger SO// Bruker Daltonik GmbH, Permoser Str 15, DE-04159 Leipzig, Germany

Rapid Commun Mass Spectrom 2004 **18** (18) 2093

Comparison of two glutaraldehyde immobilization techniques for solid-phase tryptic peptide mapping of human hemoglobin by capillary zone electrophoresis and mass spectrometry

Migneault I, Dartiguenave C, Vinh J, Bertrand MJ, Waldron KC*// *Univ Montreal, Dept Chem, CP 6128, Succ Centre-Ville, Montreal, Quebec, Canada H3C 3J7

Electrophoresis 2004 **25** (9) 1367

5-Amino-2-mercapto-1,3,4-thiadiazole: A new matrix for the efficient matrix-assisted laser desorption/ionization of neutral carbohydrates (Letter)

Mirza SP, Raju P, Madhavendra SS, Vairamani M*// *Indian Inst Chem Technol, Natl Ctr Mass Spectrom, IN-500007 Hyderabad, India

Rapid Commun Mass Spectrom 2004 **18** (14) 1666

Thin-layer chromatography combined with diode laser desorption/atmospheric pressure chemical ionization mass spectrometry

Peng S, Ahlmann N, Kunze K, Nigge W, Edler M, Hoffman T, Franzke J*// *ISAS - Inst Analyt Sci, Bunsen-Kirchhoff-Str 11, DE-44139 Dortmund, Germany

Rapid Commun Mass Spectrom 2004 **18** (16) 1803

Continuous-flow sample introduction for field desorption/ionization mass spectrometry

Schaub TM, Linden HB, Hendrickson CL, Marshall AG*// *Ion Cyclotron Resonance Prog, Natl High Magnetic Field Lab, 1800 East Paul Dr, Tallahassee, FL 32310, USA

Rapid Commun Mass Spectrom 2004 **18** (14) 1641

A critical evaluation of high performance liquid chromatography-electrospray ionization-mass spectrometry and capillary electrophoresis-electrospray-mass spectrometry for the detection and determination of small molecules of significance in clinical and forensic science

Smyth WF, Brooks P// Univ Ulster, Sch Biomed Sci, Coleraine BT52 1SA, Northern Ireland

Electrophoresis 2004 **25** (10-11) 1413

Time-of-flight secondary ion mass spectrometry (TOF-SIMS): Versatility in chemical and imaging surface analysis

Sodhi RNS// Univ Toronto, Dept Chem Eng & Appl Chem, Surface Interface Ontario, 200 Coll St, Toronto, Ontario, Canada M5S 3E5

Analyst 2004 **129** (6) 483

The reproducible acquisition of comparative liquid chromatography/tandem mass spectrometry data from complex biological samples

Stewart II, Zhao L, Le Bihan T, Larsen B, Scozzaro S, Figeys D, Mao GD, Ornatsky O, Dharsee M, Orsi C, Ewing R, Goh R// MDS-Proteomics Inc, 251 Attwell Dr, Toronto, Ontario, Canada M9W 7H4

Rapid Commun Mass Spectrom 2004 **18** (15) 1697

Novel linear quadrupole ion trap/FT mass spectrometer: Performance characterization and use in the comparative analysis of histone H3 post-translational modifications

Syka JEP, Marto JA, Bai DL, Horning S, Senko MW, Schwartz JC, Ueberheide B, Garcia B, Busby S, Muratore T, Shabanowitz J, Hunt DF*// *Univ Virginia, Engn Phys Program, Charlottesville, Va 22901, USA

J Proteome Res 2004 **3** (3) 621

Selective dissociation of non-covalent bonds in biological molecules by laser spray

Takamizawa A, Itoh Y, Osawa R, Iwasaki N, Nishimura Y, Akashi S*, Hiraoka K// *Yokohama City Univ, Grad Sch Integrated Sci, 1-7-29 Suehiro cho, Tsurumi ku, Yokohama 230 0045, Japan

J Mass Spectrom 2004 **39** (9) 1053

Electron capture dissociation Fourier transform ion cyclotron resonance mass spectrometry in the electron energy range 0-50eV

Tsybin YO, Witt M, Baykut G, Hakansson P*// *Angstrom Lab, Div Ion Phys, Box 534, SE-75121 Uppsala, Sweden

Rapid Commun Mass Spectrom 2004 **18** (14) 1607

Effect of sodium dodecyl sulfate micelles on peptide mass fingerprinting by matrix-assisted laser desorption/ionization mass spectrometry

Tummala R, Limbach PA*// *Univ Cincinnati, Dept Chem, Rieveschl Lab Mass Spectrom, POB 210172, Cincinnati, Oh 45221, USA

Rapid Commun Mass Spectrom 2004 **18** (18) 2031

High-pressure ion trap mass spectrometry

Whitten WB, Reilly PTA, Ramsey JM// Oak Ridge Nat Lab, PO Box 2008, MS 6142, Oak Ridge, Tn 37831, USA

Rapid Commun Mass Spectrom 2004 **18** (15) 1749

Use of polymer-modified MALDI-MS probes to improve analyses of protein digests and DNA

Xu YD, Bruening ML, Watson JT*// *Michigan State Univ, Dept Chem, East Lansing, Mi 48824, USA

Anal Chem 2004 **76** (11) 3106

Mass spectrometry as an emerging tool for systems biology

Yates JR// Scripps Res Inst, Dept Cell Biol, La Jolla, Ca, USA

Biotechniques 2004 **36** (6) 917

Quantitative measurement of fathead minnow vitellogenin by liquid chromatography combined with tandem mass spectrometry using a signature peptide of vitellogenin

Zhang FG, Bartels MJ, Brodeur JC, Woodburn KB// Dow Chem Co USA, Toxicol & Environ Res & Consulting, 1803 Bldg, Midland, Mi 48674, USA

Environ Toxicol Chem 2004 **23** (6) 1408

3 GAS PHASE ION CHEMISTRY

Obtaining thermochemical data by the extended kinetic method

Bouchoux G, Sablier M, Berruyer-Penaud F// Ecole Polytech, Lab Mecanismes Reactionnels, UMR CNRS 7651, FR-91128 Palaiseau, France
J Mass Spectrom 2004 **39** (9) 986

Formation of molecular radical cations of aliphatic tripeptides from their complexes with Cu^{II}(12-crown-4)
Chu IK, Siu SO, Lam CNW, Chan JCY, Rodriguez CF// Univ Hong Kong, Dept Chem, Hong Kong, Peoples Rep China
Rapid Commun Mass Spectrom 2004 **18** (16) 1798

Modeling of the gas-phase ion chemistry of protonated arginine
Csonka IP, Paizs B*, Suhai S// *Deutsches Krebsforschungszentrum, Dept Mol Biophys, Im Neuenheimer Feld 280, DE069120 Heidelberg, Germany
J Mass Spectrom 2004 **39** (9) 1025

Accuracy of enthalpy and entropy determination using the kinetic method: Are we approaching a consensus?
Drahoš L, Peltz C, Vekey K*// *Hungarian Acad Sci, Inst Structural Chem, Mass Spectrometry Dept, Pusztaszeri út 59-67, HU-1025 Budapest, Hungary
J Mass Spectrom 2004 **39** (9) 1016

Systematic and random errors in ion affinities and activation entropies from the extended kinetic method
Ervin KM, Armentrout PB// Univ Nevada, Dept Chem & Chem Phys Prog, Reno, NV 89557, USA
J Mass Spectrom 2004 **39** (9) 1004

Formation of iminium ions by fragmentation of a₂ ions
Harrison AG, Young AB, Schnoelzer M, Paizs B// Univ Toronto, Dept Chem, 80 St George St, Toronto, Ontario, Canada M5S 3H6
Rapid Commun Mass Spectrom 2004 **18** (14) 1635

Stereochemical preference in the loss of cyclohexene from ionized cyclohexyl phenyl ether (Letter)
Molenaar-Langeveld TA, Van der Burg LM, Peeters JWH, De Koster CG, Ingemann S*// *Univ Amsterdam, Fac Sci, Swammerdam Inst Life Sci, Nieuwe Achtergracht 166, NL-1018 WV Amsterdam, The Netherlands
J Mass Spectrom 2004 **39** (9) 1075

Chiral recognition in solution and the gas phase. Experimental and theoretical studies of aromatic D- and L-amino acid-Cu(II)-chiragen complexes
Seymour JL, Turecek F*, Malkov AV, Kocovsky P// *Univ Washington, Dept Chem, PO Box 351700, Seattle, WA 981195, USA
J Mass Spectrom 2004 **39** (9) 1044

Entropy considerations in kinetic method experiments
Wesdemiotis C// Univ Akron, Dept Chem, Akron, OH 44325, USA
J Mass Spectrom 2004 **39** (9) 998

4 BIOLOGY/BIOCHEMISTRY:

Amino acids, peptides & proteins

Analysis of substance P in rat brain by means of immunoaffinity capture and matrix-assisted laser desorption/ionization time-of-flight mass spectrometry
Babu CVS, Lee J, Lho DS, Yoo YS*// *Korea Inst Sci & Technol, Bioanal & Biotransformat Res Ctr, POB 131, Seoul 130 650, South Korea
J Chromatogr B 2004 **807** (2) 307

Absolute quantification of the model biomarker prostate-specific antigen in serum by LC-MS/MS using protein cleavage and isotope dilution mass spectrometry
Barnidge DR, Goodmanson MK, Klee GG, Muddiman DC*// *Mayo Clin, Coll Med, WM Keck FT-ICR Mass Spectrometry Lab, Mayo Proteomics Res Ctr, 200 1st St SW, Rochester, MN 55905, USA
J Proteome Res 2004 **3** (3) 644

Evaluation of a cleavable stable isotope labeled synthetic peptide for absolute protein quantification using LC-MS/MS
Barnidge DR, Hall GD, Stocker JL, Muddiman DC*// *Address as above
J Proteome Res 2004 **3** (3) 658

Global analysis of the membrane subproteome of *Pseudomonas aeruginosa* using liquid chromatography-tandem mass spectrometry
Blonder J, Goshe MB, Xiao WZ, Camp DG, Wingerd M, Davis RW, Smith RD*// *Pacific NW Natl Lab, Environm Mol Sci Lab, POB 999, MSIN K8-98, Richland, WA 99352, USA
J Proteome Res 2004 **3** (3) 434

Co-populated conformational ensembles of β_2 -microglobulin uncovered quantitatively by electrospray ionization mass spectrometry
Borysik AJH, Radford SE, Ashcroft AE*// *Univ Leeds, Sch Biochem & Microbiol, Astbury Ctr Struct Mol Biol, Leeds LS2 9JT, England
J Biol Chem 2004 **279** (26) 27069

Mapping of bovine skeletal muscle proteins using two-dimensional gel electrophoresis and mass spectrometry
Bouley J, Chambon C, Picard B*// *INRA, Lab Croissance & Metab Muscle, Unite Rech Herbivores, FR-63122 St Genes Champanelle, France

Proteomics 2004 **4** (6) 1811

Screening of sugar converting enzymes using quantitative MALDI-ToF mass spectrometry
Bungert D, Bastian S, Heckmann-Pohl DM, Giffhorn F, Heinze E, Tholey A*// *Univ Saarland, DE-66123 Saarbrücken, Germany
Biotechnol Lett 2004 **26** (13) 1025

Analysis of the sinusitis nasal lavage fluid proteome using capillary liquid chromatography interfaced to electrospray ionization-quadrupole time of flight-tandem mass spectrometry
Casado B, Pannell LK, Viglio S, Iadarola P, Baraniuk JN// Georgetown Univ, Div Rheumatol Allergy & Immunol, Washington, DC 20007, USA
Electrophoresis 2004 **25** (9) 1386

Characterization of the *Salmonella typhimurium* proteome by semi-automated two dimensional HPLC-mass spectrometry: Detection of proteins implicated in multiple antibiotic resistance
Coldham NG, Woodward MJ// Vet Labs Agency, Dept Food & Environ Safety, Addlestone KT15 3NB, England
J Proteome Res 2004 **3** (3) 595

Unimod: Protein modifications for mass spectrometry
Creasy DM, Cottrell JS*// *Matrix Science Ltd, 8 Wyndham Pl, London W1H 1PP, England
Proteomics 2004 **4** (6) 1534

Mass spectrometric identification of RNA binding proteins from dried EMSA gels
Dominique SR, Gruissem W, Baginsky S*// *Swiss Fed Inst Technol, ETH Zentrum, Inst Plant Sci, LFW E18, Universitätsstr 2, CH-8092 Zurich, Switzerland
J Proteome Res 2004 **3** (3) 662

Identification and characterization of a new β -casein variant in goat milk by high-performance liquid chromatography with electrospray ionization mass spectrometry and matrix-assisted laser desorption/ionization mass spectrometry
Galliano F, Saletti R, Cunsolo V, Foti S*, Marletta D, Bordonaro S, D'Urso G// *Univ Catania, Dipt Sci Chim, Viale A Doria 6, IT-95125 Catania, Italy
Rapid Commun Mass Spectrom 2004 **18** (17) 1972

Expanded coverage of the human heart mitochondrial proteome using multidimensional liquid chromatography coupled with tandem mass spectrometry
Gaucher SP, Taylor SW, Fahy E, Zhang B, Warnock DE, Ghosh SS, Gibson BW*// *8001 Redwood Blvd, Novato, CA 94945, USA
J Proteome Res 2004 **3** (3) 495

A rapid method for analyzing recombinant protein inclusion bodies by mass spectrometry
Grimm R, Huber R, Neumeier T, Seidl A, Haslbeck M, Seibert FS*// *Hexal Biotech Forschungs GmbH, Keltnering 1&3, DE-82041 Oberhaching, Germany
Anal Biochem 2004 **330** (1) 140

LC-MS/MS identification and yeast polymerase η bypass of a novel γ -irradiation-induced intrastrand cross-linked lesion G[8-5]C
Gu CN, Wang YS*// *Univ Calif Riverside, Dept Chem, Riverside, CA 92521, USA
Biochemistry 2004 **43** (21) 6745

Low-molecular-weight human serum proteome using ultrafiltration, isoelectric focusing, and mass spectrometry
Harper RG, Workman SR, Schuetzner S, Timperman AT, Sutton JN*// *West Virginia Univ, Dept Chem, Protea Biosci Inc, Clark Hall, Morgantown, WV 26506, USA
Electrophoresis 2004 **25** (9) 1299

Absolute quantification of proteins in solutions and in polyacrylamide gels by mass spectrometry
Havlis J, Shevchenko A*// *Max Planck Inst Mol Cell Biol & Genet, Pfotenhauerstr 108, DE-01307 Dresden, Germany
Anal Chem 2004 **76** (11) 3029

Investigation of non-covalent interactions between paramagnetic complexes and human serum albumin by electrospray mass spectrometry
Henrotte V, Laurent S, Gabelica V, Vander Elst L, Depauw E, Muller RN*// *Univ Mons-Hainaut, Dept Organic Chem, NMR Lab, 24 Ave du Champ de Mars, BE-7000 Mons, Belgium
Rapid Commun Mass Spectrom 2004 **18** (17) 1919

Identification of phosphorylation sites in protein kinase A substrates using artificial neural networks and mass spectrometry
Hjerriid M, Stensballe A, Rasmussen TE, Kofoed CB, Blom N, Sicheritz-Ponten T, Larsen MR, Brunak S, Jensen ON, Gammeltoft S// Glostrup Hosp, Dept Clin Biochem, Nordre Ringvej 57, DK-2600 Glostrup, Denmark
J Proteome Res 2004 **3** (3) 426

Development of an isotope dilution mass spectrometry assay for HbA_{1c} based on enzyme-cleaved peptide analysis

- Iguchi K, Nakanishi T, Miyazaki A, Shimizu A*, Ota A// *Osaka Med Coll, Clin Lab, 2-7 Daigakumachi, Takatsuki, Osaka 569 8686, Japan
J Chromatogr B 2004 **806** (1) 25
- Proteome analysis in the bovine adrenal medulla using liquid chromatography with tandem mass spectrometry
Jalili PR, Dass C*// *Univ Memphis, Dept Chem, Campus Box 526060, Memphis, TN 38152, USA
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- Phosphoproteome analysis of mouse liver using immobilized metal affinity purification and linear trap mass spectrometry
Jin WH, Dai J, Zhou H, Xia QC, Zou HF, Zeng R*// *Chinese Acad Sci, Shanghai Inst Biol Sci, Inst Biochem & Cell Biol, Res Ctr Proteome Anal, 230 YueYang Rd, CN-200031 Shanghai, China
Rapid Commun Mass Spectrom 2004 **18** (18) 2169
- Proteome analysis of DNA damage-induced neuronal death using high throughput mass spectrometry
Johnson MD, Yu LR, Conrads TP, Kinoshita Y, Uo T, Matthews JD, Lee SW, Smith RD, Veenstra TD, Morrison RS*// *Univ Washington Sch Med, Dept Neurol Surg, Box 356470, 1959 NE Pacific St, Seattle, WA 98195, USA
J Biol Chem 2004 **279** (25) 26685
- Metabolic regulation analysis of *icd*-gene knockout *Escherichia coli* based on 2D electrophoresis with MALDI-TOF mass spectrometry and enzyme activity measurements
Kabir MM, Shimizu K*// *Kyushu Inst Technol, Dept Biochem Eng & Sci, Fukuoka 820 8502, Japan
Appl Microbiol Biotechnol 2004 **65** (1) 84
- Proteomic analysis of *Acinetobacter lwoffii* K24 by 2-D gel electrophoresis and electrospray ionization quadrupole-time of flight mass spectrometry
Kim EA, Kim JY, Kim SJ, Park KR, Chung HJ, Leem SH, Kim SI*// *Korea Basic Sci Inst, Proteome Anal Team, 52 Yeoeun dong, Taejeon 305 806, South Korea
J Microbiol Methods 2004 **57** (3) 337
- Correlations between air levels of hexahydrophthalic anhydride (HHPA) and HHPA-adducted albumin tryptic peptides in nasal lavage fluid from experimentally exposed volunteers
Kristiansson MH, Lindh CH, Jonsson BAG// Univ Hosp, Dept Occupat & Environm Med, SE-22185 Lund, Sweden
Rapid Commun Mass Spectrom 2004 **18** (14) 1592
- Formation of c_1 fragment ions in collision-induced dissociation of glutamine-containing peptide ions: A tip for *de novo* sequencing
Lee YJ, Lee YM*// *Univ Calif, Molec Structure Facil, One Shields Ave, Davis, CA 95616, USA
Rapid Commun Mass Spectrom 2004 **18** (18) 2069
- Identification of membrane proteins differentially expressed in human papillomavirus type 16 E5-transfected human keratinocytes by nanoelectrospray ionization mass spectrometry
Leykauf K, Salek M, Schluter H, Lehmann WD, Alonso A*// *Deutsch Krebsforschungszentrum, Im Neuenheimer Feld 242, DE-69120 Heidelberg, Germany
J Gen Virol 2004 **85** (6) 1427
- Human serum proteins pre-separated by electrophoresis or chromatography followed by tandem mass spectrometry
Marshall J, Jankowski A, Furesz S, Kireeva I, Barker L, Dombrovsky M, Zhu WM, Jacks K, Ingratta L, Bruin J, Kristensen E, Zhang R, Stanton E, Takashashi M, Jackowski G// Ryerson Univ, Fac Engn & Appl Sci, Dept Chem & Biol, Toronto, Ontario, Canada
J Proteome Res 2004 **3** (3) 364
- Substrate profiling of deubiquitin hydrolases with a positional scanning library and mass spectrometry
Mason DE, Ek J, Peters EC, Harris JL*// *Genomics Inst Novartis Res Fdn, 10675 John Jay Hopkins Dr, San Diego, CA 92121, USA
Biochemistry 2004 **43** (21) 6535
- Identification of variant forms of the neuroendocrine peptide galanin
Norberg A, Griffiths WJ*, Hjelmgvist L, Jorvall H, Rokaeus A// *Univ London, Sch Pharm, Dept Pharmaceut & Biol Chem, 29/39 Brunswick Sq, Bloomsbury, London WC1N 1AX, England
Rapid Commun Mass Spectrom 2004 **18** (14) 1583
- Method for differential detection and identification of components in protein mixtures analyzed by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry
Ossipova E, Nord LI, Kenne L, Eriksson J*// *Swedish Univ Agr Sci, Dept Chem, POB 7015, SE-75007 Uppsala, Sweden
Rapid Commun Mass Spectrom 2004 **18** (18) 2053
- Determination of *N*-acetyl-*S*-(*N*-methylcarbamoyl)cysteine (AMCC) in urine by high-performance liquid chromatography combined with mass spectrometry
Perico A, Baglioni S, Bavazzano P// Lab Sanita Pubbl Azienda Sanitaria Firenze, Via San Salvi 12, IT-50135 Florence, Italy
Rapid Commun Mass Spectrom 2004 **18** (16) 1865
- Peptidomics of CNS-associated neurohemal systems of adult *Drosophila melanogaster*: A mass spectrometric survey of peptides from individual flies
Predel R, Wegener C, Russell WK, Tichy SE, Russell DH, Nachman RJ// Saxon Acad Sci, Res Grp Jena, Erbertstr 1, DE-07743 Jena, Germany
J Comp Neurol 2004 **474** (3) 379
- Miniaturized proteomics and peptidomics using capillary liquid separation and high mass spectrometry
Ramstrom M, Bergquist J*// *Univ Uppsala, Dept Chem, Biomed Ctr, POB 599, SE-75124 Uppsala, Sweden
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- Rapid characterization of amyloid- β side-chain oxidation by tandem mass spectrometry and the scoring algorithm for spectral analysis
Schiewe AJ, Margol L, Soreghan BA, Thomas SN, Yang AJ*// *Univ Sthn Calif, Dept Pharmaceut Sci, Los Angeles, CA 90033, USA
Pharmaceut Res 2004 **21** (7) 1094
- Quantification of urinary 5-aminolevulinic acid by gas chromatography-mass spectrometry
Shinka T, Kuhara T// Kanazawa Med Univ, Med Res Inst, Div Human Genet, 1-1 Daigaku, Uchinada, Ishikawa 920 029, Japan
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5 PHARMACOLOGY/TOXICOLOGY

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Laville I, Pigaglio S, Blais JC, Loock B, Maillard P, Grierson DS, Blais J*// *Univ Paris 06, LPBC, UMR CNRS 7033, 4 Pl Jussieu, Case 138, FR-75252 Paris 05, France

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Leader IP, Halket J, Finch P// Royal Holloway, Egham TW20 0EX, England

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Lee J, La S, Ahn BR, Jeong TC, Kim DH*// *Korea Inst Sci & Technol, Bioanal & Biotransformat Res Ctr, PO Box 131, Chungryang, Seoul 130-650, South Korea

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Lee J, Son J, Chung SJ, Lee ES, Kim DH*// *Address as above

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Lewis RJ, Johnson RD, Angier MK, Ritter RM// FAA, Civil Aerosp Med Inst, Toxicol & Accident Res Lab, AAM-610, POB 25082, Oklahoma City, Ok 73125, USA

J Chromatogr B 2004 **806** (2) 141

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Liang HR, Foltz RL, Meng M, Bennett P// NWT Inc, Tandem Labs, 1121 East 3900 Sth, Salt Lake City, Ut 84124, USA

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Liu BM, Malik P, Wu HF*// *Tamkang Univ, Dept Chem, Tamsui 251, Taiwan

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Losito I, Monaci L, Palmisano F*, Tantillo G// *Univ Bari, Dipt Chim, Via E Orabona 4, IT-70126 Bari, Italy

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Min DH, Tang WJ, Mrksich M*// *Univ Chicago, Dept Chem, Inst Biophys Dynam, 5735 Sth Ellis Ave, Chicago, Il 60637, USA

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Na DH, Youn Y, Lee KC*// *SungKyunKwan Univ, Coll Pharm, Drug Target Lab, 300 Chonchon-dong, Jangun-ku, Suwon City 440 746, Korea

Rapid Commun Mass Spectrom 2004 **18** (18) 2185

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Oertel R, Renner U, Kirch W// Tech Univ Dresden, Med Fac Carl Gustav Carus, Inst Clin Pharmacol, Fiedlerstr 27, DE-01307 Dresden, Germany

J Pharm Biomed Anal 2004 **35** (3) 633

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Prasain JK, Jones K, Brissie N, Moore R, Wyss JM, Barnes S// Univ Alabama, Dept Pharmacol & Toxicol, Birmingham, Al 35294, USA

J Agric Food Chem 2004 **52** (12) 3708

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Raut BB, Kolte BL, Deo AA, Bagool MA, Shinde DB*// *Dr Babasaheb Ambedkar Marathwada Univ, Dept Chem Technol, IN-431004 Aurangabad, Maharashtra, India

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 Sheen JF, Her GR// *Nat Taiwan Univ, Dept Chem, Taipei, Taiwan
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J Chromatogr B 2004 **806** (2) 199

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 Thevis M, Opfermann G, Krug O, Schanzer W// German Sport Univ Cologne, Inst Biochem, Carl-Diem Weg 6, Cologne, Germany
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 Wang YN, Hochhaus G// *Univ Florida, Coll Pharm, Dept Pharmaceut, POB 100494, Gainesville, FL 32610, USA
J Chromatogr B 2004 **805** (2) 203

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 Wu WN, McKown LA, Gopaul VS// *Johnson & Johnson Prod LLC, Spring House, Pa 19477, USA
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 Zhang F, Bartels MJ// Dow Chem Co, Toxicol & Environ Res & Consulting, 1803 Bldg, Midland, MI 48674, USA
Rapid Commun Mass Spectrom 2004 **18** (16) 1809

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 Zhou GH, Luo GA, Sun GQ, Cao YC, Zhang XD, Zhang X// Huadong Res Inst Med & Biotech, 293 Zhongshan East Rd, CN-210002 Nanjing, Jiangsu, Peoples Rep China

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6 NATURAL PRODUCTS

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J Stored Prod Res 2004 **40** (4) 451

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J Food Compos Anal 2004 **17** (3-4) 385

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 Bonnell E, Young NM, Lis H, Sharon N, Thibault P// *Nat'l Res Council Canada, Inst Biol Sci, 100 Sussex Dr, Ottawa, Ontario, Canada K1A 0R6
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 Breithaupt DE// Univ Hohenheim, Inst Lebensmittelchem, Garbenstr 28, DE-70599 Stuttgart, Germany
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 Chen YM, Hagerman AE// *Miami Univ, Dept Chem & Biochem, Oxford, Oh 45056, USA
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 Conrath U, Amoroso G, Kohle H, Sultemeyer DF// Univ Bonn, Inst Cellular & Mol Bot, Plant Mol Biol Dept, 1 Kirschallee, DE-53115 Bonn, Germany
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 Darie CC, Binossek ML, Jovine L, Litscher ES, Wassarman PM// *CUNY Mt Sinai Sch Med, Brookdale Dept Mol Cell & Dev Biol, 1 Gustave L Levy Pl, New York, NY 10029, USA
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 Deng C, Zhang X// *Fudan Univ, Dept Chem, CN-200433 Shanghai, China
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 Deng CH, Zhang W, Zhang J, Zhang XM// *Address as above
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 Dickinson DN, La Duc MT, Satomi M, Winefordner JD, Powell DH, Venkateswaran K// Univ Florida, Dept Chem, POB 117200, Gainesville, FL 32611, USA
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Flamini R, Della Vedova A// Inst Sperimentale Viticoltura, Lab Chim, Viale XXVIII Aprile 26, IT-26-31015 Conegliano, TV, Italy
Rapid Commun Mass Spectrom 2004 **18** (17) 1925

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Focken U// Univ Hohenheim - 480B, Dept Aquacult Syst & Anim Nutr Trop Subtrop, DE-70593 Stuttgart, Germany
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Hantson AL, De Meyer M, Guerit N// Fac Polytech Mons, Appl Chem & Biochem Dept, 56 rue Epargne, BE-7000 Mons, Belgium
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Hiserodt RD, Adejiji J, John TV, Dewis ML// Int Flavors & Fragrances Inc, Res & Dev, 1515 State Highway 36, Union Beach, NJ 07735, USA
J Agric Food Chem 2004 **52** (11) 3536

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Inoue Y, Kuhara T// *Kanazawa Med Univ, Med Res Inst, Div Human Genet, 1-1 Daigaku, Uchinada, Ishikawa 920 029, Japan
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Jamin E, Martin F, Martin GG// Eurofins Sci Analyt, BP42301, rue Pierre Adolphe Bobierre, FR-44323 Nantes 3, France
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Laven A, Markides K*, Langstrom B// *Uppsala Univ, Inst Chem, Dept Analyt Chem, Box 599, SE-75124 Uppsala, Sweden
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Liu AP, Kushnir MM, Roberts WL, Pasquali M// ARUP Inst Clin & Expt Pathol, 500 Chipeta Way, Salt Lake City, Ut 84108, USA
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Papagiannopoulos M, Wollseifen HR, Mellenthin A, Haber B, Galensa R// Univ Bonn, Dept Food Sci & Food Chem, Endenicher Allee 11-13, DE-53115 Bonn, Germany
J Agric Food Chem 2004 **52** (12) 3784

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J Agric Food Chem 2004 **52** (12) 3679

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Peru KM, Headley JV*, Doucette WJ// *Environm Canada, Nat Water Res Inst, 11 Innovation Blvd, Saskatoon, Saskatchewan, Canada S7N 3H5
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Przybylski P, Brzezinski B*, Bartl F// *Adam Mickiewicz Univ Poznan, Fac Chem, Grunwaldzka 6, PL-60780 Poznan, Poland

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Rosch D, Krumbein A, Mugge C, Kroh LW// *Tech Univ Berlin, Inst Lebensmitteltechnol & Lebensmittelchem, Gustav Meyer Allee 25, DE-13355 Berlin, Germany

J Agric Food Chem 2004 **52** (13) 4039

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Ruelle V, El Moualij B, Zorzi W, Ledent P, De Pauw E// Univ Liege, Mass Spectrom Lab, 3 Allee de la Chimie, B6c, BE-4000 Liege, Belgium
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Sang SM, Tian SY, Stark RE, Yang CS, Ho CT// Rutgers State Univ, Ernest Mario Sch Pharm, Dept Biol Chem, 164 Frelinghuysen Rd, Piscataway, NJ 08854, USA

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J Agric Food Chem 2004 **52** (13) 4090

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Senk P, Kozak L, Foret F// *Inst Analyt Chem, Veveri 97, CZ-61142 Brno, Czech Republic
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Shang CW, Shibahara T, Hanada K, Iwafune Y, Hirano H// *Yokohama City Univ, Grad Sch Integrated Sci, Kihara Inst Biol Res, Maioka cho 641-12, Yokohama, Kanagawa 244 081, Japan
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Soukhova N, Soldin OP, Soldin SJ// *Georgetown Clin Res Ctr, Bioanalyt Core Lab, GM-12A Preclin Sci Bldg, 3900 Reservoir Rd NW, Washington, DC 20007, USA

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7 ANALYSIS OF ORGANIC COMPOUNDS

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Nagi Reddy P, Srikanth R, Bhanuprakash K*, Srinivas R// *Indian Inst Chem Technol, Inorgan Chem Div, IN-500007 Hyderabad, India
Rapid Commun Mass Spectrom 2004 **18** (17) 1939

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tion of some ω -hydroxycarboxylic and ω -dicarboxylic acid trimethylsilyl derivatives and the effect of chain length
Rontani JF, Aubert C// Ctr Oceanol Marseille - OSU, Lab Microbiol Geochim & Ecol Marines, UMR 6117, Campus Luminy - Case 901, FR-13288 Marseille, France
Rapid Commun Mass Spectrom 2004 **18** (17) 1889

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Roussis SG, Proulx R// Imperial Oil, Prod & Chem Div, Res Dept, 453 Christina St Sth, PO Box 3022, Sarnia, Ontario, Canada N7T 8C8
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Wang W, Vas G, Dommissie R, Loones K, Claeys M// *Univ Antwerp, Dept Pharmaceut Sci, Campus Drie Eiken, Universiteitspl 1, BE-2610 Antwerp, Belgium

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Wybieralska J// Adam Mickiewicz Univ, Fac Chem, Dept Mass Spectrom Organ Cpd, Grunwaldzka 6, PL-60780 Poznan, Poland

Rapid Commun Mass Spectrom 2004 **18** (17) 2008

Effect of matrix and solvent on the analysis of novel poly(phenylene-vinylene) derivatives by matrix-assisted laser desorption/ionization time-of-flight mass spectrometry

Zhang Z, Deng H*, Deng Q, Zhao S// *Sun Yat-Sen Univ, Instrum Anal & Res Ctr, CN-510275 Guangzhou, Guangdong, China

Rapid Commun Mass Spectrom 2004 **18** (18) 2146

8 ANALYSIS OF INORGANICS/ORGANOMETALLICS

Electrospray ionization mass spectrometry in the structural characterization of some diphenyllead(VI) thiosemicarbazonates

Casas JS, Garcia-Tasende MS, Sordo J, Taboada C, Tubaro M, Traldi P*, Vidarte MJ// *CNR, Inst Sci & Technol Mol, Corso Stati Uniti 4, IT-35100 Padua, Italy

Rapid Commun Mass Spectrom 2004 **18** (16) 1856

9 SURFACE ANALYSIS

Depth profiling of 4-acetaminophenol-doped poly(lactic acid) films using cluster secondary ion mass spectrometry

Mahoney CM, Roberson SV, Gillen G// NIST, Chem Sci & Technol Lab, Surface & Microanal Sci Div, 100 Bureau Dr, Mail Stop 8371, Gaithersburg, Md 20899, USA

Anal Chem 2004 **76** (11) 3199

Characterization of the surface of conventional hydrogel and silicone hydrogel contact lenses by time-of-flight secondary ion mass spectrometry

Maldonado-Codina C, Morgan PB, Efron N, Canry JC// UMIST, Dept Optom & Neurosci, Eurolens Res, POB 88, Manchester, M60 1QD, England
Optom Vis Sci 2004 **81** (6) 455

10 ENVIRONMENTAL ANALYSIS

Determination of thiabendazole in orange juice and rind by liquid chromatography with fluorescence detection and confirmation by gas chromatography/mass spectrometry after extraction by matrix solid-phase dispersion

Albero B, Sanchez-Brunete C, Tadeo JL*// *INIA, Dept Med Ambiente, Apdo 8111, ES-28080 Madrid, Spain
J AOAC Int 2004 **87** (3) 664

Electron ionization mass spectrometric study of antifungal 1,2,4-trithiols (Letter)

Alvarez C, Penieries G, Cruz T, Londono A, Velasco B, Miranda R*// *Fac Estudios Superiores Cuautitlan-UNAM, Avda Primero Mayo s/n, MX-54740 Cuautitlan Izcalli, Edo de Mexico, Mexico

Rapid Commun Mass Spectrom 2004 **18** (14) 1660

Influence of flooding on $\delta^{15}\text{N}$, $\delta^{18}\text{O}$, $\delta^{15}\text{N}$ and $\delta^{15}\text{N}$ signatures of N_2O released from estuarine soils - A laboratory experiment using tidal flooding chambers

Bol R, Rockmann T, Blackwell M, Yamulki S// Nth Wyke Res Station, Inst

Grassland & Environm Res, Okehampton EX20 2SB, England

Rapid Commun Mass Spectrom 2004 **18** (14) 1561

Determination of abamectin in soil samples using high-performance liquid chromatography with tandem mass spectrometry

Brewer BN, Armbrust KL, Mead KT, Holmes WE*// *Mississippi State Chem Lab, Box CR, Mississippi State, Ms 39762, USA

Rapid Commun Mass Spectrom 2004 **18** (15) 1693

Comparison chromatography of accelerator mass spectrometry with gas for the determination of pesticide residues in individual items in the diets of wild birds and mammals

Brown P, Garner C, Glass R, Ridgway C, Hart A// Cent Sci Lab, York YO41 1LZ, England

J Agric Food Chem 2004 **52** (12) 3693

Determination of pharmaceutical compounds in surface- and ground-water samples by solid-phase extraction and high-performance liquid chromatography-electrospray ionization mass spectrometry

Cahill JD, Furlong ET*, Burkhardt MR, Kolpin D, Anderson LG// *US Geol Survey, Natl Water Qual Lab, Denver Fed Ctr, POB 25046, MS 407, Denver, Co 80225, USA

J Chromatogr A 2004 **1041** (1-2) 171

Determination of acrylamide in drinking water by large-volume direct injection and ion-exclusion chromatography-mass spectrometry

Cavalli S, Polesello S*, Sacconi G// *IRSA, CNR, Via Mornera 25, IT-20047 Brughiero, MI, Italy

J Chromatogr A 2004 **1039** (1-2) 155

Validation of a real-time monitoring method for aniline in freshwater by high-performance liquid chromatography on porous graphitic carbon/electrospray ionization tandem mass spectrometry

Delepee R, Chaimbault P, Antignac JP, Lafosse M// Univ Orleans, Inst Chim Organ & Anal, UMR 6005, rue Chartres, BP 6759, FR-45067 Orleans, France
Rapid Commun Mass Spectrom 2004 **18** (14) 1548

Improved separation of the 209 polychlorinated biphenyl congeners using comprehensive two-dimensional gas chromatography-time-of-flight mass spectrometry

Focant JF, Sjodin A, Patterson DG// Univ Liege, Mass Spectrometry Lab, Allee Chim 3, B-6c Sart Tilman, BE-4000 Cointe Ougree, Belgium

J Chromatogr A 2004 **1040** (2) 227

The effect of N_2O on the isotopic composition of air- CO_2 samples

Ghosh P, Brand WA*// *Max-Planck-Inst Biogeochem, PO Box 100164, DE-07701 Jena, Germany

Rapid Commun Mass Spectrom 2004 **18** (16) 1830

Measurement of perchlorate in water by use of an ^{18}O -enriched isotopic standard and ion chromatography with mass spectrometric detection

Hedrick E, Munch D// US EPA, 26 West Martin Luther King Dr, Cincinnati, Oh 45268, USA

J Chromatogr A 2004 **1039** (1-2) 83

Rapid determination of chlorinated pesticides in fish by freezing-lipid filtration, solid-phase extraction and gas chromatography-mass spectrometry

Hong J, Kim HY, Kim DG, Seo J, Kim KJ// Korea Basic Sci Inst, Hazardous Subst Res Team, Anam 5 Ga, Seoul 136 701, South Korea

J Chromatogr A 2004 **1038** (1-2) 27

Determination of pesticides in soil by liquid-phase microextraction and gas chromatography-mass spectrometry

Hou L, Lee HK*// *Natl Univ Singapore, Dept Chem, 3 Sci Dr 3, SG-117543 Singapore, Rep Singapore

J Chromatogr A 2004 **1038** (1-2) 37

On-line laser desorption/ionization mass spectrometry of matrix-coated aerosols

Jackson SN, Mishra S, Murray KK*// *Louisiana State Univ, Dept Chem, Baton Rouge, La 70803, USA

Rapid Commun Mass Spectrom 2004 **18** (18) 2041

Simultaneous extraction of tetracycline, macrolide and sulfonamide antibiotics from agricultural soils using pressurised liquid extraction, followed by solid-phase extraction and liquid chromatography-tandem mass spectrometry

Jacobsen AM, Halling-Sorensen B, Ingerslev F, Hansen SH// Danish Univ Pharmaceut Sci, Dept Analyt Chem, Universitetsparken, DK-2100 Copenhagen, Denmark

J Chromatogr A 2004 **1038** (1-2) 157

Trace analysis of phenolic xenoestrogens in water samples by stir bar sorptive extraction with *in situ* derivatization and thermal desorption-gas chromatography-mass spectrometry

Kawaguchi M, Inoue K, Yoshimura M, Sakui N, Okanouchi N, Ito R, Yoshimura Y, Nakazawa H*// *Hoshi Univ, Fac Pharmaceut Sci, Dept Analyt Chem, 2-4-41 Ebara, Shinagawa ku, Tokyo 142 8501, Japan

J Chromatogr A 2004 **1041** (1-2) 19

Kel-FTM discs improve storage time of canopy air samples in 10-mL vials for

CO₂-δ¹³C analysis (Letter)

Knohl A, Werner RA, Geilmann H, Brand WA// Univ Calif, Dept Environ Sci Policy Management, 151 Hilgard Hall 3110, Berkeley, Ca 94720, USA
Rapid Commun Mass Spectrom 2004 **18** (14) 1663

Evaluation of ¹⁴C abundance in soil respiration using accelerator mass spectrometry

Koarashi J, Iida T, Moriizumi J, Asano T// Japan Nucl Cycle Dev Inst, Radiat Prot Div, Ibaraki 319 1194, Japan
J Environ Radioact 2004 **75** (2) 117

Microwave-assisted extraction followed by gas chromatography-mass spectrometry for the determination of endocrine disrupting chemicals in river sediments

Liu R, Zhou JL*, Wilding A// *Univ Sussex, Sch Life Sci, Dept Biol & Environm Sci, Brighton BN1 9QJ, England
J Chromatogr A 2004 **1038** (1-2) 19

Determination of trace-level haloacetic acids in drinking water by ion chromatography-inductively coupled plasma mass spectrometry

Liu YJ, Mou SF*, Chen DY// *Chinese Acad Sci, Ecoenvironm Sci Res Ctr, POB 2871, CN-100085 Beijing, Peoples Rep China
J Chromatogr A 2004 **1039** (1-2) 89

Determination of amines as pentafluoropropionic acid anhydride derivatives in biological samples using liquid chromatography and tandem mass spectrometry

Marand A, Karlsson D, Dalene M, Skarping G*// *Stockholm Univ, Work Environm Chem, POB 460, SE-28124 Hassleholm, Sweden
Analyst 2004 **129** (6) 522

Simultaneous determination of alkylphenols and bisphenol A in river water by stir bar sorptive extraction with *in situ* acetylation and thermal desorption-gas chromatography-mass spectrometry

Nakamura S, Daishima S// Yokogawa Analyt Syst Inc, 9-1 Takakura cho, Hachioji, Tokyo 192 0033, Japan
J Chromatogr A 2004 **1038** (1-2) 291

Determination of toxic cyclic heptapeptides by liquid chromatography with detection using ultra-violet, protein phosphatase assay and tandem mass spectrometry

Ortea PM, Allis O, Healy BM, Lehane M, Ni Shuilleabhain A, Furey A, James KJ*// *Cork Inst Technol, Dept Chem, Mass Spect Ctr Proteom & Biotoxin Res, Cork, Rep Ireland
Chemosphere 2004 **55** (10) 1395

Potential of liquid chromatography-atmospheric pressure chemical ionisation tandem mass spectrometry for determination of fosetyl-aluminium residues in dried hops

Poustka J, Hajslova J, Holadova K, Novakova K// Inst Chem Technol, Dept Food Chem & Anal, Technicka 3, CZ-16628 Prague 6, Czech Republic
Czech J Food Sci 2004 **22** (1) 24

Determination of organophosphorus pesticides using membrane-assisted solvent extraction combined with large volume injection-gas chromatography-mass spectrometric detection

Schellin M, Hauser B, Popp P// UFZ Ctr Environm Res, Dept Analyt Chem, Permoserstr 15, DE-04318 Leipzig, Germany
J Chromatogr A 2004 **1040** (2) 251

Is the isotopic composition of nitrous oxide an indicator for its origin from nitrification or denitrification? A theoretical approach from referred data and microbiological and enzyme kinetic aspects

Schmidt HL, Werner RA, Yoshida N, Well R// Prielhofweg 2, DE-84036 Landshtut, Germany
Rapid Commun Mass Spectrom 2004 **18** (18) 2036

N₂O influence on isotopic measurements of atmospheric CO₂

Sirignano C, Neubert REM, Meijer HAJ// Rijksuniversiteit Groningen, Ctr Isotope Res - CIO, Nijenborgh 4, NL-9747 AG Groningen, The Netherlands
Rapid Commun Mass Spectrom 2004 **18** (16) 1839

Quantification of hydrogen cyanide in humid air by selected ion flow tube mass spectrometry

Spänel P, Wang T, Smith D*// *Keele Univ, Sch Med, Inst Sci & Technol Med, Thornburrow Dr, Hartshill, Stoke-on-Trent ST4 7QB, England
Rapid Commun Mass Spectrom 2004 **18** (16) 1869

Determination of residues of propamocarb in wine by liquid chromatography-electrospray mass spectrometry with direct injection

Taylor JC, Hird SJ, Sykes MD, Startin JR*// *Cent Sci Lab, York YO41 1LZ, England
Food Addit Contam 2004 **21** (6) 572

A portable automated system for trace gas sampling in the field and stable isotope analysis in the laboratory

Theis DE, Saurer M, Blum H, Frossard E, Seigwolf RTW*// *Paul Scherrer Inst, Lab Atmos Chem, CH-5232 Villigen, Switzerland
Rapid Commun Mass Spectrom 2004 **18** (18) 2106

Determination of molecular formulas and structural regularities of low molecular weight fulvic acids by size-exclusion chromatography with electrospray ionization quadrupole time-of-flight mass spectrometry

These A, Winkler M, Thomas C, Reemtsma T*// *Tech Univ Berlin, Dept Water Qual Control, Sekr KF4, Str 17 Juni 135, DE-10623 Berlin, Germany
Rapid Commun Mass Spectrom 2004 **18** (16) 1777

Ultrafine nitrate particle events in Baltimore observed by real-time single particle mass spectrometry

Tolocka MP, Lake DA, Johnston MV*, Wexler AS// *Univ Delaware, Dept Chem & Biochem, Brown Lab 107, Newark, De 19716, USA
Atmos Environ 2004 **38** (20) 3215

Liquid chromatography-mass spectrometry analysis of hydroxylated polycyclic aromatic hydrocarbons, formed in a simulator of the human gastrointestinal tract

Van de Wiele TR, Peru KM, Verstraete W, Siciliano SD, Headley JV*// *Natl Water Res Inst, 11 Innovation Blvd, Saskatoon, SK, Canada S7N 3H5
J Chromatogr B 2004 **806** (2) 245

Determination of organophosphorus pesticides in water by HPLC-MS-MS (German, English Abstract)

Ventker M, Werres F*, Balsaa P, Winterhalter P, Overath H// *Inst Gerhard-Mercator GH Univ Duisburg, IWW Rheinisch Westfälisches, Inst Wasserforsch Gemeinnutzige GmbH, Moritzstr 26, DE-45476 Mulheim an der Ruhr, Germany
Acta Hydrochim Hydrobiol 2004 **32** (1) 40

Solid-phase extraction-high-performance liquid chromatography-ion trap mass spectrometry for analysis of trace concentrations of macrolide antibiotics in natural and waste water matrices

Yang S, Carlson KH*// *Colorado State Univ, Dept Civil & Environm Engr, Fort Collins, Co 80523, USA
J Chromatogr A 2004 **1038** (1-2) 141

Quantitative determination of trace concentrations of tetracycline and sulfonamide antibiotics in surface water using solid phase extraction and liquid chromatography/ion trap tandem mass spectrometry

Yang S, Cha J, Carlson K*// *Address as above
Rapid Commun Mass Spectrom 2004 **18** (18) 2131

11 ELEMENTAL ANALYSIS

Multivariate pattern matching of trace elements in solids by laser ablation inductively coupled plasma-mass spectrometry: Source attribution and preliminary diagnosis of fractionation

Aeschliman DB, Bajic SJ, Baldwin DP, Houk RS*// *Iowa State Univ, Dept Chem, US Dept Energy, Ames Lab, Ames, Ia 50011, USA
Anal Chem 2004 **76** (11) 3119

Determination of anthropogenic input of Ru, Rh Pd, Re, Os, Ir and Pt in soils along Austrian motorways by isotope dilution ICP-MS

Fritsche J, Meisel T*// *Univ Leoben, Franz Josef Str 18, AT-8700 Leoben, Austria
Sci Total Environ 2004 **325** (1-3) 145

Determination of intratest variability of trace elements in foraminifera by laser ablation inductively coupled plasma-mass spectrometry

Hathorne EC, Alard O, James RH, Rogers NW// Open Univ, Dept Earth Sci, Walton Hall, Milton Keynes MK7 6AA, England
Geochim Geophys Geosyst 2003 **4** 8408

Chemical resolution of Pu⁺ from U⁺ and Am⁺ using a band-pass reaction cell inductively coupled plasma mass spectrometer

Tanner SD, Li SD, Vais V, Baranov VI, Bandura DR// PerkinElmer SCIEX, 71 Four Valley Dr, Concord, Ontario, Canada L4K 4V8
Anal Chem 2004 **76** (11) 3042

Determination of elements in native and bypass human coronary artery plaque deposits from the same heart using inductively coupled plasma-mass spectrometry

Thiam S, Tracy RE, Robinson JW*, Warner IM// *Louisiana State Univ, Dept Chem, Baton Rouge, La 70803, USA
J Environ Sci Health A 2004 **39** (6) 1497

Direct analysis of Ca, P, and Fe in oleochemicals by inductively coupled plasma MS

Wiedemann SCC, Abbes H, Hansen WG// Uniqema, Corp Analyt Dev, POB 2, NL-2800 AA Gouda, The Netherlands
J Am Oil Chem Soc 2004 **81** (5) 437

Speciation of heavy metals in marine sediments from the East China Sea by ICP-MS with sequential extraction

Yuan CG, Shi JB, He B, Liu JF, Liang LN, Jiang GB*// *Chinese Acad Sci, Ecoenvironm Sci Res Ctr, Key Lab Environm Chem & Ecotoxicol, POB 2871, CN-100085 Beijing, Peoples Rep China
Environ Int 2004 **30** (6) 769