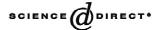


Available online at www.sciencedirect.com



JOURNAL OF CHROMATOGRAPHY A

Journal of Chromatography A, 995 (2003) 247-252

www.elsevier.com/locate/chroma

Subject Index Vol. 995

Activation energy

Kinetic analysis and subambient temperature on-line on-column derivatization of an active aldehyde 995(2003)67

Adsorption energy distribution

Effect of the mobile phase composition on the isotherm parameters and the high concentration band profiles in reversed-phase liquid chromatography 995(2003)37

Adsorption isotherms

Effect of the mobile phase composition on the isotherm parameters and the high concentration band profiles in reversed-phase liquid chromatography 995(2003)37

Affinity partitioning

Separation of enzymes by sequential macroaffinity ligand-facilitated three-phase partitioning 995(2003)127

Aldehydes

Kinetic analysis and subambient temperature on-line on-column derivatization of an active aldehyde 995(2003)67

Aromatic amines

Determination of aromatic amine mutagens, PBTA-1 and PBTA-2, in river water by solid-phase extraction followed by liquid chromatography—tandem mass spectrometry 995(2003)239

Arrhenius plot

Kinetic analysis and subambient temperature on-line on-column derivatization of an active aldehyde 995(2003)67

Automation

Systematic error in automated in-tube solid-phase microextraction 995(2003)1

Background electrolyte composition

Modification and validation of the pyromellitic acid electrolyte for the capillary electrophoretic determination of anions 995(2003)217

Band profiles

Effect of the mobile phase composition on the isotherm parameters and the high concentration band profiles in reversed-phase liquid chromatography 995(2003)37

Benzene

Simultaneous determination of methyl *tert*.-butyl ether and its degradation products, other gasoline oxygenates and benzene, toluene, ethylbenzene and xylenes in Catalonian groundwater by purge-and-trap-gas chromatography-mass spectrometry 995(2003)171

β-Blockers

pH dependence of the hydrophobicity of β -blocker amine compounds measured by counter-current chromatography 995(2003)55

Calibration

Description and characterization of an on-line system for longterm measurements of isoprene, methyl vinyl ketone, and methacrolein in ambient air 995(2003)185

Carnosic acid

Quantitative determination of phenolic diterpenes in rosemary extracts. Aspects of accurate quantification 995(2003)119

Carnosol

Quantitative determination of phenolic diterpenes in rosemary extracts. Aspects of accurate quantification 995(2003)119

Cellulase

Separation of enzymes by sequential macroaffinity ligandfacilitated three-phase partitioning 995(2003)127

4-Chlorophenols

On-line solid-phase extraction with molecularly imprinted polymers to selectively extract substituted 4-chlorophenols and 4-nitrophenol from water 995(2003)233

Continuous-flow liquid membrane extraction

Trace analysis of sulfonylurea herbicides in water by on-line continuous flow liquid membrane extraction– C_{18} precolumn liquid chromatography with ultraviolet absorbance detection 995(2003)21

Counter-current chromatography

pH dependence of the hydrophobicity of β -blocker amine compounds measured by counter-current chromatography 995(2003)55

0021-9673/03/\$ – see front matter © 2003 Elsevier Science B.V. All right reserved doi:10.1016/S0021-9673(03)00677-0

Derivatization, LC

Kinetic analysis and subambient temperature on-line on-column derivatization of an active aldehyde 995(2003)67

Dves

Analysis of food colorants by capillary electrophoresis with large-volume sample stacking 995(2003)29

Electrochromatography

Behavior of neutral solutes in pressurized flow driven electrochromatography using a mixed stationary phase of ODS and anion-exchange 995(2003)209

Electroosmotic flow mobility

Behavior of neutral solutes in pressurized flow driven electrochromatography using a mixed stationary phase of ODS and anion-exchange 995(2003)209

Elution order reversal

True or apparent reversal of elution order during chiral highperformance liquid chromatography monitored by a polarimetric detector under different mobile phase conditions 995(2003)79

Enantiomer separation

True or apparent reversal of elution order during chiral highperformance liquid chromatography monitored by a polarimetric detector under different mobile phase conditions 995(2003)79

Different multidimensional chromatographic approaches applied to the study of wine malolactic fermentation 995(2003)161

Environmental analysis

Simultaneous determination of methyl *tert.*-butyl ether and its degradation products, other gasoline oxygenates and benzene, toluene, ethylbenzene and xylenes in Catalonian groundwater by purge-and-trap-gas chromatography–mass spectrometry 995(2003)171

Enzymes

Separation of enzymes by sequential macroaffinity ligandfacilitated three-phase partitioning 995(2003)127

Ethylbenzene

Simultaneous determination of methyl *tert*.-butyl ether and its degradation products, other gasoline oxygenates and benzene, toluene, ethylbenzene and xylenes in Catalonian groundwater by purge-and-trap-gas chromatography-mass spectrometry 995(2003)171

Eucommia ulmoides

Analysis of long-chain polyprenols using supercritical fluid chromatography and matrix-assisted laser desorption ionization time-of-flight mass spectrometry 995(2003)203

Extraction methods

Optimization, validation and comparison of various extraction techniques for the trace determination of polycyclic aromatic hydrocarbons in sewage sludges by liquid chromatography coupled to diode-array and fluorescence detection 995(2003)87

Food analysis

Analysis of food colorants by capillary electrophoresis with large-volume sample stacking 995(2003)29

Analysis of proanthocyanidins by high-performance gel permeation chromatography 995(2003)99

Coupling solid-phase microextraction and high-performance liquid chromatography for direct and sensitive determination of halogenated fungicides in wine 995(2003)135

Frontal analysis

Effect of the mobile phase composition on the isotherm parameters and the high concentration band profiles in reversed-phase liquid chromatography 995(2003)37

Gasoline

Simultaneous determination of methyl *tert*.-butyl ether and its degradation products, other gasoline oxygenates and benzene, toluene, ethylbenzene and xylenes in Catalonian groundwater by purge-and-trap-gas chromatography-mass spectrometry 995(2003)171

Gem-diol formation

Kinetic analysis and subambient temperature on-line on-column derivatization of an active aldehyde 995(2003)67

Glycosides

Identification of acylated xanthone glycosides by liquid chromatography–atmospheric pressure chemical ionization mass spectrometry in positive and negative modes from the lichen *Umbilicaria proboscidea* 995(2003)109

Grapes

Analysis of proanthocyanidins by high-performance gel permeation chromatography 995(2003)99

Hexamethonium hydroxide

Modification and validation of the pyromellitic acid electrolyte for the capillary electrophoretic determination of anions 995(2003)217

Headspace solid-phase microextraction

Optimisation of headspace solid-phase microextraction for the analysis of volatile phenols in wine 995(2003)11

Hop

Analysis of proanthocyanidins by high-performance gel permeation chromatography 995(2003)99

Hydrophobicity

pH dependence of the hydrophobicity of β -blocker amine compounds measured by counter-current chromatography 995(2003)55

Inorganic anions

Simultaneous separation of inorganic anions and cations by using anion-exchange and cation-exchange columns connected in tandem in ion chromatography 995(2003)153

Modification and validation of the pyromellitic acid electrolyte for the capillary electrophoretic determination of anions 995(2003)217

Inorganic cations

Determination of sodium at low ng/l concentrations in simulated power plant waters by ion chromatography 995(2003)143

Simultaneous separation of inorganic anions and cations by using anion-exchange and cation-exchange columns connected in tandem in ion chromatography 995(2003)153

Instrumentation

Systematic error in automated in-tube solid-phase microextraction 995(2003)1

In-tube solid-phase microextraction

Systematic error in automated in-tube solid-phase microextraction 995(2003)1

Ionizable compounds

pH dependence of the hydrophobicity of β -blocker amine compounds measured by counter-current chromatography 995(2003)55

Isoprene

Description and characterization of an on-line system for longterm measurements of isoprene, methyl vinyl ketone, and methacrolein in ambient air 995(2003)185

Large-volume injections

Analysis of food colorants by capillary electrophoresis with large-volume sample stacking 995(2003)29

Macroaffinity ligand-facilitated three-phase partitioning

Separation of enzymes by sequential macroaffinity ligandfacilitated three-phase partitioning 995(2003)127

Malolactic fermentation

Different multidimensional chromatographic approaches applied to the study of wine malolactic fermentation 995(2003)161

Matrix-assisted laser desorption ionization mass spectrometry

Analysis of long-chain polyprenols using supercritical fluid chromatography and matrix-assisted laser desorption ionization time-of-flight mass spectrometry 995(2003)203

Methacrolein

Description and characterization of an on-line system for longterm measurements of isoprene, methyl vinyl ketone, and methacrolein in ambient air 995(2003)185

Methyl tert.-butyl ether

Simultaneous determination of methyl *tert.*-butyl ether and its degradation products, other gasoline oxygenates and benzene, toluene, ethylbenzene and xylenes in Catalonian groundwater by purge-and-trap-gas chromatography–mass spectrometry 995(2003)171

Methyl vinyl ketone

Description and characterization of an on-line system for longterm measurements of isoprene, methyl vinyl ketone, and methacrolein in ambient air 995(2003)185

Mobile phase composition

Effect of the mobile phase composition on the isotherm parameters and the high concentration band profiles in reversed-phase liquid chromatography 995(2003)37

True or apparent reversal of elution order during chiral highperformance liquid chromatography monitored by a polarimetric detector under different mobile phase conditions 995(2003)79

Molecular imprinting

On-line solid-phase extraction with molecularly imprinted polymers to selectively extract substituted 4-chlorophenols and 4-nitrophenol from water 995(2003)233

Multidimensional techniques

Different multidimensional chromatographic approaches applied to the study of wine malolactic fermentation 995(2003)161

4-Nitrophenol

On-line solid-phase extraction with molecularly imprinted polymers to selectively extract substituted 4-chlorophenols and 4-nitrophenol from water 995(2003)233

Octanol-water partition coefficients

pH dependence of the hydrophobicity of β -blocker amine compounds measured by counter-current chromatography 995(2003)55

Optimization

Optimization, validation and comparison of various extraction techniques for the trace determination of polycyclic aromatic hydrocarbons in sewage sludges by liquid chromatography coupled to diode-array and fluorescence detection 995(2003)87

Organic anions

Modification and validation of the pyromellitic acid electrolyte for the capillary electrophoretic determination of anions 995(2003)217

Organochlorine compounds

Coupling solid-phase microextraction and high-performance liquid chromatography for direct and sensitive determination of halogenated fungicides in wine 995(2003)135

Partition coefficients

pH dependence of the hydrophobicity of β -blocker amine compounds measured by counter-current chromatography 995(2003)55

Pectinase

Separation of enzymes by sequential macroaffinity ligandfacilitated three-phase partitioning 995(2003)127

Pentane-2,4-diol

Different multidimensional chromatographic approaches applied to the study of wine malolactic fermentation 995(2003)161

Pesticides

Trace analysis of sulfonylurea herbicides in water by on-line continuous flow liquid membrane extraction– C_{18} precolumn liquid chromatography with ultraviolet absorbance detection 995(2003)21

Coupling solid-phase microextraction and high-performance liquid chromatography for direct and sensitive determination of halogenated fungicides in wine 995(2003)135

Phenol

Effect of the mobile phase composition on the isotherm parameters and the high concentration band profiles in reversed-phase liquid chromatography 995(2003)37

Phenolic compounds

Quantitative determination of phenolic diterpenes in rosemary extracts. Aspects of accurate quantification 995(2003)119

Phenols

Optimisation of headspace solid-phase microextraction for the analysis of volatile phenols in wine 995(2003)11

Analysis of proanthocyanidins by high-performance gel permeation chromatography 995(2003)99

Plant materials

Identification of acylated xanthone glycosides by liquid chromatography-atmospheric pressure chemical ionization mass spectrometry in positive and negative modes from the lichen *Umbilicaria proboscidea* 995(2003)109

Polarimetric detection

True or apparent reversal of elution order during chiral highperformance liquid chromatography monitored by a polarimetric detector under different mobile phase conditions 995(2003)79

Polymer additives

Feasibility of supercritical fluid extraction with on-line coupling of reversed-phase liquid chromatography for quantitative analysis of polymer additives 995(2003)227

Polynuclear aromatic hydrocarbons

Optimization, validation and comparison of various extraction techniques for the trace determination of polycyclic aromatic hydrocarbons in sewage sludges by liquid chromatography coupled to diode-array and fluorescence detection 995(2003)87

Polyprenols

Analysis of long-chain polyprenols using supercritical fluid chromatography and matrix-assisted laser desorption ionization time-of-flight mass spectrometry 995(2003)203

Proanthocyanidins

Analysis of proanthocyanidins by high-performance gel permeation chromatography 995(2003)99

Procvanidins

Analysis of proanthocyanidins by high-performance gel permeation chromatography 995(2003)99

Prodelphinidins

Analysis of proanthocyanidins by high-performance gel permeation chromatography 995(2003)99

Purge-and-trap methods

Simultaneous determination of methyl *tert.*-butyl ether and its degradation products, other gasoline oxygenates and benzene, toluene, ethylbenzene and xylenes in Catalonian groundwater by purge-and-trap-gas chromatography–mass spectrometry 995(2003)171

Pyromellitic acid

Modification and validation of the pyromellitic acid electrolyte for the capillary electrophoretic determination of anions 995(2003)217

Ranitidine

Systematic error in automated in-tube solid-phase microextraction 995(2003)1

Retention factor

Behavior of neutral solutes in pressurized flow driven electrochromatography using a mixed stationary phase of ODS and anion-exchange 995(2003)209

Rosmarinus officinalis

Quantitative determination of phenolic diterpenes in rosemary extracts. Aspects of accurate quantification 995(2003)119

Sample stacking

Analysis of food colorants by capillary electrophoresis with large-volume sample stacking 995(2003)29

Sewage sludge

Optimization, validation and comparison of various extraction techniques for the trace determination of polycyclic aromatic hydrocarbons in sewage sludges by liquid chromatography coupled to diode-array and fluorescence detection 995(2003)87

Sodium

Determination of sodium at low ng/l concentrations in simulated power plant waters by ion chromatography 995(2003)143

Solid-phase extraction

On-line solid-phase extraction with molecularly imprinted polymers to selectively extract substituted 4-chlorophenols and 4-nitrophenol from water 995(2003)233

Determination of aromatic amine mutagens, PBTA-1 and PBTA-2, in river water by solid-phase extraction followed by liquid chromatography-tandem mass spectrometry 995(2003)239

Solid-phase microextraction

Systematic error in automated in-tube solid-phase microextraction 995(2003)1

Stationary phases

Behavior of neutral solutes in pressurized flow driven electrochromatography using a mixed stationary phase of ODS and anion-exchange 995(2003)209

Sulfonylureas

Trace analysis of sulfonylurea herbicides in water by on-line continuous flow liquid membrane extraction– C_{18} precolumn liquid chromatography with ultraviolet absorbance detection 995(2003)21

Supercritical fluid chromatography

Analysis of long-chain polyprenols using supercritical fluid chromatography and matrix-assisted laser desorption ionization time-of-flight mass spectrometry 995(2003)203

Supercritical fluid extraction

Feasibility of supercritical fluid extraction with on-line coupling of reversed-phase liquid chromatography for quantitative analysis of polymer additives 995(2003)227

Surface charge

Behavior of neutral solutes in pressurized flow driven electrochromatography using a mixed stationary phase of ODS and anion-exchange 995(2003)209

Systematic errors

Systematic error in automated in-tube solid-phase microextraction 995(2003)1

Tannins

Analysis of proanthocyanidins by high-performance gel permeation chromatography 995(2003)99

Terpenes

Quantitative determination of phenolic diterpenes in rosemary extracts. Aspects of accurate quantification 995(2003)119

Toluene

Simultaneous determination of methyl *tert.*-butyl ether and its degradation products, other gasoline oxygenates and benzene, toluene, ethylbenzene and xylenes in Catalonian groundwater by purge-and-trap-gas chromatography-mass spectrometry 995(2003)171

Trace analysis

Trace analysis of sulfonylurea herbicides in water by on-line continuous flow liquid membrane extraction– C_{18} precolumn liquid chromatography with ultraviolet absorbance detection 995(2003)21

Umbilicaria proboscidea

Identification of acylated xanthone glycosides by liquid chromatography-atmospheric pressure chemical ionization mass spectrometry in positive and negative modes from the lichen *Umbilicaria proboscidea* 995(2003)109

Validation

Optimization, validation and comparison of various extraction techniques for the trace determination of polycyclic aromatic hydrocarbons in sewage sludges by liquid chromatography coupled to diode-array and fluorescence detection 995(2003)87

Modification and validation of the pyromellitic acid electrolyte for the capillary electrophoretic determination of anions 995(2003)217

Volatile organic compounds

Description and characterization of an on-line system for longterm measurements of isoprene, methyl vinyl ketone, and methacrolein in ambient air 995(2003)185

Water analysis

Trace analysis of sulfonylurea herbicides in water by on-line continuous flow liquid membrane extraction– C_{18} precolumn liquid chromatography with ultraviolet absorbance detection 995(2003)21

Determination of sodium at low ng/l concentrations in simulated power plant waters by ion chromatography 995(2003)143

Simultaneous separation of inorganic anions and cations by using anion-exchange and cation-exchange columns connected in tandem in ion chromatography 995(2003)153

Simultaneous determination of methyl *tert*.-butyl ether and its degradation products, other gasoline oxygenates and benzene, toluene, ethylbenzene and xylenes in Catalonian groundwater by purge-and-trap-gas chromatography-mass spectrometry 995(2003)171

On-line solid-phase extraction with molecularly imprinted polymers to selectively extract substituted 4-chlorophenols and 4-nitrophenol from water 995(2003)233

Determination of aromatic amine mutagens, PBTA-1 and PBTA-2, in river water by solid-phase extraction followed by liquid chromatography—tandem mass spectrometry 995(2003)239

Wine

Optimisation of headspace solid-phase microextraction for the analysis of volatile phenols in wine 995(2003)11

Coupling solid-phase microextraction and high-performance liquid chromatography for direct and sensitive determination of halogenated fungicides in wine 995(2003)135

Different multidimensional chromatographic approaches applied to the study of wine malolactic fermentation 995(2003)161

Xanthone glycosides, acylated

Identification of acylated xanthone glycosides by liquid chromatography-atmospheric pressure chemical ionization mass spectrometry in positive and negative modes from the lichen *Umbilicaria proboscidea* 995(2003)109

Xylenes

Simultaneous determination of methyl *tert.*-butyl ether and its degradation products, other gasoline oxygenates and benzene, toluene, ethylbenzene and xylenes in Catalonian groundwater by purge-and-trap-gas chromatography–mass spectrometry 995(2003)171