

Available online at www.sciencedirect.com



Journal of Chromatography A, 986 (2003) 331-337

# JOURNAL OF CHROMATOGRAPHY A

www.elsevier.com/locate/chroma

# Subject Index Vol. 986

#### Acidity

Comparison of the acidity of residual silanol groups in several liquid chromatography columns 986(2003)33

# Adsorption

Comparison of the differential isosteric adsorption enthalpies and entropies calculated from chromatographic data 986(2003)89

# Adsorption isotherms

Numerical determination of the competitive isotherm of enantiomers 986(2003)207

#### Affinity adsorbents

Direct chromatographic capture of enzyme from crude homogenate using immobilized metal affinity chromatography on a continuous supermacroporous adsorbent 986(2003)275

## Aglycones

Determination of daidzein and genistein in soybean foods by automated on-line in-tube solid-phase microextraction coupled to high-performance liquid chromatography 986(2003)169

# Alcohol ethoxylates

Retention mechanism of fatty alcohol ethoxylates in reversedphase liquid chromatography 986(2003)199

# Alkamides

Simultaneous analysis of caffeic acid derivatives and alkamides in roots and extracts of *Echinacea purpurea* by highperformance liquid chromatography-photodiode array detectionelectrospray mass spectrometry 986(2003)73

#### Amines

Development of a chiral non-aqueous capillary electrophoretic system using the partial filling technique with UV and mass spectrometric detection 986(2003)143

#### Amino acids

Study of tryptophan enantiomer binding to a teicoplanin-based stationary phase using the perturbation technique. Investigation of the role of sodium perchlorate in solute retention and enantioselectivity 986(2003)45

#### Angiotensin-converting enzyme

Kinetic study of angiotensin converting enzyme activity by capillary electrophoresis after in-line reaction at the capillary inlet 986(2003)303

## Anthranilic acid

High-performance liquid chromatography assay for 1-deoxy-D-xylulose 5-phosphate synthase activity using fluorescence detection 986(2003)291

#### Antibiotics

Cholesterol bonded phase as a separation medium in liquid chromatography. Evaluation of properties and applications 986(2003)253

# Aroma compounds

Determination of stale-flavor carbonyl compounds in beer by stir bar sorptive extraction with in-situ derivatization and thermal desorption–gas chromatography–mass spectrometry 986(2003)101

# Atomic force microscopy

Capillary-channeled polymer fibers as stationary phases in liquid chromatography separations 986(2003)17

#### At-inlet reaction

Kinetic study of angiotensin converting enzyme activity by capillary electrophoresis after in-line reaction at the capillary inlet 986(2003)303

# Automation

Determination of daidzein and genistein in soybean foods by automated on-line in-tube solid-phase microextraction coupled to high-performance liquid chromatography 986(2003)169

#### **Band broadening**

Contribution of the polymer standards' polydispersity to the observed band broadening in size-exclusion chromatography 986(2003)1

Simple method for the quantitative examination of extra column band broadening in microchromatographic systems 986(2003)247

0021-9673/03/\$ – see front matter © 2003 Elsevier Science B.V. All right reserved PII: S0021-9673(02)00021-9

332

# Beer

Determination of stale-flavor carbonyl compounds in beer by stir bar sorptive extraction with in-situ derivatization and thermal desorption-gas chromatography-mass spectrometry 986(2003)101

# Bilobalide

Development and validation of a gas chromatographic-mass spectrometric method for simultaneous identification and quantification of marker compounds including bilobalide, ginkgolides and flavonoids in *Ginkgo biloba* L. extract and pharmaceutical preparations 986(2003)121

# **Bubble formation**

Packing structure and self-heating in capillary electrochromatography 986(2003)297

## Caffeic acid

Simultaneous analysis of caffeic acid derivatives and alkamides in roots and extracts of *Echinacea purpurea* by highperformance liquid chromatography-photodiode array detectionelectrospray mass spectrometry 986(2003)73

# Capillary-channel polymer fibers

Capillary-channeled polymer fibers as stationary phases in liquid chromatography separations 986(2003)17

# Carbon dioxide

Anomalous effects of helium head pressure carbon dioxide in supercritical fluid chromatography and extraction 986(2003)129

# **Carbonyl** compounds

Determination of stale-flavor carbonyl compounds in beer by stir bar sorptive extraction with in-situ derivatization and thermal desorption–gas chromatography–mass spectrometry 986(2003)101

## **Charge exclusion**

Comparison of the acidity of residual silanol groups in several liquid chromatography columns 986(2003)33

# Chlorophenols

Conductive polymers as new media for solid-phase extraction: Isolation of chlorophenols from water sample 986(2003)111

# Cholesterol

Cholesterol bonded phase as a separation medium in liquid chromatography. Evaluation of properties and applications 986(2003)253

# **Cichoric acid**

Simultaneous analysis of caffeic acid derivatives and alkamides in roots and extracts of *Echinacea purpurea* by highperformance liquid chromatography-photodiode array detectionelectrospray mass spectrometry 986(2003)73

# Cytochrome P4501A-inducing compounds

Sequential fractionation procedure for the identification of potentially cytochrome P4501A-inducing compounds 986(2003)55

# Daidzein

Determination of daidzein and genistein in soybean foods by automated on-line in-tube solid-phase microextraction coupled to high-performance liquid chromatography 986(2003)169

# Deoxyxylulose phosphate synthase

High-performance liquid chromatography assay for 1-deoxy-Dxylulose 5-phosphate synthase activity using fluorescence detection 986(2003)291

# Derivatization, electrophoresis

Simultaneous determination of water-soluble vitamins in a vitamin-enriched drink by an in-capillary enzyme reaction method 986(2003)153

# **Derivatization**, LC

High-performance liquid chromatography assay for 1-deoxy-Dxylulose 5-phosphate synthase activity using fluorescence detection 986(2003)291

# **Detection, SFE**

Determination of total petroleum hydrocarbons in soil by dynamic on-line supercritical fluid extraction with infrared photometric detection 986(2003)319

#### Diethylhexyl phthalate

Simultaneous extraction of di(2-ethylhexyl) phthalate and nonionic surfactants from house dust. Concentrations in floor dust from 15 Danish schools 986(2003)179

# (-)-DIKGA

Development of a chiral non-aqueous capillary electrophoretic system using the partial filling technique with UV and mass spectrometric detection 986(2003)143

# **Dissociation constants**

Comparison of the acidity of residual silanol groups in several liquid chromatography columns 986(2003)33

# Dodecylsulfate-modified stationary phase

Studies on the separation of hydronium ion using surfactantmodified reversed-phase stationary phases and eluents containing an acidified electrolyte 986(2003)263

# Dust

Simultaneous extraction of di(2-ethylhexyl) phthalate and nonionic surfactants from house dust. Concentrations in floor dust from 15 Danish schools 986(2003)179

#### Echinacea purpurea

Simultaneous analysis of caffeic acid derivatives and alkamides in roots and extracts of *Echinacea purpurea* by highperformance liquid chromatography-photodiode array detectionelectrospray mass spectrometry 986(2003)73

## Echinocoside

Separation and determination of phenylpropanoid glycosides from *Pedicularis* species by capillary electrophoresis 986(2003)163

## Electrochromatography

Packing structure and self-heating in capillary electrochromatography 986(2003)297

#### **Enantiomer separation**

Study of tryptophan enantiomer binding to a teicoplanin-based stationary phase using the perturbation technique. Investigation of the role of sodium perchlorate in solute retention and enantioselectivity 986(2003)45

Separation of triadimefon and triadimenol enantiomers and diastereoisomers by supercritical fluid chromatography 986(2003)135

Development of a chiral non-aqueous capillary electrophoretic system using the partial filling technique with UV and mass spectrometric detection 986(2003)143

Numerical determination of the competitive isotherm of enantiomers 986(2003)207

Cholesterol bonded phase as a separation medium in liquid chromatography. Evaluation of properties and applications 986(2003)253

#### **Environmental analysis**

Conductive polymers as new media for solid-phase extraction: Isolation of chlorophenols from water sample 986(2003)111

# Enzymes

Direct chromatographic capture of enzyme from crude homogenate using immobilized metal affinity chromatography on a continuous supermacroporous adsorbent 986(2003)275

High-performance liquid chromatography assay for 1-deoxy-Dxylulose 5-phosphate synthase activity using fluorescence detection 986(2003)291

Kinetic study of angiotensin converting enzyme activity by capillary electrophoresis after in-line reaction at the capillary inlet 986(2003)303

#### Ethoxylates

Retention mechanism of fatty alcohol ethoxylates in reversedphase liquid chromatography 986(2003)199

## **Extraction methods**

Determination of stale-flavor carbonyl compounds in beer by stir bar sorptive extraction with in-situ derivatization and thermal desorption–gas chromatography–mass spectrometry 986(2003)101 Simultaneous extraction of di(2-ethylhexyl) phthalate and nonionic surfactants from house dust. Concentrations in floor dust from 15 Danish schools 986(2003)179

# Fatty alcohol ethoxylates

Retention mechanism of fatty alcohol ethoxylates in reversedphase liquid chromatography 986(2003)199

#### Flavonoids

Development and validation of a gas chromatographic-mass spectrometric method for simultaneous identification and quantification of marker compounds including bilobalide, ginkgolides and flavonoids in *Ginkgo biloba* L. extract and pharmaceutical preparations 986(2003)121

#### Food analysis

Determination of stale-flavor carbonyl compounds in beer by stir bar sorptive extraction with in-situ derivatization and thermal desorption–gas chromatography–mass spectrometry 986(2003)101

Simultaneous determination of water-soluble vitamins in a vitamin-enriched drink by an in-capillary enzyme reaction method 986(2003)153

Determination of daidzein and genistein in soybean foods by automated on-line in-tube solid-phase microextraction coupled to high-performance liquid chromatography 986(2003)169

## Formic acid

Quantitation of formate by solid-phase microextraction and gas chromatography-mass spectrometry utilizing a [<sup>13</sup>C]formate internal standard 986(2003)313

## FUMI theory

Prediction of measurement precision of apparatus using a chemometric tool in electrochemical detection of highperformance liquid chromatography 986(2003)239

#### Ginkgo biloba L.

Development and validation of a gas chromatographic-mass spectrometric method for simultaneous identification and quantification of marker compounds including bilobalide, ginkgolides and flavonoids in *Ginkgo biloba* L. extract and pharmaceutical preparations 986(2003)121

#### Genistein

Determination of daidzein and genistein in soybean foods by automated on-line in-tube solid-phase microextraction coupled to high-performance liquid chromatography 986(2003)169

## Ginkgolides

Development and validation of a gas chromatographic-mass spectrometric method for simultaneous identification and quantification of marker compounds including bilobalide, ginkgolides and flavonoids in *Ginkgo biloba* L. extract and pharmaceutical preparations 986(2003)121

334

# Glucosaminoglucan

Determination of the distribution of molecular masses of sodium hyaluronate by high-performance anion-exchange chromatography 986(2003)67

# **Gradient elution**

Hydrophobicity gradient columns for the separation of trypsin inhibitor by hydrophobic interaction chromatography at low salt concentration 986(2003)83

# Helium head pressure

Anomalous effects of helium head pressure carbon dioxide in supercritical fluid chromatography and extraction 986(2003)129

## Hippuric acid

Kinetic study of angiotensin converting enzyme activity by capillary electrophoresis after in-line reaction at the capillary inlet 986(2003)303

# Hyaluronic acid

Determination of the distribution of molecular masses of sodium hyaluronate by high-performance anion-exchange chromatography 986(2003)67

# Hydrocarbons

Determination of total petroleum hydrocarbons in soil by dynamic on-line supercritical fluid extraction with infrared photometric detection 986(2003)319

#### Hydronium ion

Studies on the separation of hydronium ion using surfactantmodified reversed-phase stationary phases and eluents containing an acidified electrolyte 986(2003)263

# Hydrophobic gradients

Hydrophobicity gradient columns for the separation of trypsin inhibitor by hydrophobic interaction chromatography at low salt concentration 986(2003)83

# Hydrophobic interaction chromatography

Hydrophobicity gradient columns for the separation of trypsin inhibitor by hydrophobic interaction chromatography at low salt concentration 986(2003)83

#### Immobilized artificial membranes

Chemometric comparison of recent chromatographic and electrophoretic methods in a quantitative structure-retention and retention-activity relationship context 986(2003)227

# Immobilized metal affinity chromatography

Direct chromatographic capture of enzyme from crude homogenate using immobilized metal affinity chromatography on a continuous supermacroporous adsorbent 986(2003)275

# Instrumentation

Determination of total petroleum hydrocarbons in soil by dynamic on-line supercritical fluid extraction with infrared photometric detection 986(2003)319

## Internal standards

Quantitation of formate by solid-phase microextraction and gas chromatography-mass spectrometry utilizing a [<sup>13</sup>C]formate internal standard 986(2003)313

# In-capillary enzyme reaction

Simultaneous determination of water-soluble vitamins in a vitamin-enriched drink by an in-capillary enzyme reaction method 986(2003)153

# Ion exchange

Comparison of the acidity of residual silanol groups in several liquid chromatography columns 986(2003)33

## Isoflavones

Determination of daidzein and genistein in soybean foods by automated on-line in-tube solid-phase microextraction coupled to high-performance liquid chromatography 986(2003)169

#### Isotherm models

Numerical determination of the competitive isotherm of enantiomers 986(2003)207

#### Kinetic study

Kinetic study of angiotensin converting enzyme activity by capillary electrophoresis after in-line reaction at the capillary inlet 986(2003)303

# Mathematical modelling

Comparison of the differential isosteric adsorption enthalpies and entropies calculated from chromatographic data 986(2003)89

### Michaelis-Menten analysis

Kinetic study of angiotensin converting enzyme activity by capillary electrophoresis after in-line reaction at the capillary inlet 986(2003)303

# Mobile phase composition

Studies on the separation of hydronium ion using surfactantmodified reversed-phase stationary phases and eluents containing an acidified electrolyte 986(2003)263

## Molecular mass distribution

Contribution of the polymer standards' polydispersity to the observed band broadening in size-exclusion chromatography 986(2003)1

# **Multistep fractionation**

Sequential fractionation procedure for the identification of potentially cytochrome P4501A-inducing compounds 986(2003)55

# Non-aqueous capillary electrophoresis

Development of a chiral non-aqueous capillary electrophoretic system using the partial filling technique with UV and mass spectrometric detection 986(2003)143

# **Organic acids**

Quantitation of formate by solid-phase microextraction and gas chromatography-mass spectrometry utilizing a [<sup>13</sup>C]formate internal standard 986(2003)313

# Packing structure

Packing structure and self-heating in capillary electrochromatography 986(2003)297

# Partial filling technique

Development of a chiral non-aqueous capillary electrophoretic system using the partial filling technique with UV and mass spectrometric detection 986(2003)143

# Pedicularis, spp

Separation and determination of phenylpropanoid glycosides from *Pedicularis* species by capillary electrophoresis 986(2003)163

## Pediculariosides

Separation and determination of phenylpropanoid glycosides from *Pedicularis* species by capillary electrophoresis 986(2003)163

#### Peptides

Kinetic study of angiotensin converting enzyme activity by capillary electrophoresis after in-line reaction at the capillary inlet 986(2003)303

#### Petroleum

Determination of total petroleum hydrocarbons in soil by dynamic on-line supercritical fluid extraction with infrared photometric detection 986(2003)319

## Pharmaceutical analysis

Determination of the distribution of molecular masses of sodium hyaluronate by high-performance anion-exchange chromatography 986(2003)67

Simultaneous determination of water-soluble vitamins in a vitamin-enriched drink by an in-capillary enzyme reaction method 986(2003)153

Separation and determination of phenylpropanoid glycosides from *Pedicularis* species by capillary electrophoresis 986(2003)163

# Phenols

Conductive polymers as new media for solid-phase extraction: Isolation of chlorophenols from water sample 986(2003)111

# Phenylpropanoid glycosides

Separation and determination of phenylpropanoid glycosides from *Pedicularis* species by capillary electrophoresis 986(2003)163

#### 1-Phenyl-1-propanol

Numerical determination of the competitive isotherm of enantiomers 986(2003)207

#### Phthalates

Simultaneous extraction of di(2-ethylhexyl) phthalate and nonionic surfactants from house dust. Concentrations in floor dust from 15 Danish schools 986(2003)179

# **Plant materials**

Simultaneous analysis of caffeic acid derivatives and alkamides in roots and extracts of *Echinacea purpurea* by highperformance liquid chromatography–photodiode array detection– electrospray mass spectrometry 986(2003)73

#### **Poisson distribution**

Contribution of the polymer standards' polydispersity to the observed band broadening in size-exclusion chromatography 986(2003)1

#### Polydispersity

Contribution of the polymer standards' polydispersity to the observed band broadening in size-exclusion chromatography 986(2003)1

#### Poly(ethylene oxide)

Retention mechanism of poly(ethylene oxide) in reversed-phase and normal-phase liquid chromatography 986(2003)191

## Polymers

Contribution of the polymer standards' polydispersity to the observed band broadening in size-exclusion chromatography 986(2003)1

Conductive polymers as new media for solid-phase extraction: Isolation of chlorophenols from water sample 986(2003)111

# Polysaccharides

Determination of the distribution of molecular masses of sodium hyaluronate by high-performance anion-exchange chromatography 986(2003)67

# **Post-column reactors**

Simple method for the quantitative examination of extra column band broadening in microchromatographic systems 986(2003)247

## Precision

Prediction of measurement precision of apparatus using a chemometric tool in electrochemical detection of highperformance liquid chromatography 986(2003)239

#### Preparative chromatography

Sequential fractionation procedure for the identification of potentially cytochrome P4501A-inducing compounds 986(2003)55

# Principal component analysis

Chemometric comparison of recent chromatographic and electrophoretic methods in a quantitative structure-retention and retention-activity relationship context 986(2003)227 336

# Pronethalol

Development of a chiral non-aqueous capillary electrophoretic system using the partial filling technique with UV and mass spectrometric detection 986(2003)143

# Proteins

Hydrophobicity gradient columns for the separation of trypsin inhibitor by hydrophobic interaction chromatography at low salt concentration 986(2003)83

# Quantitative retention-activity relationships

Chemometric comparison of recent chromatographic and electrophoretic methods in a quantitative structure-retention and retention-activity relationship context 986(2003)227

# Quantitative structure-retention relationships

Chemometric comparison of recent chromatographic and electrophoretic methods in a quantitative structure-retention and retention-activity relationship context 986(2003)227

# Retention

Study of tryptophan enantiomer binding to a teicoplanin-based stationary phase using the perturbation technique. Investigation of the role of sodium perchlorate in solute retention and enantioselectivity 986(2003)45

# **Retention mechanism**

Retention mechanism of poly(ethylene oxide) in reversed-phase and normal-phase liquid chromatography 986(2003)191

Retention mechanism of fatty alcohol ethoxylates in reversedphase liquid chromatography 986(2003)199

#### **Riboflavin phosphate**

Simultaneous determination of water-soluble vitamins in a vitamin-enriched drink by an in-capillary enzyme reaction method 986(2003)153

## Self-heating

Packing structure and self-heating in capillary electrochromatography 986(2003)297

#### Silanol activity

Comparison of the acidity of residual silanol groups in several liquid chromatography columns 986(2003)33

## Silica columns

Comparison of the acidity of residual silanol groups in several liquid chromatography columns 986(2003)33

# Silica, *n*-octadecyl bonded

Comparison of the acidity of residual silanol groups in several liquid chromatography columns 986(2003)33

# Size-exclusion chromatography

Contribution of the polymer standards' polydispersity to the observed band broadening in size-exclusion chromatography 986(2003)1

#### Sodium hyaluronate

Determination of the distribution of molecular masses of sodium hyaluronate by high-performance anion-exchange chromatography 986(2003)67

# Sodium perchlorate

Study of tryptophan enantiomer binding to a teicoplanin-based stationary phase using the perturbation technique. Investigation of the role of sodium perchlorate in solute retention and enantioselectivity 986(2003)45

#### Soil

Determination of total petroleum hydrocarbons in soil by dynamic on-line supercritical fluid extraction with infrared photometric detection 986(2003)319

## Solid-phase extraction

Conductive polymers as new media for solid-phase extraction: Isolation of chlorophenols from water sample 986(2003)111

#### Solid-phase microextraction

Determination of daidzein and genistein in soybean foods by automated on-line in-tube solid-phase microextraction coupled to high-performance liquid chromatography 986(2003)169

# Soybean

Determination of daidzein and genistein in soybean foods by automated on-line in-tube solid-phase microextraction coupled to high-performance liquid chromatography 986(2003)169

# Stationary phases, LC

Capillary-channeled polymer fibers as stationary phases in liquid chromatography separations 986(2003)17

Comparison of the acidity of residual silanol groups in several liquid chromatography columns 986(2003)33

Study of tryptophan enantiomer binding to a teicoplanin-based stationary phase using the perturbation technique. Investigation of the role of sodium perchlorate in solute retention and enantioselectivity 986(2003)45

Cholesterol bonded phase as a separation medium in liquid chromatography. Evaluation of properties and applications 986(2003)253

Studies on the separation of hydronium ion using surfactantmodified reversed-phase stationary phases and eluents containing an acidified electrolyte 986(2003)263

# Stir bar sorptive extraction

Determination of stale-flavor carbonyl compounds in beer by stir bar sorptive extraction with in-situ derivatization and thermal desorption–gas chromatography–mass spectrometry 986(2003)101

# Supercritical fluid chromatography

Anomalous effects of helium head pressure carbon dioxide in supercritical fluid chromatography and extraction 986(2003)129 Separation of triadimefon and triadimenol enantiomers and diastereoisomers by supercritical fluid chromatography 986(2003)135

# Supercritical fluid extraction

Anomalous effects of helium head pressure carbon dioxide in supercritical fluid chromatography and extraction 986(2003)129

Determination of total petroleum hydrocarbons in soil by dynamic on-line supercritical fluid extraction with infrared photometric detection 986(2003)319

## Surfactants

Simultaneous extraction of di(2-ethylhexyl) phthalate and nonionic surfactants from house dust. Concentrations in floor dust from 15 Danish schools 986(2003)179

## Teicoplanin

Study of tryptophan enantiomer binding to a teicoplanin-based stationary phase using the perturbation technique. Investigation of the role of sodium perchlorate in solute retention and enantioselectivity 986(2003)45

## **Temperature effects**

Retention mechanism of poly(ethylene oxide) in reversed-phase and normal-phase liquid chromatography 986(2003)191

Retention mechanism of fatty alcohol ethoxylates in reversedphase liquid chromatography 986(2003)199

# Thermal desorption

Determination of stale-flavor carbonyl compounds in beer by stir bar sorptive extraction with in-situ derivatization and thermal desorption–gas chromatography–mass spectrometry 986(2003)101

#### Thermodynamic parameters

Comparison of the differential isosteric adsorption enthalpies and entropies calculated from chromatographic data 986(2003)89

# Triadimefon

Separation of triadimefon and triadimenol enantiomers and diastereoisomers by supercritical fluid chromatography 986(2003)135

#### Triadimenol

Separation of triadimefon and triadimenol enantiomers and diastereoisomers by supercritical fluid chromatography 986(2003)135

# **Trypsin** inhibitor

Hydrophobicity gradient columns for the separation of trypsin inhibitor by hydrophobic interaction chromatography at low salt concentration 986(2003)83

# Tryptophan

Study of tryptophan enantiomer binding to a teicoplanin-based stationary phase using the perturbation technique. Investigation of the role of sodium perchlorate in solute retention and enantioselectivity 986(2003)45

# Verbascoside

Separation and determination of phenylpropanoid glycosides from *Pedicularis* species by capillary electrophoresis 986(2003)163

# Vitamins

Simultaneous determination of water-soluble vitamins in a vitamin-enriched drink by an in-capillary enzyme reaction method 986(2003)153

# Water analysis

Conductive polymers as new media for solid-phase extraction: Isolation of chlorophenols from water sample 986(2003)111