

**Cover image caption:** Mass spectrometry will play an important role in the future success of the cannabis industry, see page 719.

**ASMS NEWS & VIEWS**

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ASMS News & Views  
Edited by Gavin Reid

**CRITICAL INSIGHT**

**719–730**

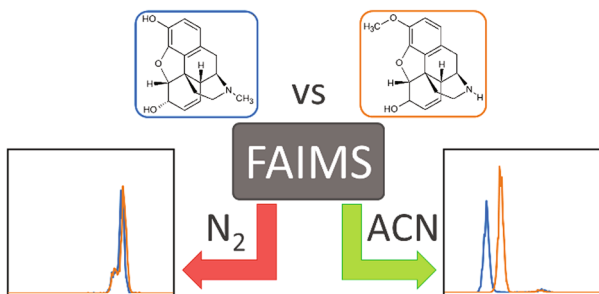
The Role of Mass Spectrometry  
in the Cannabis Industry  
B. Nie, J. Henion, and I. Ryona



**RESEARCH ARTICLES**

**731–742**

Effects of Solvent Vapor Modifiers  
for the Separation of Opioid Isomers  
in Micromachined FAIMS-MS  
M.S. Wei, R.H.J. Kemperman,  
and R.A. Yost



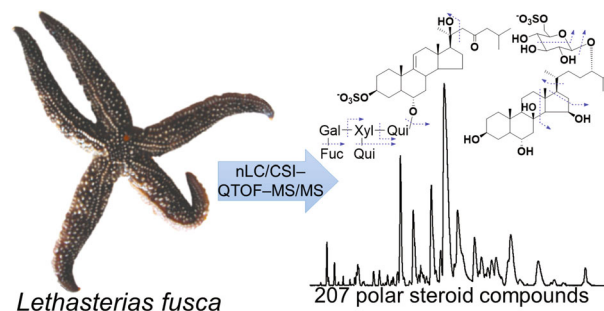
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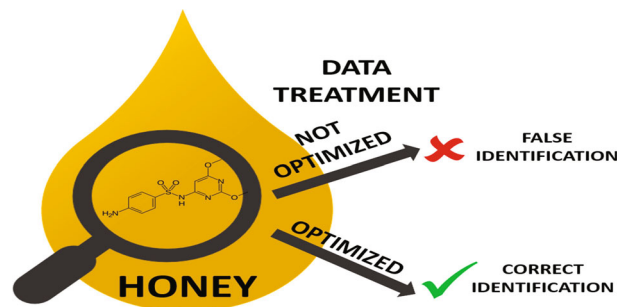
## 743–764

Structural Characterization of Polar Steroid Compounds of the Far Eastern Starfish *Lethasterias fusca* by Nanoflow Liquid Chromatography Coupled to Quadrupole Time-of-Flight Tandem Mass Spectrometry  
R.S. Popov, N.V. Ivanchina, A.A. Kicha, T.V. Malyarenko, and P.S. Dmitrenok



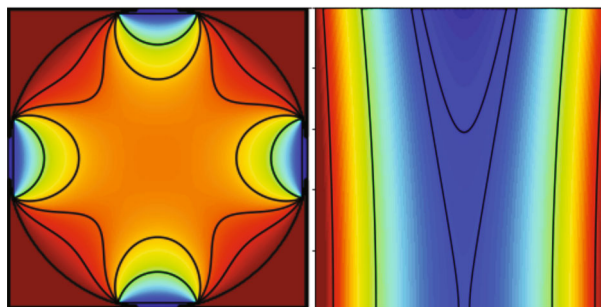
## 765–777

Optimization of the Data Treatment Steps of a Non-targeted LC-MS-Based Workflow for the Identification of Trace Chemical Residues in Honey  
A. von Eyken and S. Bayen



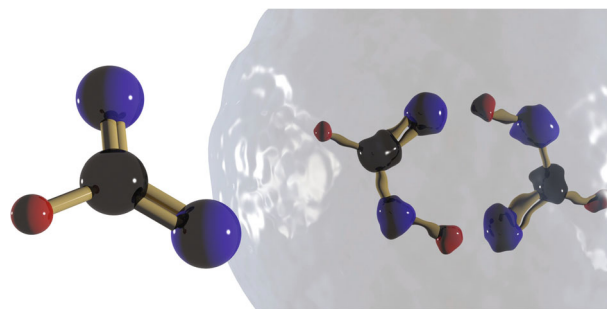
## 778–786

Analytical Solution for the Electric Field Inside Dynamically Harmonized FT-ICR Cell  
A. Lioznov, G. Baykut, and E. Nikolaev



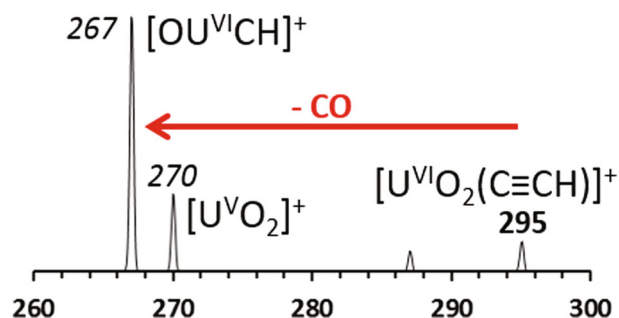
## 787–795

Electron Attachment and Electron Ionization of Formic Acid Clusters Embedded in Helium Nanodroplets  
M. Mahmoodi-Darian, L. Lundberg, S. Zöttl, P. Scheier, and O. Echt



## 796–805

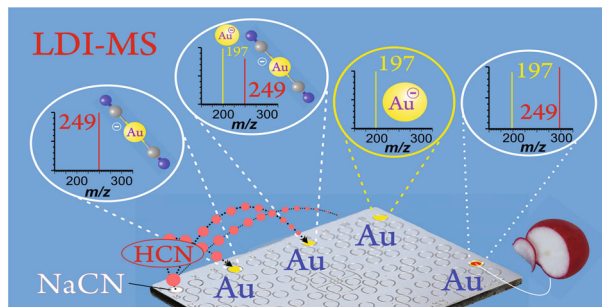
Gas-Phase Deconstruction of  $\text{UO}_2^{2+}$ : Mass Spectrometry Evidence for Generation of  $[\text{OU}^{\text{VI}}\text{CH}]^+$  by Collision-Induced Dissociation of  $[\text{U}^{\text{VI}}\text{O}_2(\text{C}\equiv\text{CH})]^+$   
M.J. van Stipdonk, I.J. Tatosian, A.C. Iacovino, A.R. Bubas, L.J. Metzler, M.C. Sherman, and A. Somogyi



806–813

Gold Nanoparticles (AuNPs) as Reactive Matrix for Detection of Trace Levels of HCN in Air by Laser Desorption/Ionization Mass Spectrometry (LDI-MS)

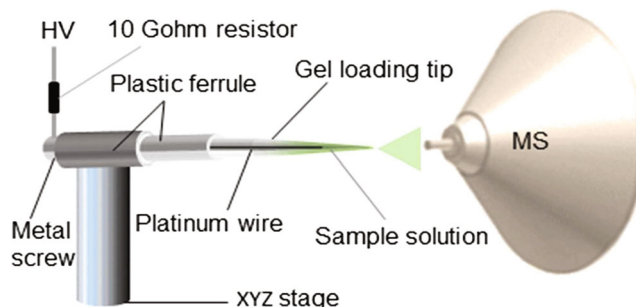
J. Pavlov and A.B. Attygalle



814–823

Direct Analysis of Aqueous Solutions and Untreated Biological Samples Using Nano-electrospray Ionization Mass Spectrometry with Pipette Tip in Series with High-Ohmic Resistor as Ion Source

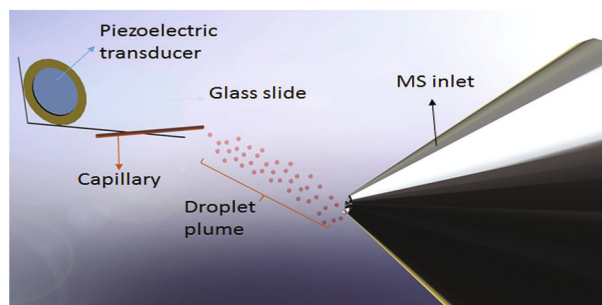
M. Rahman, D. Wu, and K. Chingin



824–831

Capillary Vibrating Sharp-Edge Spray Ionization (cVSSI) for Voltage-Free Liquid Chromatography-Mass Spectrometry

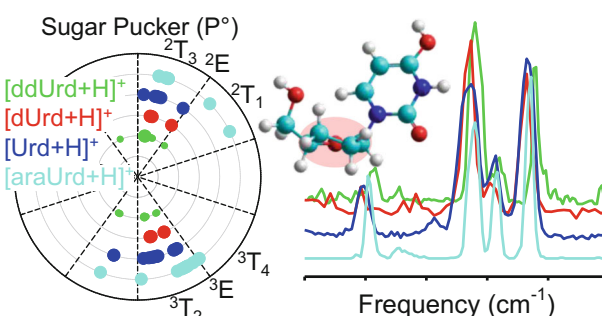
N. Ranganathan, C. Li, T. Suder, A.K. Karanji, X. Li, Z. He, S.J. Valentine, and P. Li



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Impact of the 2'- and 3'-Sugar Hydroxyl Moieties on Gas-Phase Nucleoside Structure

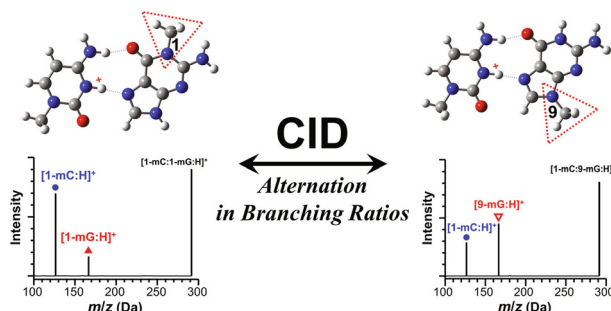
L.A. Hamlow, Z.J. Devereaux, H.A. Roy, N.A. Cunningham, G. Berden, J. Oomens, and M.T. Rodgers



846–854

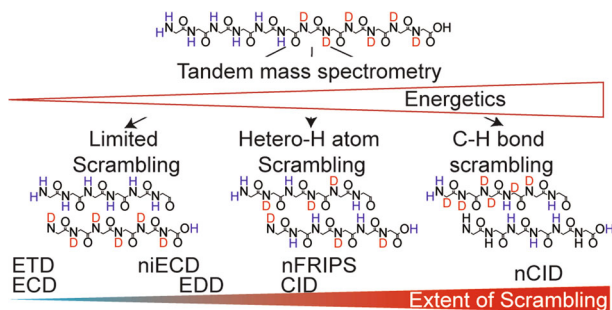
Alternated Branching Ratios by Anomaly in Collision-Induced Dissociation of Proton-Bound Hoogsteen Base Pairs of 1-Methylcytosine with 1-Methylguanine and 9-Methylguanine

J.J. Park and S.Y. Han



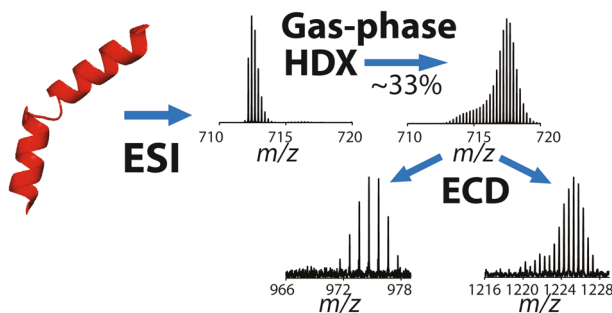
855–863

Gas-Phase Hydrogen/Deuterium Scrambling in Negative-Ion Mode Tandem Mass Spectrometry  
 Q. Wang, N.B. Borotto, and K. Håkansson



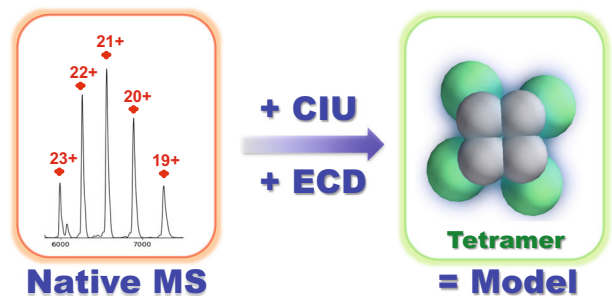
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Hydrogen-Deuterium Exchange and Electron Capture Dissociation to Interrogate the Conformation of Gaseous Melittin Ions  
 R.N. Straus and R.A. Jockusch



876–885

Native Mass Spectrometry, Ion Mobility, Electron-Capture Dissociation, and Modeling Provide Structural Information for Gas-Phase Apolipoprotein E Oligomers  
 H. Wang, J. Eschweiler, W. Cui, H. Zhang, C. Frieden, B.T. Ruotolo, and M.L. Gross



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Generation of Charge-Reduced Ions of Membrane Protein Complexes for Native Ion Mobility Mass Spectrometry Studies  
 J.W. Patrick and A. Laganowsky

