

List of Publications of Jean H. Futrell

Books

Gaseous Ion Chemistry, J.H. Futrell, Ed., John Wiley Interscience, New York, 1986.

Invited Book Chapters

1. "Fundamental Studies of Collision-Induced Dissociation of Ions," in *Experimental Mass Spectrometry*, D.H. Russell, Ed., Plenum Publishing Corp., New York, 1994, pp. 71–112.
2. "Crossed-Molecular Beam Studies of State-to-State Reaction Dynamics," J.H. Futrell, in *State-Selected and State-to-State Reaction Dynamics, Part 1: Experiment*, C.-Y. Ng and M. Baer, Eds., John Wiley-Interscience, New York, 1992.
3. "Crossed-Molecular Beam Studies of Charge Transfer Reactions at Low and Intermediate Energy," in *Structure/Reactivity and Thermochemistry of Ions*, P. Ausloos and G.S. Lias, Eds., D. Reidel Publishing Company, Dordrecht, Holland, 1987.
4. "Pyrolysis Mass Spectrometry Studies of Oil Shales and Kerogens," H.L.C. Meuzelaar, W. Windig, A.M. Harper, and J.H. Futrell, in *Characterization of Shale Oils*, T. Axal, Ed., ASTM Special Publication, 1985.
5. "State-to-State Reaction Dynamics," J.H. Futrell, in *Gaseous Ion Chemistry*, J.H. Futrell, Ed., John Wiley-Interscience, New York, 1985.
6. "Beam Methods," J.H. Futrell, in *Gaseous Ion Chemistry*, J.H. Futrell, Ed., John Wiley-Interscience, New York, 1985.
7. "Ion Cyclotron Resonance," J.H. Futrell, in *Gaseous Ion Chemistry*, J.H. Futrell, Ed., John Wiley-Interscience, New York, 1985.
8. "Mass Spectrometry Applications," J.H. Futrell, in *Electron Impact Ionization*, T.D. Märk and G.H. Dunn, Eds., Springer-Verlag, Wien and New York, 1985.
9. "Safe Handling of Toxic Chemicals: Perspectives of a Bench Chemistry and Laboratory Manager," J.H. Futrell, in *Human and Environmental Risks of Chlorinated Dioxins and Related Compounds*, R.E. Tucker, A.L. Young, and A.P. Gray, Eds., Plenum Press, New York, NY, 1983.
10. "A Tandem Ion Cyclotron Resonance Study of the Reaction of N₂⁺ With SO₂," J.H. Futrell and R.G. Orth, in *Ion*

Cyclotron Resonance II, H. Hartmann and K.-P. Wanczek, Eds., Lecture Notes in Chemistry Series 31, Springer-Verlag, Berlin, Heidelberg and New York, 1982.

11. "Comparison of the Thermal Degradation Products of α -cellulose and Douglas Fir Under Inert and Oxidative Environments," J.D. Hileman, L.H. Wojcik, J.H. Futrell, and I.N. Einhorn, in *Thermal Uses and Properties of Carbohydrates and Lignins*, F. Shafizadeh, K.V. Sarkanen, and D.A. Tillman, Eds., Academic Press, New York, NY, 1976.
12. "New Instrumentation for the Study of Ion Molecule Reactions," J.H. Futrell, in *Interactions Between Ions and Molecules*, P. Ausloos, Ed., Plenum Press, New York, NY, 1975.
13. "Ion-Molecule Reactions," J.H. Futrell, in *Advances in Radiation Research*, Duplan and Chapiro, Eds., Science Publishers, Ltd., London, 1973.
14. "Ion Cyclotron Resonance," J.H. Futrell, in *Dynamic Mass Spectrometry*, Dennis Price, Ed., Heydon and Sons, Ltd., London, 1972.
15. "Ion-Molecule Reactions in a Tandem Mass Spectrometer," J.H. Futrell, in *Ion-Molecule Reactions*, J.L. Franklin, Ed., Plenum Publishing Corp., New York, NY, 1972.
16. "Ion-Molecule Reactions," J.H. Futrell and T.O. Tiernan, in *Fundamental Processes of Radiation Chemistry*, P.J. Ausloos, Ed., John Wiley & Sons, Inc., New York, NY, 1968.
17. "Radiation Chemistry of Propane," L.I. Bone and J.H. Futrell, in *The Chemistry of Ionization and Excitation*, G.R.A. Johnson and G. Scholes, Eds., Taylor and Francis, Ltd., London, 1967.
18. "Effect of Translational Energy on Ion-Molecule Reaction Rates," J.H. Futrell and F.P. Abramson, in *Ion Molecule Reactions in the Gas Phase*, R.F. Gould, Ed., American Chemical Society Publications, Washington, DC, 1966.

Book Reviews

Mass Spectrometry/Mass Spectrometry: Techniques and Applications of Tandem Mass Spectrometry, by Kenneth L. Bush, Gary L. Glish, and Scott A. McLuckey. *Microchemical Journal*, 41, 246 (1990).

Journal Articles

1. “Soft-Landing of Peptides onto Self-Assembled Monolayer Surfaces” J. Alvarez, J.H. Futrell and J. Laskin, *Journal of Physical Chemistry A*, 110, 1678–1687 (Feb 2006)
2. “Protein Identification via Surface-induced Dissociation in an FT-ICR Mass Spectrometer and a Patchwork Sequencing Approach,” F.M. Fernandez, V.H. Wysocki, J.H. Futrell and J. Laskin, *Journal of the American Society for Mass Spectrometry*, 17, 700–709. (2006).
3. “Mechanisms of Peptide Fragmentation from Time-and-Energy-Resolved Surface-Induced Dissociation Studies: Dissociation of Angiotensin Analogs”, J. Laskin, T.H. Bailey and J.H. Futrell, *International Journal of Mass Spectrometry*, Chava Lifshitz Memorial Issue, 249–250 (2006), 462–472 (Dec 2005)
4. “Preparation and In Situ Characterization of Surfaces Using Soft Landing in a Fourier Transform Ion Cyclotron Resonance Mass Spectrometer,” J. Alvarez, R.G. Cooks, S.E. Barlow, D.J. Gaspar, J.H. Futrell, and J. Laskin, *Analytical Chemistry* 77(11):3452–3460 (2005).
5. “Activation of Large Ions in FT-ICR Mass Spectrometry,” J. Laskin and J.H. Futrell, *Mass Spectrometry Reviews* 24(2):135–167 (2005).
6. “An Autobiography,” J.H. Futrell, *European Journal of Mass Spectrometry* 10(2):141–146 (2004).
7. “Fragmentation Energetics for Angiotensin II and Its Analogs from Time-and-Energy-Resolved Surface-Induced Dissociation Studies,” J. Laskin, T.H. Bailey, and J.H. Futrell, *International Journal of Mass Spectrometry* 234(1–3):89–99 (2004).
8. “Surface-Induced Dissociation of Ions Produced by Matrix-Assisted Laser Desorption Ionization in a Fourier Transform Ion Cyclotron Resonance Mass Spectrometer,” J. Laskin, K.M. Beck, J.J. Hache, and J.H. Futrell, *Analytical Chemistry* 76(2):351–356 (2004).
9. “Relative Proton Affinities from Kinetic Energy Release Distributions for Dissociation of Proton-Bound Dimers: 2. Diamines as a Test Case,” J.J. Hache, J.H. Futrell, and J. Laskin, *International Journal of Mass Spectrometry* 233:223–231 (2004).
10. Surface-Induced Dissociation of Peptide Ions: Kinetics and Dynamics,” J. Laskin, J.H. Futrell, and A.K. Shukla, *Journal of the American Society for Mass Spectrometry* 14(12):1340–1347 (2003).
11. “Entropy is the Major Driving Force for Fragmentation of Proteins and Protein-Ligand Complexes in the Gas Phase,” J. Laskin and J.H. Futrell, *Journal of Physical Chemistry A* 107:5836–5839 (2003).
12. “Energy Transfer in Collisions of Peptide Ions with Surfaces,” J. Laskin and J.H. Futrell, *Journal of Chemical Physics* 119(6):3413–3420 (2003).
13. “Shattering of Peptide Ions on Self-Assembled Monolayer Surfaces,” J. Laskin, T. Bailey, and J.H. Futrell, *Journal of the American Chemical Society* 125(6):1625–1632 (2003).
14. “Surface-Induced Dissociation of Acetone Cations from Self-Assembled Monolayer Surface of Fluorinated Alkyl Thiol on Au (111) Substrate at Low Collision Energies,” A.K. Shukla and J.H. Futrell, *International Journal of Mass Spectrometry* 228(2–3):563–576 (2003).
15. “Dynamics of Hyperthermal Energy Ion-Surface Collisions: Dissociative and Non-Dissociative Scattering of Ethanol Cations from a Self-Assembled Monolayer Surface of Fluorinated Alkyl Thiol on Au (111),” A.K. Shukla and J.H. Futrell, *International Journal of Mass Spectrometry* 223(1–3):783–801 (2003). “Collisional Activation of Peptide Ions in FT-ICR Mass Spectrometry,” J. Laskin and J.H. Futrell, *Mass Spectrometry Review* 22:158–181 (2003).
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18. “A Beam Scattering Instrument for the Dynamics Studies of Surface-Induced Dissociation Processes,” A.K. Shukla and J.H. Futrell, *Review of Scientific Instruments*, 74(1):168–175 (2003).
19. “Energetics of Selective Cleavage at Acidic Residues Studied by Time-and-Energy-Resolved Surface-Induced Dissociation in FT-ICR-MS,” T.H. Bailey, J. Laskin, and J.H. Futrell, *International Journal of Mass Spectrometry* 222(1–3):313–327 (2003).
20. “Fragmentation Energetics of Small Peptides from Multiple-Collision Activation and Surface-Induced Dissociation in FT-ICR MS,” J. Laskin, E.V. Denisov, and J.H. Futrell, *International Journal of Mass Spectrometry* 219:189–201 (2002).
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24. “Surface Induced Dissociation of the Benzene Molecular Cation,” E.V. Denisov, J. Laskin, and J.H. Futrell, *Journal of Physical Chemistry A*, 106(12):2781–2788 (2001).
25. “Surface-Induced Dissociation of Chromium Hexacarbonyl Ion on Fluorinated Alkanethiolate Surface in Ion Cyclotron Resonance Mass Spectrometer: Studies of Energetics of the Process Using Recursive Internal Energy Distribution Search Method,” V.S. Rakov, E.V. Denisov,

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26. “A Comparative Study of Collision-Induced and Surface-Induced Dissociation. II. Fragmentation of Small Alanine-Containing Peptides in FT-ICR MS,” J. Laskin, E.V. Denisov, and J.H. Futrell, *Journal of Physical Chemistry B* 105(9):1895–1900 (2001).
 27. “Energy Transfer, Scattering and Dissociation in Ion Atom Collisions: CS₂+AR,” R.E. Tosh, A.K. Shukla, and J.H. Futrell, *Journal of Chemical Physics* 114(7):2986–2992 (2001).
 28. “Simulation-Based Optimization of the Electrodynamic Ion Funnel for High Sensitivity Electrospray Ionization-Mass Spectrometry,” A.V. Tolmachev, T. Kim, H.R. Udseth, R.D. Smith, T.H. Bailey, and J.H. Futrell, *International Journal of Mass Spectrometry* 203(1–3):31–47 (2000).
 29. “Development of Tandem Mass Spectrometry: One Perspective,” J.H. Futrell, *International Journal of Mass Spectrometry* 200(1–3):495–508 (2000).
 30. “Collision-Induced Dissociation of Nitrobenzene Molecular Cations at Low Energies by Crossed-Beam Tandem Mass Spectrometry,” R. Chawla, A. Kl Shukla, and J.H. Futrell, *Journal of Physical Chemistry A* 105(2):349–353 (2000).
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 35. “Design and Implementation of a New Electrodynamic Ion Funnel,” T. Kim, A.V. Tolmachev, R. Harkewicz, D.C. Prior, G.A. Anderson, H.R. Udseth, R.D. Smith, T.H. Bailey, V.S. Rakov, and J.H. Futrell, *Analytical Chemistry* 72:2247–2255 (2000).
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Unreferred Publications

1. "Mechanisms of Peptide Fragmentation from Time-and Energy-Resolved Surface-Induced Dissociation Studies," Julia Laskin, Thomas H. Bailey, and Jean H. Futrell. ASMS Proceedings 53rd ASMS Conference on Mass Spectrometry and Allied Topics, June 5–8, 2005, San Antonio, Texas.
2. "Collisions of Peptide Ions with Surfaces Studied Using FT-ICR MS," Julia Laskin, Jean H. Futrell, S. E. Barlow, Jormarie Alvarez and R. Graham Cooks. ASMS Proceedings 53rd ASMS Conference on Mass Spectrometry and Allied Topics, June 5–8, 2005, San Antonio, Texas.
3. "Protein Identification in a Fourier Transform Ion cyclotron Resonance Mass Spectrometer Combining SORI-CID and SID Ion Activation," Facundo M. Fernandez, Julia Laskin, Jean H. Futrell, and Vicki H. Wysocki. ASMS Proceedings 52nd ASMS Conference on Mass Spectrometry and Allied Topics, May 23–27, 2004, Nashville, Tennessee.
4. "Novel Techniques for Studying Ion-surface Interactions in FT-ICR MS," Julia Laskin, Jormarie Alvarez, R. Graham Cooke, Stephan E. Barlow, and Jean H. Futrell, ASMS Proceedings 52nd ASMS Conference on Mass Spectrometry and Allied Topics, May 23–27, 2004, Nashville, Tennessee.
5. "Fragmentation Energetics for Protonated Peptides from Time-and-Energy-Resolved Surface-Induced Dissociation Studies," Julia Laskin, Thomas H. Bailey, and Jean. Futrell. ASMS Proceedings 52nd ASMS Conference on Mass Spectrometry and Allied Topics, May 23–27, 2004, Nashville, Tennessee.
6. "Entropy Effects in the Gas Phase Dissociation of Peptides and Proteins," Julia Laskin and Jean H. Futrell. Euresco Conference "Molecules of Biological Interest in the Gas Phase," Exeter, April 13–18, 2004, United Kingdom.
7. "Protein Identification in a Fourier Transform Ion Cyclotron Resonance Mass Spectrometer Combining SORI-CID and SID Ion Activation," Facundo M. Fernandez, Julia Laskin, Jean H. Futrell, and Vicki H. Wysocki, ASMS Proceedings 51st ASMS Conference on Mass Spectrometry and Allied Topics, June 8–12, 2003, Montreal, Quebec, Canada.
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9. "Effect of the Surface on the Energy Transfer in Ion-Surface Collisions," Julia Laskin and Jean H. Futrell, ASMS Proceedings 51st ASMS Conference on Mass Spectrometry and Allied Topics, June 8–12, 2003, Montreal, Quebec, Canada.
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12. "Surface-Induced Dissociation and Scattering of Acetone Cations at Low Energies," Anil K. Shukla and Jean H. Futrell, ASMS Proceedings 50th ASMS Conference on Mass Spectrometry and Allied Topics, June 2–6, 2002, Orlando, Florida.
13. "Energetics and Mechanisms of Peptide Fragmentation From Surface-Induced Dissociation Studies Julia Laskin, Thomas H. Bailey, and Jean H. Futrell, ASMS Proceedings 50th ASMS Conference on Mass Spectrometry and Allied Topics, June 2–6, 2002, Orlando, Florida.
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