

List of publications Jochen Mikosch (4/2009):¹

in press

- *R. Otto, P. Hlavenka, S. Trippel, J. Mikosch, M. Weidemüller, and R. Wester*
How can a 22-pole ion trap exhibit 10 local minima in the effective potential?
J. Phys. B, special issue “Modern Applications of Trapped Ions” (in press)

2009

- *P. Hlavenka, R. Otto, S. Trippel, J. Mikosch, M. Weidemüller, and R. Wester*
Absolute photodetachment cross section measurements of the O⁻ and OH⁻ anion
J. Chem. Phys. Communications **130**, 061105-1 - 061105-4 (2009)

2008

- * *J. Mikosch, R. Otto, S. Trippel, C. Eichhorn, M. Weidemüller, and R. Wester*
Inverse temperature dependent lifetimes of transient S_N2 ion-dipole complexes
J. Phys. Chem. A **112**, 10448-10452 (2008)
- * *J. Mikosch, U. Frühling, S. Trippel, R. Otto, P. Hlavenka, D. Schwalm, M. Weidemüller, and R. Wester*
Evaporation of trapped anions studied with a 22-pole ion trap in tandem time-of-flight configuration
Phys. Rev. A **78**, 023402-1 - 023402-13 (2008)
- * *R. Otto, J. Mikosch, S. Trippel, M. Weidemüller, and R. Wester*
Nonstandard behavior of a negative ion reaction at very low temperatures
Phys. Rev. Lett. **101**, 063201-1 - 063201-4 (2008)
(reprint provided)
- *M. Debatin, M. Kröner, J. Mikosch, S. Trippel, N. Morrison, M. Reetz-Lamour, P. Woias, R. Wester, and M. Weidemüller*
Planar multipole ion trap
Phys. Rev. A **77**, 033422-1 - 033422-6 (2008)

¹Publications marked as * are (in parts) covered in my PhD thesis.

- * *J. Mikosch, S. Trippel, C. Eichhorn, R. Otto, U. Lourderaj, J. X. Zhang, W. L. Hase, M. Weidemüller, and R. Wester*
Imaging nucleophilic substitution dynamics
Science 319, 183-186 (2008)
(reprint provided)

2007

- *S. D. Kraft, J. Mikosch, P. Staantum, J. Deiglmayr, J. Lange, A. Fioretti, R. Wester, and M. Weidemüller*
A high resolution time-of-flight mass spectrometer for the detection of ultracold molecules
Appl. Phys. B 90, 453-457 (2007)
- * *J. Mikosch, U. Frühling, S. Trippel, D. Schwalm, M. Weidemüller, and R. Wester*
Evaporation of buffer gas-thermalized anions out of a multipole rf ion trap
Phys. Rev. Lett. **98**, 223001-1 - 223001-4 (2007)

2006

- * *S. Trippel, J. Mikosch, R. Berhane, R. Otto, M. Weidemüller, and R. Wester*
Photodetachment of cold OH⁻ in a multipole ion trap
Phys. Rev. Lett. **97**, 193003-1 - 193003-4 (2006)
(see also Erratum: Phys. Rev. Lett. **100**, 219901(E) (2008))
- *A. Wolf, H. Kreckel, L. Lammich, D. Strasser, J. Mikosch, J. Glosík, R. Plašil, S. Altevogt, V. Andrianarijaona, H. Buhr, J. Hoffmann, M. Lestinsky, I. Nevo, S. Novotny, D. A. Orlov, H. B. Pedersen, A. S. Terekhov, J. Toker, R. Wester, D. Gerlich, D. Schwalm, and D. Zajfman,*
Effects of molecular rotation in low-energy electron collisions of H₃⁺
Phil. Trans. R. Soc. A 364, 2981 - 2997 (2006)
- * *J. Mikosch, U. Frühling, S. Trippel, D. Schwalm, M. Weidemüller, and R. Wester*
Velocity map imaging of ion-molecule reactive scattering: The Ar⁺ + N₂ charge transfer reaction
Phys. Chem. Chem. Phys. 8, 2990 - 2999 (2006)
(selected as Hot Topic Article)

2005

- *H. Kreckel, M. Motsch, J. Mikosch, J. Glosík, R. Plašil, S. Altevogt, V. Andrianarijaona, H. Buhr, J. Hoffmann, L. Lammich, M. Lestinsky, I. Nevo, S. Novotny, D. A. Orlov, H. B. Pedersen, F. Sprenger, A. S. Terekhov, J. Toker, R. Wester, D. Gerlich, D. Schwalm, A. Wolf, and D. Zajfman,*
High-resolution dissociative recombination of cold H_3^+ and first evidence for nuclear spin effects
Phys. Rev. Lett. **95**, 263201-1 - 263201-4 (2005)

2004

- * *J. Mikosch, H. Kreckel, R. Wester, R. Plašil, J. Glosík, D. Gerlich, D. Schwalm, and A. Wolf*
Action spectroscopy and temperature diagnostics of H_3^+ by chemical probing
J. Chem. Phys. **121**, 11030 - 11037 (2004)
(reprint provided)

Conference proceedings:

- * *J. Mikosch, S. Trippel, R. Otto, C. Eichhorn, P. Hlavenka, M. Weidemüller, and R. Wester*
Kinematically complete reaction dynamics of slow ions
Journal of Physics: Conference Series (ICPEAC 2007) 88, 012025-1 - 012025-7 (2007)
- *H. Kreckel, A. Petrigiani, M. Berg, D. Bing, S. Reinhardt, S. Altevogt, H. Buhr, M. Froese, J. Hoffmann, B. Jordon-Thaden, C. Krantz, M. Lestinsky, M. Mendes, O. Novotny, S. Novotny, H. B. Pedersen, D. A. Orlov, J. Mikosch, R. Wester, R. Plašil, J. Glosík, D. Schwalm, D. Zajfman and A. Wolf,*
Electron collisions and rovibrational action spectroscopy of cold H_3^+ molecules
Journal of Physics: Conference Series (ICPEAC 2007) 88, 012064-1 - 012064-8 (2007)
- *M. Kröner, M. Debatin, J. Mikosch, S. Trippel, E. Just, M. Reetz-Lamour, R. Wester, M. Weidemüller, and P. Woias*
Simulation, design, and test of a novel planar rf micro ion trap
Proceedings of the Transducers and Eurosensors '07, pp. 1665 - 1668
- *H. Kreckel, J. Mikosch, R. Wester, J. Glosík, R. Plašil, M. Motsch, D. Gerlich, D. Schwalm, and A. Wolf*
Towards state selective measurements of the H_3^+ dissociative recombination rate coefficient
Journal of Physics: Conference Series **4**, 126 - 133 (2005)