

Publikations- und Vortragsliste

Im Zusammenhang mit dieser Arbeit stehen folgende Publikationen:

- 1) P. Farmanara, V. Stert, and W. Radloff
'Ultrafast internal conversion and fragmentation in electronically excited C₂H₄ and C₂H₃Cl molecules'
Chem. Phys. Lett. **288** (1998), 518-522.
- 2) W. Radloff, P. Farmanara, V. Stert, E. Schreiber, and J. R. Huber
'Ultrafast photodissociation dynamics of electronically excited CF₂I₂ molecules'
Chem. Phys. Lett. **291** (1998), 173-178.
- 3) V. Stert, W. Radloff, P. Farmanara, H.-H. Ritze, I. V. Hertel
'Analysis of the femtosecond time-resolved photoelectron spectra of the ammonia dimer excited to the \tilde{A} state'
Ultrafast Phenomena XI, T. Elsaesser, J.G. Fujimoto, D.A. Wiersma, and W. Zinth (Eds.), Springer Verlag Heidelberg (1998), 479-481.
- 4) V. Stert, P. Farmanara, W. Radloff, F. Noack, S. Skowronek, J. Jimenez, A. Gonzalez-Urena
'Real-time study of the femtosecond harpooning reaction of Ba...FCH₃'
Physical Review A, RC 59, **3** (1999), R1727-1730.
- 5) P. Farmanara, V. Stert, W. Radloff
'Ultrafast photodissociation of methyl nitrite excited to the S₂ state'
Chem. Phys. Lett. **303** (1999), 521-525.
- 6) W. Radloff, P. Farmanara, V. Stert, E. Schreiber, J. R. Huber
'Ultrafast photodissociation dynamics in electronically excited CF₂I₂ molecules'
Eur. Phys. J. D **9** (1999), 405-406.
- 7) P. Farmanara, V. Stert, W. Radloff, E. Schreiber, J. R. Huber
'Femtosecond photodissociation dynamics of CF₂I₂ at 267 nm'

Lasers '98, V. J. Corcoran and T. A. Goldman (eds.), Soc. Opt.&Quant. Electr., STS Press, McLean, VA, (1999), 72-77.

8) P. Farmanara, W. Radloff, V. Stert, H.-H. Ritze, I. V. Hertel
'Real-time observation of hydrogen transfer: Femtosecond time-resolved photoelectron spectroscopy in excited ammonia dimer'
J. Chem. Phys. **111** (1999), 633-642.

9) P. Farmanara, V. Stert, W. Radloff, S. Skowronek, A. Gonzalez-Urena
'Ultrafast dynamics and energetics of the intracuster harpooning reaction in Ba...FCH₃'
Chem. Phys. Lett. **304** (1999), 127-133.

10) P. Farmanara, V. Stert, W. Radloff
'Ultrafast predissociation and coherent phenomena in CS₂ excited by femtosecond laser pulses at 194...207nm'
J. Chem. Phys. **111** (1999), 5338-5343.

11) P. Farmanara, O. Steinkellner, M. Wick, M. Wittmann, G. Korn, V. Stert, W. Radloff
'Ultrafast internal conversion and photodissociation of molecules excited by femtosecond 155nm laser pulses'
J. Chem. Phys. **111** (1999), 6264-6270.

12) P. Farmanara, H.-H. Ritze, V. Stert, W. Radloff
'Vibrational wave packet motion in I₂ excited with femtosecond pulses in the 200nm wavelength region'
Chem. Phys. Lett. **307** (1999), 1-7.

13) P. Farmanara, V. Stert, H.-H. Ritze, and W. Radloff
'Excited ammonia cluster dynamics controlled by time-delayed femtosecond laser pulses'
Proceedings of TSRP-2000 (2000), IT27.

14) P. Farmanara, V. Stert, W. Radloff

'Ultrafast photodissociation dynamics of acetone excited by femtosecond 155nm laser pulses'

Chem. Phys. Lett. **320** (2000), 697-702.

15) M. Wittmann, M. T. Wick, O. Steinkellner, P. Farmanara, V. Stert, W. Radloff, G. Korn, and I. V. Hertel

'Generation of femtosecond VUV pulses and their application to time resolved spectroscopy in the gas phase'

Opt. Comm. **173** (2000), 323-331.

16) V. Stert, P. Farmanara, W. Radloff

'Electron configuration changes in excited pyrazine molecules analysed by femtosecond time resolved photoelectron spectroscopy'

J. Chem. Phys. **112** (2000), 4460-4464.

17) P. Farmanara, V. Stert, H.-H. Ritze, W. Radloff

'Analysis of the ultrafast photodissociation of electronically excited CF_2I_2 molecules by femtosecond time-resolved photoelectron spectroscopy'

J. Chem. Phys. **113** (2000), 1705-1713.

18) P. Farmanara, V. Stert, H.-H. Ritze, and W. Radloff

'Change of ammonia cluster dynamics by a femtosecond infrared control pulse'

Ultrafast Phenomena XII, T. Elsaesser, J.G. Fujimoto, D.A. Wiersma, and W. Zinth (Eds.), Springer Verlag Heidelberg (2000), 341.

19) V. Stert, H.-H. Ritze, P. Farmanara, F. Tschirschwitz, E. T. J. Nibbering, and W. Radloff

'Ultrafast dynamics in ClO_2 and $\text{ClO}_2(\text{H}_2\text{O})_n$ excited at 398nm'

Ultrafast Phenomena XII, T. Elsaesser, J.G. Fujimoto, D.A. Wiersma, and W. Zinth (Eds.), Springer Verlag Heidelberg (2000), 630.

20) I. V. Hertel, C. Bobbert, C. P. Schulz, P. Farmanara, H.-H. Ritze, V. Stert, and W. Radloff

'Clusters with polar molecules: Ultrafast dynamics, time resolved photoelectron spectroscopy and femtosecond control'

Proceedings of the 17th Nobel Symposium in Cluster Physics, E.E.B. Campbell, M. Larson, A. Rosen (Eds.), World Scientific (Singapore, New Jersey, London, Hong Kong).

21) V. Stert, H.-H. Ritze, P. Farmanara, and W. Radloff

'Mechanism of the laser initiated ultrafast intracuster reaction in Ba...FCH₃ and Ba...FCD₃'

Submitted to PhysChemPhys..

22) P. Farmanara, V. Stert, H.-H. Ritze, W. Radloff, and I.V. Hertel

'Ultrafast internal conversion of highly excited toluene monomers and dimers'

J. Phys. Chem., accepted.

23) P. Farmanara, V. Stert, H.-H. Ritze, W. Radloff, and I.V. Hertel

'Control of the fragmentation of excited ammonia cluster dynamics by femtosecond infrared laser pulses'

J. Chem. Phys., accepted.

24) V. Stert, H.-H. Ritze, P. Farmanara, and W. Radloff

'Femtosecond time-resolved electron spectroscopy of the intracuster reaction in Ba...FCH₃'
Chem. Phys. Lett. **337** (2001), 299-305.

25) P. Farmanara, H.-H. Ritze, V. Stert, W. Radloff, and I.V. Hertel

'Ultrafast photodissociation dynamics and energetics of the electronically excited H atom transfer state of the ammonia dimer and trimer'

Submitted to J. Chem. Phys..

26) P. Farmanara, H.-H. Ritze, V. Stert, W. Radloff, and I.V. Hertel

'Ultrafast dynamics of internally hydrogenated ammonia clusters excited electronically by femtosecond infrared laser pulses: size dependent deactivation and photoelectron spectra'

Submitted to Eur. Phys. J. D.

Im Zusammenhang mit dieser Arbeit stehen folgende Konferenzbeiträge:

- 1) W. Radloff, V. Stert, P. Farmanara, and I V. Hertel
'Ultrafast internal conversion and fragmentation in $(\text{C}_6\text{H}_6)_{1,2}$ and $\text{C}_2\text{H}_3\text{Cl}$ '
FST98, The Femtosecond Technology Research Association (FESTA), Tsukuba/japan,
book of abstracts, (1998).

- 2) V. Stert, W. Radloff, P. Farmanara, and I V. Hertel
'Femtosecond time resolved photoelectron spectroscopy of ammonia clusters'
FST98, The Femtosecond Technology Research Association (FESTA), Tsukuba/japan,
book of abstracts, (1998).

- 3) P. Farmanara, W. Radloff, V. Stert, E. Schreiber
'Femtosekunden-Dynamik der Photodissoziation von CF_2I_2 '
Frühjahrstagung Konstanz, Verhandl. der DPG (1998), p. 144.

- 4) P. Farmanara, W. Radloff, V. Stert, F. Noack
'Ultraschnelle interne Konversion in hochangeregten Molekülen und Molekülclustern'
Frühjahrstagung Konstanz, Verhandl. der DPG (1998), p. 143.

- 5) V. Stert, W. Radloff, P. Farmanara, H.-H. Ritze, I. V. Hertel
'Analysis of the femtosecond time-resolved photoelectron spectra of the ammonia dimer
excited to the $\tilde{\text{A}}$ state'
XIth Int. Conf. on Ultrafast Phenomena, Garmisch-Partenkirchen, technical digest
(1998), p. 360-362.

- 6) V. Stert, W. Radloff, P. Farmanara, and I V. Hertel
'Femtosecond time-resolved photoelectron spectroscopy of benzene molecules and clusters'
ISSPIC 9, Lausanne/Switzerland, book of abstracts, (1998), p. 6.17.

- 7) V. Stert, W. Radloff, P. Farmanara, and F. Noack
'Ultrafast intracuster harpooning reaction in $\text{Ba}\dots\text{FCH}_3$ '
ISSPIC 9, Lausanne/Switzerland, book of abstracts, (1998), p. 6.18.

- 8) W. Radloff, P. Farmanara, V. Stert, E. Schreiber, and J. R. Huber
'Ultrafast photodissociation dynamics in electronically excited CF_2I_2 molecules'
ISSPIC 9, Lausanne/Switzerland, book of abstracts, (1998), p. 6.19.
- 9) P. Farmanara, V. Stert, W. Radloff, E. Schreiber, and J. R. Huber
'Femtosecond photodissociation dynamics of CF_2I_2 at 267 nm'
Lasers '98, Tucson/Arizona, book of abstracts (1998), p. 77.
- 10) P. Farmanara, V. Stert, F. Noack, W. Radloff
'Echtzeituntersuchung der Femtosekunden-Harpunreaktion in $\text{Ba}\cdot\text{FCH}_3$ '
Frühjahrstagung Heidelberg, Verhandl. der DPG (1999), p. 313.
- 11) P. Farmanara, V. Stert, F. Noack, W. Radloff
'Femtosekunden-zeitaufgelöste Photoelektronenspektroskopie an Pyrazin'
Frühjahrstagung Heidelberg, Verhandl. der DPG (1999), p. 302.
- 12) O. Steinkellner, M Wittmann, M. T. Wick, P. Farmanara, V. Stert, W. Radloff, and G. Korn'
'Erzeugung und Charakterisierung von Laserimpulsen im VUV'
Frühjahrstagung Heidelberg, Verhandl. der DPG (1999), p. 389.
- 13) M. T. Wick, M. Wittmann, P. Farmanara, O. Steinkellner, V. Stert, W. Radloff, G. Korn, and I. V. Hertel
'A subpicosecond deep UV-lasource: two-photon two-color ionization pump-probe experiments in the VUV'
CLEO'99, Baltimore/Maryland, technical digest (1999), p. 61.
- 14) P. Farmanara, V. Stert, H.-H. Ritze, W. Radloff, S. Skowronek, A. Gonzalez-Urena
'Photoinitiated harpooning reaction in the $\text{Ba}\cdot\text{FCH}_3$ complex: femtosecond dynamics and product state analysis'
16. Int. Conf. on Molecular Energy Transfer, Assisi/Italy, book of abstracts, (1999), p. 76.

- 15) P. Farmanara, V. Stert, and W. Radloff
'Ultrafast photodissociation dynamics and quantum beats in CS₂ excited by femtosecond laser pulses at 194-207 nm'
16. Int. Conf. on Molecular Energy Transfer, Assisi/Italy, book of abstracts, (1999), p. 77.
- 16) P. Farmanara, V. Stert, and W. Radloff
'Coherent phenomena and ultrafast predissociation in CS₂ excited by femtosecond laser pulses at 194-207 nm'
Femtochemistry IV, Leuven/Belgium, book of abstracts, (1999), p. 152-155.
- 17) P. Farmanara, V. Stert, W. Radloff, S. Skowronek, A. Gonzalez-Urena
'Photoionitiated harpooning reaction in the Ba...FCH₃ complex: femtosecond dynamics and product state analysis'
Femtochemistry IV, Leuven/Belgium, book of abstracts, (1999), p. 272-276.
- 18) P. Farmanara, V. Stert, H.-H. Ritze, W. Radloff
'Femtosecond dynamics and energetics of the photoionitiated Ba...FCH₃ intracuster harpooning reaction'
Third Int. Symp. on Theory of Atomic and Molecular Clusters (TAMC-3), Berlin, book of abstracts, (1999), p. T-41.
- 19) M. Wittmann, M. T. Wick, P. Farmanara, O. Steinkellner, V. Stert, W. Radloff, and G. Korn
'Femtosecond two-photon two-color ionization pump-probe experiments in the VUV'
Applications of High Field and Short Wavelength Sources VIII, Potsdam, technical digest (2000), p. 128-130.
- 20) V. Stert, P. Farmanara, W. Radloff, H.-H. Ritze, F. Noack
'Intracuster Harpooning Reaktion in Ba... FCH₃: Femtosekunden-Dynamik und Energetik'
Clustertreffen, Saßnitz/Rügen, book of abstracts, (1999).
- 21) P. Farmanara, V. Stert, H.-H. Ritze, and W. Radloff

'Excited ammonia cluster dynamics controlled by time-delayed femtosecond laser pulses'

Trombay Symposium on Radiation and Photochemistry (TSRP-2000), Mumbai/India, book of abstracts, (2000), p. 14.

22) P. Farmanara, V. Stert, H.-H. Ritze, W. Radloff

'Beeinflussung der Dynamik angeregter Ammoniak-Cluster durch zeitverzögerte Femtosekunden-Kontrollimpulse'

Frühjahrstagung Bonn, Verhandl. der DPG (2000), p. 974.

23) P. Farmanara, V. Stert, H.-H. Ritze, W. Radloff

'Femtosekunden-zeitaufgelöste Photoelektronenspektroskopie zur Analyse der Photodissoziation elektronisch angeregter CF_2I_2 -Moleküle'

Frühjahrstagung Bonn, Verhandl. der DPG (2000), p. 973.

24) P. Farmanara, V. Stert, W. Radloff

'Ultraschnelle Photodissoziationsdynamik und Quantenschwebungen in CS_2 bei Anregung mit Femtosekunden-Laserimpulsen zwischen 194 nm und 207 nm'

Frühjahrstagung Bonn, Verhandl. der DPG (2000), p. 973.

25) W. Radloff, P. Farmanara, H.-H. Ritze, and V. Stert,

'Ammonia cluster fragmentation controlled by time-delayed infrared femtosecond laser pulses'

ISSPIC 10, Atlanta/Georgia, book of abstracts, (2000), p. 5.6.

26) P. Farmanara, V. Stert, H.-H. Ritze, and W. Radloff

'Change of ammonia cluster dynamics by a femtosecond infrared control pulse'

XIIth Int. Conf. on Ultrafast Phenomena, Charleston/South Carolina, technical digest (2000), p. 283-285.

27) V. Stert, H.-H. Ritze, P. Farmanara, F. Tschirschwitz, E. T. J. Nibbering, and W. Radloff

'Ultrafast dynamics in ClO_2 and $\text{ClO}_2(\text{H}_2\text{O})_n$ excited at 398nm'

XIIth Int. Conf. on Ultrafast Phenomena, Charleston/South Carolina, technical digest (2000), p. 424-426.

28) I. V. Hertel, C. Bobbert, C. P. Schulz, P. Farmanara, H.-H. Ritze, V. Stert, and W. Radloff

'Clusters with polar molecules: Ultrafast dynamics, time resolved photoelectron spectroscopy and femtosecond control'

17th Nobel Symposium in Cluster Physics, Stockholm/Sweden, book of abstracts (2000).

29) W. Radloff, P. Farmanara, H.-H. Ritze, V. Stert, and, I. V. Hertel

'Ammonia cluster fragmentation controlled by time-delayed infrared laser pulses'

ACS National Meeting, San Diego/California, book of abstracts, (2001).

30) P. Farmanara, V. Stert, W. Radloff, and, I. V. Hertel

'Internal conversion in highly excited toluene monomers and dimers analyzed by femtosecond time-resolved photoelectron spectroscopy'

ACS National Meeting, San Diego/California, book of abstracts, (2001).

31) P. Farmanara, V. Stert, and W. Radloff

'Ultrafast photodissociation dynamics of acetone excited by femtosecond 155 nm laser pulses'

ECAMP VII, The seventh European Conference on Atomic and Molecular Physics, Berlin, book of abstracts, (2001), p. 132.

32) P. Farmanara, V. Stert, and W. Radloff

'Ultrafast internal conversion of highly excited toluene monomers and dimers'

ECAMP VII, The seventh European Conference on Atomic and Molecular Physics, Berlin, book of abstracts, (2001), p. 138.

33) V. Stert, H.-H. Ritze, P. Farmanara, and W. Radloff

'Ultrafast dynamics in excited OCIO molecules analyzed by femtosecond time-resolved photoelectron spectroscopy'

ECAMP VII, The seventh European Conference on Atomic and Molecular Physics, Berlin, book of abstracts, (2001), p. 146.