

List of publications

1. “Influence of a DC Offset on the Dynamics of Kicked Elongated Rydberg Atoms,”
S. Yoshida, C. O. Reinhold, J. Burgdörfer, W. Zhao, J. J. Mestayer, J. C. Lancaster, and F. B. Dunning,
in preparation.
2. “The Kicked Rydberg Atom: Population Trapping Near the Continuum ,”
W. Zhao, J. J. Mestayer, J. C. Lancaster, F. B. Dunning, C. O. Reinhold, S. Yoshida, and J. Burgdörfer,
submitted to Phys. Rev. A.
3. “Ramsauer-Townsend Diffraction Oscillations in the Two-Dimensional Momentum Distribution of Laser Ionized Electrons,”
D. G. Arbó, S. Yoshida, E. Persson, K. Dimitriou, and J. Burgdörfer,
submitted to Phys. Rev. Lett. (2005).
4. “Enhancement of Low-Energy Electron Ion Recombination in a Magnetic field : Influence of Transient Field Effects,”
M. Hörndl, S. Yoshida, A. Wolf, G. Gwinner, and J. Burgdörfer,
accepted to Phys. Rev. Lett. (2005).
5. “The Kicked Rydberg Atom,”
F. B. Dunning, J. C. Lancaster, J. Burgdörfer, C. O. Reinhold, and S. Yoshida,
Adv. Atom. Mol. Opt. Phys. (2005) (in print).
6. “Engineering Very-High-n Polarized Rydberg States Using Tailored HCP Sequences,”
W. Zhao, J. J. Mestayer, J. C. Lancaster, F. B. Dunning, C. O. Reinhold, S. Yoshida, and J. Burgdörfer,
Phys. Rev. Lett. **95** 163007 (2005).
7. “Enhancement of Low-Energy Electron Ion Recombination in a Magnetic field : Influence of Transient Field Effects,”
M. Hörndl, S. Yoshida, K. Tőkési, and J. Burgdörfer,
Nucl. Instr. and Meth. B **235** 290 (2005).
8. “Steering Rydberg wave packets using a chirped train of half-cycle pulses,”
S. Yoshida, C. O. Reinhold, E. Persson, J. Burgdörfer, and F. B. Dunning,
J. Phys. B **38** S209 (2005).
9. “Origin of the double peak structure in the momentum distribution of single ionization of atoms driven by strong laser fields,”
K. Dimitriou, D. G. Arbó, S. Yoshida, E. Persson, and J. Burgdörfer,
Phys. Rev. A **70** 061401 (2004).
10. Comment on “Radiative recombination enhancement of bare ions in storage rings with electron cooling”
M. Hörndl, S. Yoshida, K. Tőkési, and J. Burgdörfer
Phys. Rev. Lett. **93** 209301 (2004).
11. “Response of highly polarized Rydberg states to trains of half-cycle pulses,”
C. O. Reinhold, W. Zhao, J. C. Lancaster, F. B. Dunning, E. Persson,

- D. G. Arbó, S. Yoshida, and J. Burgdörfer,
Phys. Rev. A **70** 033402 (2004).
12. “Semiclassical analysis of the periodically kicked Rydberg atom,”
 S. Yoshida, F. Großmann, E. Persson and J. Burgdörfer,
Phys. Rev. A **69** 043410 (2004).
 13. “Tailoring and controlling wave packets in multi-photon atom collisions”
 S. Yoshida, C. O. Reinhold, E. Persson, J. Burgdörfer, B. E. Tannian, C. L. Stokely,
 and F. B. Dunning
Physica Scripta **T100** 424 (2004).
 14. “Enhancement of Low-Energy Electron Ion Recombination in a Magnetic field”
 M. Hörndl, S. Yoshida, K. Tőkési, and J. Burgdörfer,
Hyperfine Interactions **146/147** 13 (2003).
 15. “Quantum localization in the three-dimensional kicked atom,”
 E. Persson, S. Yoshida, X.-M. Tang, C. O. Reinhold, and J. Burgdörfer,
Phys. Rev. A **68** 063406 (2003).
 16. “Low energy electron-ion recombination in a magnetic field:
 The role of chaotic dynamics”
 M. Hörndl, S. Yoshida, K. Tőkési, and J. Burgdörfer,
Physics of Photonic, Electronic and Atomic Collisions edited by C.R.Vane *et al.*, (Rinton Press, NY, 2002).
 17. “Quantum localization in the high-frequency limit,”
 E. Persson, S. Yoshida, X.-M. Tang, C. O. Reinhold, and J. Burgdörfer,
Phys. Rev. A **66** 043407 (2002).
 18. “Designing Rydberg wavepackets using trains of half-cycle pulses,”
 C. O. Reinhold, S. Yoshida, J. Burgdörfer, B. E. Tannian, C. L. Stokely, and
 F. B. Dunning,
J. Phys. B **34** L551 (2001).
 19. “Quantum signature of reconnection bifurcations,”
 G. Corso, S. D. Prado, and S. Yoshida,
Physica A **295** 316 (2001).
 20. “Siegert-pseudostate representation of quantal time evolution: A harmonic oscillator kicked by periodic pulses,”
 S. Tanabe, S. Watanabe, N. Sato, M. Matsuzawa, S. Yoshida, C. O. Reinhold,
 and J. Burgdörfer,
Phys. Rev. A **63** 052721 (2001).
 21. “The kicked atom : behavior with uni- and bi-directional trains of impulses,”
 B. E. Tannian, R. A. Popple, F. B. Dunning, S. Yoshida, C. O. Reinhold, and
 J. Burgdörfer,
Phys. Rev. A **62** 43402 (2000).
 22. “Exponential and non-exponential localization of the one-dimensional periodically kicked Rydberg atom,”
 S. Yoshida, C. O. Reinhold, P. Kristöfel, and J. Burgdörfer,
Phys. Rev. A **62** 23408 (2000).

23. "Quantum evolution of atomic states during transmission through solids," D.G. Arbó, C.O. Reinhold, S. Yoshida, and J. Burgdörfer, *Nuc. Inst. Meth.* **164** 495 (2000).
24. "Quantum localization of the kicked Rydberg atom" S. Yoshida, C. O. Reinhold, and J. Burgdörfer, *Phys. Rev. Lett.* **84** 2602 (2000).
25. "Reflection-free propagation of wave packets," S. Yoshida, S. Watanabe, C. O. Reinhold, and J. Burgdörfer, *Phys. Rev. A* **60** 1113 (1999).
26. "Quantum transport theory for atomic states through solids," D. G. Arbó, C. O. Reinhold, P. Kürpick, S. Yoshida, and J. Burgdörfer, *Phys. Rev. A* **60** 1091 (1999).
27. "Floquet analysis of the dynamical stabilization of the kicked hydrogen atom," S. Yoshida, C. O. Reinhold, P. Kristöfel, J. Burgdörfer, S. Watanabe, and F. B. Dunning, *Phys. Rev. A* **59** R4121 (1999).
28. "Realization of the kicked atom," M. T. Frey, F. B. Dunning, C. O. Reinhold, S. Yoshida and J. Burgdörfer, *Phys. Rev. A* **59** 1434 (1999).
29. "Electronic excitation in transmission of relativistic H⁻ ions through thin foils," C. O. Reinhold, P. Kürpick, J. Burgdörfer, S. Yoshida, and B. Gervais, *Nucl. Instr. and Meth.* **146** 76 (1998).
30. "Ionization of Rydberg atoms by half-cycle pulses: effect of pulse shape and rise time," B. E. Tannian, R. A. Popple, F. B. Dunning, S. Yoshida, C. O. Reinhold, and J. Burgdörfer, *J. Phys. B* **31** L455 (1998).
31. "Accurate ionization thresholds of atoms subject to half cycle pulses," S. Yoshida, C. O. Reinhold, J. Burgdörfer, B. E. Tannian, R. A. Popple, and F. B. Dunning, *Phys. Rev. A* **58** 2229 (1998).
32. "Statistical mechanics of deformable molecular liquids: Thermal expansion and isomerization of diatomic molecules," T. Munakata, S. Yoshida, and F. Hirata, *Phys. Rev. E* **54** 3687 (1996).
33. "Shear-induced distortion of intramolecular and intermolecular correlations in liquids: Time-dependent density-functional theory," S. Yoshida, F. Hirata and T. Munakata, *Phys. Rev. E* **54** 1763 (1996).