

PUBLICATIONS IN REFEREED JOURNALS

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4. R. Shakeshaft and J. Macek, "A Note on the Scattering Matrix in the Impact Parameter Approximation," *J. Phys. B* **5**, L63-L66 (1972).
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- 132.T. Grosjes, B. Piraux, and R. Shakeshaft, "Rayleigh and Raman Scattering from Helium for Wavelengths Down to 16nm," *Phys. Rev. A*59, 3088 (1999).
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- Final-State Wavefunction," Phys. Rev. A, 60, 1280 (1999).
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- 136.Z. Mulyukov and R. Shakeshaft, "Breakup of H_2^+ by One Photon in the Presence of a Strong DC Field," Phys. Rev. A, 63, 53404 (2001).
- 137.R. Shakeshaft, "Representation of a Complex Green Function on a Real Basis; Series Representation," Phys. Rev. A 66, 12506 (2002).
- 138.T. Li, B. Piraux and R. Shakeshaft, "Representation of a Complex Green Function on a Real Basis: Generalizations to a Three-Body System", Phys. Rev. A, accepted for publication.

INVITED CONFERENCE TALKS

- "Charge transfer to the continuum," Gordon Conference on Atomic Physics, New Hampshire, June 1979.
- "Theory of charge transfer to the continuum," American Physical Society meeting on electron and atom collisions, Houston, December 1979.
- "The Thomas model for electron capture from atoms by fast ions," American Physical Society general meeting, Washington, D.C., April 1980 .
- "Atomic rearrangement collisions as asymptotically high impact velocities," XII International Conference on the Physics of Electronic and Atomic Collisions, Gatlinberg, July 1981
- "Electron scattering in the presence of a laser field," International Symposium on Molecular Scattering Theory and Quantum Chemistry (Sanibel Symposium), Florida, March 1983.
- "Multiphoton absorption above the ionization threshold," International workshop on "Photons and continuum states of atoms and molecules," Cortona, Italy, June 1986.
- "Theoretical aspects of above-threshold ionization," Optical Society of American topical meeting on "Multiple excitations of atoms," Seattle, October 1986.
- "Theoretical aspects of above-threshold ionization," American Physical Society meeting on atomic, molecular, and optical physics, Cambridge, Mass., May 1, 1987.
- "Theoretical aspects of above-threshold ionization," International Laser Science Conference, Atlantic City, November 1987.
- "Atomic processes in intense laser fields," XIV Summer School and International Symposium on Physics of Ionized Gases, Sarajevo, Yugoslavia, August 1988.
- "Time-dependent treatment of atoms in strong laser fields," Study Conference on Spectroscopy and Collisions of Few Electron Ions," Bucharest, Romania, August 1988.
- "Time-independent treatment of atoms in strong laser fields," International symposium on Atoms in Strong Fields, Grainau, West Germany, September 1988.

“Lectures on scattering theory,” Winter College on Atomic and Molecular Physics - Photon Assisted Collisions in Atoms and Molecules, International Center for Theoretical Physics, Trieste, Italy, February 1989.

“Multiphoton processes in intense laser fields,” Seminar on Fundamentals of Laser Interactions II, Obergurgl, Austria, February-March 1989.

“Floquet methods applied to atoms in intense fields,” Annual Meeting of Optical Society of America, Orlando, Florida, October 1989.

“Floquet approach to multiphoton ionization,” International Conference on Multiphoton Processes V; Paris, France, September 1990.

“The behavior of the ac-quasienergy and its power series expansion in the complex field and frequency planes,” Workshop on Hidden Crossings in Ion-Atom Collisions and in other Nonadiabatic Transitions, ITAMP, Harvard-Smithsonian Center for Astrophysics, May 1991.

“Experimental Observability of Stabilization of Atomic Hydrogen,” Workshop on Super-Intense Laser-Atom Physics, Big Sky, Montana, June 1991.

“From Tunneling to Stabilization of Atoms in Strong Laser Fields,” American Physical Society meeting on atomic, molecular and optical physics, Chicago, May 1992.

“Calculation of the Photoelectron Energy Spectrum for Multiphoton Ionization of Hydrogen,” Adriatico Research Conference on Hydrogen Atoms in Intense Electromagnetic Fields, Trieste, Italy, August 1992.

“Theory of Atomic Hydrogen in Intense Laser Fields,” 8th Interdisciplinary Laser Science Conference, Albuquerque, New Mexico, September 1992.

“Multiphoton Ionization of Two-Electron Systems,” NATO Advanced Research Workshop on Super-Intense Laser-Atom Physics, Han-sur-Lesse, Belgium, January 1993.

“Single and Double Ionization of Two-Electron Systems,” 6th International Conference on Multiphoton Processes, Laval, Quebec City, June 1993.

“Atomic Processes in Strong Oscillating Fields,” American Physical Society general meeting, Washington DC, April 1995.

“Double Photoionization of Helium,” Workshop on Two-Electron Processes in Photon-Helium Interaction, JILA - University of Colorado, Boulder, Colorado, January 1996.

“Double Photoionization of Helium,” 2nd Europhysics Study Conference on Photon and Electron Collisions with Atoms and Molecules,” Belfast, United Kingdom, July 1996.

“Photoionization of a Two-Electron System,” Workshop on “Resonances and Fragmentation of Three-Body Systems,” ITAMP, Harvard-Smithsonian Center for Astrophysics, July 1997.

“Photo-Doubleionization of He at Relatively Low Photon Energies,” XX International Conference on the Physics of Electronic and Atomic Collisions, Vienna, Austria, July 1997.

“Description of a 2-Electron Atom or Ion in an AC Field using Interparticle Coordinates,” Workshop on “Manifestations of Electron Correlation,” ITAMP, Harvard-Smithsonian Center for Astrophysics, October 1997.

“Thoughts on the Theoretical Treatment of Multiphoton Multiple-Electron Escape,” International Symposium on (e, 2e), Double Photoionization, and Related Topics, Beijing, China, July 1999.

“One Photon Breakup of H_2^+ by One Photon in the Presence of a Strong DC Field,” NATO Advanced Research Workshop on Super-Intense Laser-Atom Physics, Han-sur-Lesse, Belgium, September 2000.

“Perturbation Theory for Multiphoton Ionization Without Knowledge of the Final-State Wavefunction,” 16th International Conference on the Application of Accelerators in Research and Industry, Dallas, November 2000.