

PUBLICATIONS MASTER LIST

J. R. MACDONALD LABORATORY – KANSAS STATE UNIVERSITY
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Mar 2005 – Mar 2006

(approximately chronological; missing numbers are papers published prior to Mar 2005)

172. “Achieving 280 fs resolution with a streak camera by reducing the deflection dispersion,”
Mahendra Man Shakya and Zenghu Chang
Appl. Phys. Lett. **87** 041103 (2005)
173. “Disentangling the volume effect through intensity-difference spectra: application to laser-induced dissociation of H₂⁺,”
Pengqian Wang, A. Max, Sayler, Kevin D. Carnes, Brett D. Esry, and Itzik Ben-Itzhak
Optics Letters **30** 664-666 (2005)
175. “Double photoexcitation of He atoms by attosecond xuv pulses in the presence of intense few-cycle infrared lasers,”
X. M. Tong and C. D. Lin
Phys. Rev. A **71** 033406 (2005)
176. “Positronium formation in positron-Li and positron-Na collisions at low energies,”
Anh-Thu Le, M. W. J. Bromley, and C. D. Lin
Phys. Rev. A **71** 032713 (2005)
177. “Circularly-polarized laser-assisted photoionization spectra of argon for attosecond pulse measurements,”
Z. X. Zhao, Zenghu Chang, X. M. Tong, and C. D. Lin
Optics Express **13** 1966-1977 (2005)
178. “Role of molecular orbital symmetry on the alignment dependence of high-order harmonic generation with molecules,”
Xiao Xin Zhou, X. M. Tong, Z. X. Zhao, and C. D. Lin
Phys. Rev. A **71** 061801 (2005)
179. “Theory of laser-assisted autoionization by attosecond laser pulses,”
Z. X. Zhao and C. D. Lin
Phys. Rev. A **71** 060702 (2005)
180. “Empirical formula for static field ionization rates of atoms and molecules by lasers in the barrier-suppression regime,”
X. M. Tong and C. D. Lin
J. Phys. B **38** 2593-2600 (2005)

181. "High-energy 6.2-fs pulses for attosecond pulse generation,"
S. Ghimire, B. Shan, C. Wang, and Z. Chang
Laser Physics **15** 838-842 (2005)
182. "Photo double ionization of helium 100 eV and 450 eV above threshold: I. Linearly polarized light,"
A. Knapp, A. Kheifets, I. Bray, Th. Weber, A. L. Landers, S. Schlösser, T. Jahnke, J. Nickles, S. Kammer, O. Jagutzki, L. Ph. H. Schmidt, M. Schöffler, T. Osipov, M. H. Prior, H. Schmidt-Böcking, C. L. Cocke, and R. Dörner
J. Phys. B **38** 615-633 (2005)
183. "Photo double ionization of helium 100 eV and 450 eV above threshold: II. Circularly polarized light,"
A. Knapp, A. Kheifets, I. Bray, Th. Weber, A. L. Landers, S. Schlösser, T. Jahnke, J. Nickles, S. Kammer, O. Jagutzki, L. Ph. H. Schmidt, M. Schöffler, T. Osipov, M. H. Prior, H. Schmidt-Böcking, C. L. Cocke, and R. Dörner
J. Phys. B **38** 635-643 (2005)
184. "Photo double ionization of helium 100 eV and 450 eV above threshold: III. Gerade and ungerade amplitudes and their relative phases,"
A. Knapp, A. Kheifets, I. Bray, Th. Weber, A. L. Landers, S. Schlösser, T. Jahnke, J. Nickles, S. Kammer, O. Jagutzki, L. Ph. H. Schmidt, M. Schöffler, T. Osipov, M. H. Prior, H. Schmidt-Böcking, C. L. Cocke, and R. Dörner
J. Phys. B **38** 645-657 (2005)
186. "Effects of orbital symmetries in dissociative ionization of molecules by few-cycle laser pulses,"
A. S. Alnaser, C. M. Maharjan, X. M. Tong, B. Ulrich, P. Ranitovic, B. Shan, Z. Chang, C. D. Lin, C. L. Cocke, and I. V. Litvinyuk
Phys. Rev. A **71** 031403 (2005)
187. "Entropy lowering in ion-atom collisions,"
H. Nguyen, R. Brédy, T. G. Lee, H. A. Camp, H. Awata, and B. D. DePaola
Phys. Rev. A **71** 062714 (2005)
188. "Numerical exploration of coherent excitation in three-level systems,"
H. A. Camp, M. H. Shah, M. L. Trachy, O. L. Weaver, and B. D. DePaola
Phys. Rev. A **71** 053401 (2005)
189. "Dissociation and ionization of molecular ions by ultra-short intense laser pulses probed by coincidence 3D momentum imaging,"
Itzik Ben-Itzhak, Pengqian Wang, Jiangfan Xia, A. Max Sayler, Mark A. Smith, J. W. Maseberg, Kevin D. Carnes, and Brett D. Esry
Nucl. Instr. Meth. in Phys. Res. B **233** 56-61 (2005)

190. “Bond rearrangement caused by sudden single and multiple ionization of water molecules,”
I. Ben-Itzhak, A. Max Sayler, M. Leonard, J. W. Maseberg, D. Hathiramani, E. Wells, M. A. Smith, Jiangfan Xia, Pengqian Want, K. D. Carnes, and B. D. Esry
Nucl. Instr. Meth. in Phys. Res. B **233** 284-292 (2005)
191. “Highlighting the angular dependence of bond softening and bond hardening of H₂⁺ in an ultrashort intense laser pulse,”
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192. “Investigation of triply excited states of Li-like ions in fast ion-atom collisions by zero-degree Auger projectile electron spectroscopy,”
T. J. M. Zouros, E. P. benis, M. Zamkov, C. D. Lin, T. G. Lee, P. Richard, T. W. Gorczyca, T. Morishita
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193. “Very-high-order harmonic generation from Ar atoms and Ar⁺ ions in superintense pulsed laser fields: An *ab initio* self-interaction-free time-dependent density-functional approach,”
Juan J. Carrera, Shih-I Chu, and X. M. Tong
Phys. Rev. A **71** 063813 (2005)
194. “Lattice approach for + H₂⁺ collisions,”
S. C. Cheng and B. D> Esry
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199. “HD⁺ photodissociation in the scaled coordinate approach,”
Vladimir Roudnev and B. D. Esry
Phys. Rev. A **71** 013411 (2005)
200. “Ion properties from high-L Rydberg fine structure: dipole polarizability of Si²⁺,”
R. A. Komara, M. A. Gearba, C. W. Fehrenbach, and S. R. Lundeen
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201. “Electron impact detachment of small negative clusters,”
D. Zajfman, O. Heber, A. Diner, P. D. Witte, D. Stasser, Y. Toker, M. L. Rappaport, I. Ben-Itzhak, O. Buliamov, L. Kronik, D. Schwalm, and A. Wolf
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202. “Dissociation and ionization of H_2^+ by ultrashort intense laser pulses probed by coincidence 3D momentum imaging,”
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204. “Proton-carbon monoxide collisions from 10 keV to 14 MeV,”
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205. “Charge transfer in slow collisions of C^{6+} with H below 1 keV/amu,”
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206. “New and old theoretical tools for evaluating cross sections for ion-atom collisions,”
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207. “Generation of attosecond XUV supercontinuum by polarization gating,”
 Bing Shan, Shambhu Ghimire, and Zenghu Chang
Journal of Modern Optics **52** 277 (2005)
208. “Simultaneous real-time tracking of wave packets evolving on two different potential curves in H_2^+ and D_2^+ ,”
 A. S. Alnaser, B. Ulrich, X. M. Tong, I. V. Litvinyuk, C. M. Maharjan,
 P. Ranitovic, T. Osipov, R. Ali, S. Ghimire, Z. Chang, C. D. Lin, and
 C. L. Cocke
Phys. Rev. A **72** 030702 (R) (2005)
209. “Momentum imaging of doubly charged ions of Ne and Ar in the sequential ionization region,”
 C. M. Maharjan, A. S. Alnaser, X. M. Tong, B. Ulrich, P. Ranitovic,
 S. Ghimire, Z. Chang, I. V. Litvinyuk, and C. L. Cocke
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210. “Two-center interference in fast proton- H_2 -electron transfer and excitation processes,”
 K. Støckkel, O. Eidem, H. Cederquist, H. Zettergren, P. Reinhard,
 R. Schuch, C. L. Cocke, S. B. Levin, V. N. Ostrovsky, A. Kälberg,
 A. Simonsson, J. Jensen, and H. T. Schmidt
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211. “Resonant excitation during strong-field dissociative ionization,”
 A. S. Alnaser, M. Zamkov, X. M. Tong, C. M. Maharjan, P.
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212. “Single ionization of hydrogen molecules by fast protons as a function of the molecular alignment,”
Nora G. Johnson, R. N. Mello, Michael E. Lundy, J. Kapplinger, Eli Parke, K. D. Carnes, I. Ben-Itzhak, and E. Wells
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213. “Alignment dependence of high-order harmonic generation from N₂ and O₂ molecules in intense laser fields,”
XiaoXin Zhou, X. M. Tong, Z. X. Zhao, and C. D. Lin
Phys. Rev. A **72** 033412 (2005)
214. “Signature of chaos in high-lying doubly excited states of the helium atom,”
Anh-Thu Le, Toru Morishita, X.-M. Tong, and C. D. Lin
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215. “Effects of orbital symmetries on the ionization rates of aligned molecules by short intense laser pulses,”
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216. “Laser-induced substructures in above-threshold-ionization spectra from intense few-cycle laser pulses,”
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217. “One- and two-electron processes in collisions between hydrogen molecules and slow highly charged ions,”
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218. “Wavelength dependence of momentum-space images of low-energy electrons generated by short intense laser pulses at high intensities,”
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219. “Preference for breaking the O-H bond over the O-D bond following HDO ionization by fast ions,”
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220. “Capture and ionization in laser-assisted proton-hydrogen collisions,”
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