

**Yoshiro AZUMA**

**Refereed Journal Publications**

S. Kosugi, F. Koike, M. Iizawa , F. Hosseini, J. Martins, T. Marchenko, O. Travnikova, J. D. Bozek, K. Ito, S. Fritzsche, M. N. Piancastelli, M. Simon, and Y. Azuma  
“Strong configuration-interaction contributions to the angle-resolved 4p photoelectron spectra of atomic xenon”  
*Phys. Rev. A* **107**, 022814 (2023)

S. Kosugi, R. Guillemin, O. Travnikova, T. Marchenko, D. Koulentianos, J.B. Martins, F. Hosseini, R. Püttner, D. Céolin, L. Journel, M.N. Piancastelli, I. Ismail, F. Koike, M. Iizawa, S. Sheinerman, L. Gerchikov, Y. Azuma, and M. Simon  
“Postcollision-interaction effects in multistep Auger transitions following Ar 1s photoionization”  
*Phys. Rev. A* **106**, 033114 (2022)

Masatomi Iizawa, Satoshi Kosugi , Fumihiro Koike and Yoshiro Azuma  
“The quantum and classical Fano parameter q”  
*Phys. Scr.* **96** 055401 (2021)

Ralph Püttner, Philippe Holzhey, Mateja Hrast, Matjaz Žitnik, Gildas Goldsztejn, Tatiana Marchenko, Renaud Guillemin, Loïc Journel, Dimitris Koulentianos, Oksana Travnikova, Moustafa Zmerli, Denis Céolin, Yoshiro Azuma, Satoshi Kosugi, Alexandre F. Lago, Maria Novella Piancastelli, and Marc Simon  
“Argon KLL Auger spectrum: Initial states, core-hole lifetimes, shake, and knock-down processes”  
*Phys. Rev. A* **102**, 052832 (2020)

Nacer Boudjemia, Kari Jänkälä, Ralph Püttner, Tatiana Marchenko, Oksana Travnikova, Renaud Guillemin, Loïc Journel, Iyas Ismail, Dimitris Koulentianos, Satoshi Kosugi, Yoshiro Azuma, Minna Patanen, Marko Huttula, Denis Céolin, Maria Novella Piancastelli and Marc Simon  
“Electron spectroscopy and dynamics of HBr around the Br 1s<sup>-1</sup> threshold”  
*Phys. Chem. Chem. Phys.* **22**, 26806-26818 (2020)

S. Kosugi, F. Koike, M. Iizawa, M. Oura, T. Gejo, K. Tamasaku, J.R. Harries, R. Guillemin, M.N. Piancastelli, M. Simon, and Y. Azuma  
“Fluorescence Time Delay in Multistep Auger Decay as an Internal Clock”  
*Phys. Rev. Lett.* **124**, 183001 (2020)

S. Kosugi, F. Koike, T. Nagayasu, F. Hosseini, J. Martins, T. Marchenko, O. Travnikova, M. Oura, T. Gejo, J. R. Harries, J. D. Bozek, K. Ito, E. Sokell, S. Fritzsche, M. N. Piancastelli, M. Simon, and Y. Azuma  
“Strong configuration interaction in the 3p photoelectron spectrum of Kr”  
*Phys. Rev. A* **101**, 042505 (2020)

S Kosugi, J Martins, F Hosseini, T Marchenko, O Travnikova, J D Bozek, K Ito, E Sokell, M N Piancastelli, M Simon, F Koike, and Y Azuma,  
“Conjugate photoelectron recapture peaks in the high resolution Auger electron spectra following near threshold Ar 2p photoionization”  
*J. Phys. B: At. Mol. Opt. Phys.* **53** 125001 (2020)

S Kosugi, N Suzuki, N Kumagai, H Iwayama, E Shigemasa, F Koike and Y Azuma  
“Dominance of angular momentum exchange in the PCI recapture of photoelectrons revealed by high resolution Auger electron measurements of Kr”

*J. Phys. B: At. Mol. Opt. Phys.* **52** 245002 (2019)

James R. Harries, Hiroshi Iwayama, Susumu Kuma, Masatomi Iizawa, Norihiro Suzuki, Yoshiro Azuma, Ichiro Inoue, Shigeki Owada, Tadashi Togashi, Kensuke Tono, Makina Yabashi, and Eiji Shigemasa

“Superfluorescence, Free-Induction Decay, and Four-Wave Mixing: Propagation of Free-Electron Laser Pulses through a Dense Sample of Helium Ions”

*Phys. Rev. Lett.* **121**, 263201 (2018)

Norihiro Suzuki, Satoshi Kosugi, Yumi Ito, Naoki Inoue Tatsuro Nagoshi, Nobuhiko Kuze, James R Harries, James P Sullivan, Tetsuo Nagata4, Emma Sokell, Fumihiro Koike and Yoshiro Azuma

“Probing electron correlation through radiative lifetime measurements upon inner-valence photoionization of Ne and Ar”,

*J. Phys. B: At. Mol. Opt. Phys.* (2016)

Satoshi Kosugi, Masatomi Iizawa, Yu Kawarai, Yosuke Kuriyama, A L David Kilcoyne, Fumihiro Koike, Nobuhiko Kuze, Daniel S Slaughter, Yoshiro Azuma

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*J. Phys. B: At. Mol. Opt. Phys.* (2015)

T Nagata, K Kawajiri, S Kosugi, N Suzuki, M Kemmotsu, T Nandi, E Sokell, Y Azuma, F Koike

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*J. Phys. B: At. Mol. Opt. Phys.* 2014/10

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T. Osawa, K. Kawajiri, N. Suzuki, T. Nagata, Y. Azuma, and F. Koike,

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“Effects of target polarization and postcollision interaction on the electron-impact single ionization of Ne(2p), Ar(3p), and Na(3s) atoms”

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James. R. Harries, T. Gejo, K. Homma, M Kuniwake, J P Sullivan, M Lebech, and Y Azuma

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*J. Phys. B: At. Mol. Opt. Phys.* **44** 095101 (2011)

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*Nucl. Instrum. Method B* **269** 263-271 (2011).

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“1s(2s2p <sup>1</sup>P)<sup>2</sup>Pnl, 1s(2s3s <sup>3,1</sup>S)<sup>2</sup>Snp, and 1s(2s3p <sup>1</sup>P)<sup>2</sup>Pns K-shell photoexcited Rydberg series of beryllium atoms”

*Phys. Rev. A* **75**, 012714 (2007)

James R Harries, James P Sullivan, Peter Hammond and Yoshiro Azuma

“Photoionization of He in the 3lnl' doubly-excited state energy region: angular distribution of the fluorescence from the residual ion He<sup>+(2p)<sup>2</sup>P”</sup>

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Shuichi Hasegawa, Fumiko Yoshida, Leo Matsuoka, Fumihiro Koike, Stephan Fritzsche, Satoshi Obara, Yoshiro Azuma and Tetsuo Nagata

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*Phys. Rev. Lett.* **97**, 023001 (2006)

Fumiko Yoshida, Leo Matsuoka, Ryuta Takashima, Tetsuo Nagata, Yoshiro Azuma, Satoshi Obara, Fumihiro Koike and Shuichi Hasegawa

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*J. Phys. B: At. Mol. Opt. Phys.* **38** No 10 L153-L160 (2005)

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