

# CURRICULUM VITAE et Production Scientifique de Marc SIMON

## Marc SIMON

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## LISTE DE PUBLICATIONS AVEC COMITE DE LECTURE

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**80-** A review of molecular effects in gas-phase KL x-ray emission.

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**84-** Ultrafast dynamics in C 1s core-excited CF<sub>4</sub> revealed by two-dimensional resonant Auger spectroscopy.

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Gildas Goldsztejn, Tatiana Marchenko, Denis Céolin, Loïc Journel, Renaud Guillemin, Jean-Pascal Rueff, Rajesh K Kushawaha, Ralph Püttner, Maria Novella Piancastelli and Marc Simon

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Piero Decleva, Daniele Toffoli, Rajesh Kumar Kushawaha, Michael MacDonald, Maria Novella Piancastelli, Marc Simon and Lucia Zuin

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M. N. Piancastelli, R. Guillemin, T. Marchenko, L. Journel, O. Travnikova, T. Marin, G. Goldsztejn, B. Cunha de Miranda, I. Ismail and M. Simon

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O. Travnikova, N. Sisourat, T. Marchenko, G. Goldsztejn, R. Guillemin, L. Journel, D. Céolin, I. Ismail, A. F. Lago, R. Püttner, M. N. Piancastelli, and M. Simon

**Physical Review Letters** 118, 213001 (2017)

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L. Gerchikov, R. Guillemin, M. Simon and S. Sheinerman

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**130-** Photoionization and ionic dissociation of the C<sub>3</sub>H<sub>3</sub>NS molecule induced by soft X-ray near the C1s edge.

A. F. Lago, R. D. Januario, R. L. Cavasso Filho, M. Simon and J. Z. Davalos

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S. Marggi Poullain, R. Cireasa, C. Cornaggia, M. Simon, T. Marin, R. Guillemin, J. C. Houver, R. R. Lucchese and D. Dowek

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**132-** Potential energy surface reconstruction and lifetime determination of molecular double-core-hole states in hard x-ray regime.

T. Marchenko, G. Goldsztejn, K. Jänkälä, O. Travnikova, L. Journel, R. Guillemin, N. Sisourat, D. Céolin, M. Zitnik, M. Kavcic, K. Bucar, A. Mihelic, B. Cunha de Miranda, I. Ismail, A. F. Lago, F. Gel'mukhanov, R. Püttner, M. N. Piancastelli and M. Simon

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**134-** Different time scales in the dissociation dynamics of core-excited CF<sub>4</sub> by two internal clocks.

H. Iwayama, C. Léonard, F. Le Quéré, S. Carniato, R. Guillemin, M. Simon, M. N. Piancastelli and E. Shigemasa

**Physical Review Letters** 119 203203 (2017)

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R. Feifel, J. H. D. Eland, S. Carniato, P. Selles, R. Püttner, D. Koulentianos, T. Marchenko, L. Journel, R. Guillemin, G. Goldsztejn, O. Travnikova, I. Ismail, B. Cunha de Miranda, A. F. Lago, D. Céolin, P. Lablanquie, F. Penent, M. N. Piancastelli and M. Simon  
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L. Young, K. Ueda, M. Guehr, P. Bucksbaum, M. Simon, S. Mukamel, N. Rohringer,K. Prince, C. Masciovecchio, M. Meyer, A. Rudenko, D. Rolles, C. Bostedt, M. Fuchs, D. Reis, R. Santra, H. Kapteyn, M. Murnane, H. Ibrahim, F. Légaré, M. Vrakking, M. Isinger, D. Kroon, M. Gisselbrecht, A. L'Huillier, H-J. Wörner and S. R. Leone

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R.J. Squibb, M. Sapunar, A. Ponzi, R. Richter, A. Kivimäki, O. Plekan, P. Finetti, N. Sisourat, V. Zhaunerchyk, T. Marchenko, L. Journel, R. Guillemin, R. Cucini, M. Coreno, C. Grazioli, M. Di Fraia, C. Callegari, K. C. Prince, P. Decleva, M. Simon, J. H. D. Eland, N. Došlic, R. Feifel and M.N. Piancastelli

**Nature Communications** 9 63 (2018)

**138-** KL double core hole pre-edge states of HCl.

D. Koulentianos, R. Püttner, G. Goldsztejn, T. Marchenko, O. Travnikova, L. Journel, R. Guillemin, D. Céolin, M. N. Piancastelli, M. Simon and R. Feifel

**Physical Chemistry Chemical Physics** 20 2724 (2018)

**139-** Interplay of complex decay processes after argon 1s ionization.

R. Guillemin, K. Jänkälä, B. Cunha de Miranda, T. Marin, L. Journel, T. Marchenko, O. Travnikova, G. Goldsztejn, I. Ismail, R. Püttner, D. Céolin, B. Lassalle-Kaiser, M. N. Piancastelli and M. Simon

**Phys. Rev. A** 97 013418 (2018)

**140-** Chemical Understanding of the Limited Site-Specificity in Molecular Inner-Shell Photofragmentation.

Ludger Inhester, Bart Oostenrijk, Minna Patanen, Esko Kokkonen, Stephen H. Southworth, Christoph Bostedt, Oksana Travnikova, Tatiana Marchenko, Sang-Kil Son, Robin Santra, Marc Simon, Linda Young and Stacey L. Sorensen

**Journal of Physical Chemistry Letters** 9 1156 (2018)

**141-** Time-resolved inner-shell photoelectron spectroscopy: From a bound molecule to an isolated atom.

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- 142-** Resonant interatomic Coulombic decay in HeNe: Electron angular emission distributions.  
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- 143-** Experimental setup for the study of resonant inelastic X-ray scattering of organometallic complexes in gas phase.  
I. Ismail, R. Guillemin, T. Marchenko, O. Travnikova, J. M. Ablett, J.-P. Rueff, M. N. Piancastelli, M. Simon and L. Journel  
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- 144-** Energy Transfer into Molecular Vibrations and Rotations by Recoil in Inner-Shell Photoemission.  
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- 145-** Double-core-hole states in CH<sub>3</sub>CN: pre-edge structures and chemical-shift contributions.  
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- 146-** Relativistic and resonant effects in the ionization of heavy atoms by ultra-intense hard X-rays.  
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- 147-** Photoionization of the iodine 3d, 4s and 4p orbitals in methyl iodide.  
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- 148-** Time and position sensitive photon detector for coincidence measurements in the keV energy range.

Iyas Ismail, Loic Journel, Régis Vacheresse, Jérôme Palaudoux, Thierry Marin, Francis Penent and Marc Simon  
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T. Marchenko, L. Inhester, G. Goldsztejn, O. Travnikova, L. Journel, R. Guillemin, I. Ismail, D. Koulentianos, D. Céolin, R. Püttner, M. N. Piancastelli, and M. Simon  
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**150-** Coulomb explosion imaging of CH<sub>3</sub>I and CH<sub>2</sub>ClI photodissociation dynamics

Felix Allum, Michael Burt, Kasra Amini, Rebecca Boll, Hansjochen Köckert, Pavel K Olshin, Sadia Bari, Cédric Bomme, Felix Brauße, Barbara Cunha de Miranda, Stefan Düsterer, Benjamin Erk, Marie Géléoc, Romain Geneaux, Alexander S Gentleman, Gildas Goldsztejn, Renaud Guillemin, David MP Holland, Iyas Ismail, Per Johnsson, Loïc Journel, Jochen Küpper, Jan Lahl, Jason WL Lee, Sylvain Maclot, Stuart R Mackenzie, Bastian Manschwetus, Andrey S Mereshchenko, Robert Mason, Jérôme Palaudoux, Maria Novella Piancastelli, Francis Penent, Dimitrios Rompotis, Arnaud Rouzée, Thierry Ruchon, Artem Rudenko, Evgeny Savelyev, Marc Simon, Nora Schirmel, Henrik Stapelfeldt, Simone Techert, Oksana Travnikova, Sebastian Trippel, Jonathan G Underwood, Claire Vallance, Joss Wiese, Farzaneh Ziaeefar, Mark Brouard, Tatiana Marchenko and Daniel Rolles

**Journal of Chemical Physics** **149** 204313 (2018)

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Denis Céolin, Ji-Cai Liu, Vinícius Vaz da Cruz, Hans Ågren, Loïc Journel, Renaud Guillemin, Tatiana Marchenko, Rajesh K. Kushawaha, Maria Novella Piancastelli, Ralph Püttner, Marc Simon and Faris Gel'mukhanov

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**152-** Deep core photoionization of iodine in CH<sub>3</sub>I and CF<sub>3</sub>I molecules: how deep down does chemical shift reach ?

Nacer Boudjemia, Kari Jänkälä, Tatsuo Gejo, Kiyonobu Nagaya, Kenji Tamasaku, Marko Huttula, Maria Novella Piancastelli, Marc Simon and Masaki Oura  
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**153-** Hard x-ray photoelectron spectroscopy on heavy atoms and heavy-element containing molecules using synchrotron radiation up to 35 keV at SPring-8 undulator beamlines

M. Oura, T. Gejo, K. Nagaya, Y. Kohmura, K. Tamasaku, L. Journel, M. N. Piancastelli and M. Simon

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**154-** Photoelectron–Auger-electron angular-momentum transfer in core-ionized Ar: Beyond the standard post-collision-interaction model.

R. Guillemin, L. Gerchikov, S. Sheinerman, M. Zmerli, T. Marin, L. Journel, O. Travnikova, T. Marchenko, B. Lassalle-Kaiser, M. N. Piancastelli and M. Simon  
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**155-** Multi-slit-type interference in carbon 2s photoionization of polyatomic molecules: from a fundamental effect to structural parameters.

Rajesh K. Kushawaha, Aurora Ponzi, Renaud Guillemin, Oksana Travnikova, Minna Patanen, Saikat Nandi, Gildas Goldsztejn, Loïc Journel, Tatiana Marchenko, Marc Simon, Maria Novella Piancastelli and Piero Decleva

**Physical Chemistry – Chemical Physics** **21** 13600 (2019)

**156-** Si  $1s^{-1}$ ,  $2s^{-1}$  and  $2p^{-1}$  lifetime broadening of  $\text{SiX}_4$  ( $X = \text{F}, \text{Cl}, \text{Br}, \text{CH}_3$ ) molecules:  $\text{SiF}_4$  anomalous behaviour reassessed.

Ralph Püttner, Tatiana Marchenko, Renaud Guillemin, Loïc Journel, Gildas Goldsztejn, Denis Céolin, Osamu Takahashi, Kiyoshi Ueda, Alexandre F. Lago, Maria Novella Piancastelli and Marc Simon

**Physical Chemistry – Chemical Physics** **21** 8827 (2019)

**157-** Energy-Dependent Relative Cross Sections in Carbon 1s Photoionization: Separation of Direct Shake and Inelastic Scattering Effects in Single Molecules.

Oksana Travnikova, Minna Patanen, Johan Söderström, Andreas Lindblad, Joshua J. Kas, Fernando D. Vila, Denis Céolin, Tatiana Marchenko, Gildas Goldsztejn, Renaud Guillemin, Loïc Journel, Thomas X. Carroll, Knut J. Børve, Piero Decleva, John J. Rehr, Nils Mårtensson, Marc Simon, Svante Svensson and Leif J. Sæther

**Journal of Physical Chemistry A** **123** 7619 (2019)

**158-** Hard x-ray spectroscopy and dynamics of isolated atoms and molecules: a review

M. N. Piancastelli, T. Marchenko, R. Guillemin, L. Journel, O. Travnikova, I. Ismail and M. Simon

**Reports on Progress in Physics** **83** 016401 (2020)

**159-** Observation of the fastest chemical processes in the radiolysis of water

Z.-H. Loh, G. Doumy, C. Arnold, L. Kjellsson, S.H. Southworth, A. Al Haddad, Y. Kumagai, M.-F. Tu, P.J. Ho, A.M. March, R.D. Schaller, M.S. Bin Mohd Yusof, T. Debnath, M. Simon, R. Welsch, L. Inhester, K. Khalili, K. Nanda, A.I. Krylov, S. Moeller, G. Coslovich, J. Koralek, M.P. Minitti, W.F. Schlötter, J.-E. Rubensson, R. Santra and L. Young

**Science** **367** 179 (2020)

**160-** Coulomb explosion of  $\text{CD}_3\text{I}$  induced by single photon deep inner-shell ionisation.

Måns Wallner, John H.D. Eland, Richard J. Squibb, Jonas Andersson, Andreas Hult Roos, Raj Singh, Omid Talaee, Dimitrios Koulentianos, Maria Novella Piancastelli, Marc Simon and Raimund Feifel

**Scientific Reports** **10** 1246 (2020)

**161-** Strong configuration interaction in the 3p photoelectron spectrum of Kr.

S. Kosugi, F. Koike, T. Nagayasu, F. Hosseini, J. Martins, T. Marcenko, O. Travnikova, M. Oura, T. Gejo, J. Harries, J. D. Bozek, K. Ito, E. Sokell, S. Fritzsch, M. N. Piancastelli, M. Simon and Y. Azuma

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**162-** Conjugate photoelectron recapture peaks in the high-resolution Auger electron spectra following near-threshold Ar 2p photoionization.

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

**Journal of Physics B** **53** 125001 (2020)

- 163-** Fluorescence Time Delay in Multistep Auger Decay as an Internal Clock.  
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- 164-** Resonant Inelastic X-Ray Scattering Reveals Hidden Local Transitionsof the Aqueous OH Radical.  
L. Kjellsson, K. D. Nanda, J.-E. Rubensson, G. Doumy, S. H. Southworth, P. J. Ho, A. M. March, A. Al Haddad, Y. Kumagai, M.-F. Tu, R. D. Schaller, T. Debnath, M. S. Bin Mohd Yusof, C. Arnold, W. F. Schlötter, S. Moeller, G. Coslovich, J. D. Koralek, M. P. Minitti, M. L. Vidal, M. Simon, R. Santra, Z.-H. Loh, S. Coriani, I. Krylov and L. Young  
**Physical Review Letters** 124 236001 (2020)
- 165-** Electron spectroscopy and dynamics of HBr around the Br  $1s^{-1}$  threshold.  
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 & Marc Simon  
**Physical Chemistry Chemical Physics** 22 26806 (2020)
- 166-** Core-hole localization and ultra-fast dissociation in SF<sub>6</sub>.  
Victor Ekholm, Gheorghe Sorin Chiuzbaian, Conny Såthe, Alessandro Nicolaou, Marco Guarise, Marc Simon, Nicolas Jaouen, Jan Magnus Luning, Coryn Frank Hague, Faris Gel'mukhanov, Michael Odelius, Olle Björneholm & Jan-Erik Rubensson  
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- 167-** Single and multiple excitations in double-core-hole states of free water molecules.  
Tatiana Marchenko, Stephane Carniato, Gildas Goldsztejn, Oksana Travnikova, Loïc Journel, Renaud Guillemin, Iyas Ismail, Dimitris Koulentianos, Jessica Martins, Denis Céolin, Ralph Püttner, Maria Novella Piancastelli & Marc Simon  
**Journal of Physics B: Atomic, Molecular and Optical Physics** 53 224002 (2020)
- 168-** Argon KLL Auger spectrum: Initial states, core-hole lifetimes, shake, and knock-down processes.  
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 & Marc Simon  
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- 170-** Argon  $1s^{-2}$  Auger hypersatellites.  
Ralph Püttner, Yongjun Li, Jiaolong Zeng, Dimitris Koulentianos, Tatiana Marchenko, Renaud Guillemin, Loïc Journel, Oksana Travnikova, Moustafa Zmerli, Denis Céolin, Yoshiro Azuma, Satoshi Kosugi, Maria Novella Piancastelli & Marc Simon  
**Journal of Physics B: Atomic, Molecular and Optical Physics** 54 024001 (2021)

**171-** The O K<sup>-2</sup>V spectrum of CO: the influence of the second core-hole.

Dimitris Koulentianos, Stephane Carniato, Ralph Püttner, Jessica Barbosa Martins, Oksana Travnikova, Tatiana Marchenko, Loic Journel, Renaud Guillemin, Iyas Ismail, Denis Céolin, Maria Novella Piancastelli, Raimund Feifel & Marc Simon

**Physical Chemistry Chemical Physics** 23 10780 (2021)

**172-** Hard x-ray photoelectron spectroscopy: a snapshot of the state-of-the-art in 2020.

Curran Kalha, Nathalie K Fernando, Prajna Bhatt, Fredrik Johansson, Andreas Linblad, Håkan Rensmo, León Zendejas Mendina, Rebecka Lindblad, Sebastian Siol, Lars Jeurgens, Claudia Cancellieri, Kai Rossnagel, Katerina Medjanik, Gerd Schoenhense, Marc Simon, Slavomir Nemsak, Patrick Lömker, Christof Schlueter & Anna Regoutz  
**Journal of Physics: Condensed Matter** 33 233001 (2021)

**173-** Nonstatistical behavior of the photoionization of spin–orbit doublets.

Ralph Püttner, Jessica Martins, Tatiana Marchenko, Oksana Travnikova, Renaud Guillemin, Loic Journel, Iyas ISMAIL, Gildas Goldsztejn, Dimitris Koulentianos, Denis Céolin, Maria Luiza Miranda Rocco, Maria-Novella Piancastelli, Marc Simon, David A Keating, Rasadi Munasinghe, Pranawa C Deshmukh & Steven Trent Manson  
**Journal of Physics B: Atomic, Molecular and Optical Physics** 54 085001 (2021)

**174-** Unified treatment of recoil and Doppler broadening in molecular high-energy photoemission.

Edwin Kukk, Denis Céolin, Oksana Travnikova, Ralph Püttner, Maria-Novella Piancastelli, Renaud Guillemin, Loic Journel, Tatiana Marchenko, Iyas Ismail, Jessica Martins, Jean-Pascal Rueff & Marc Simon  
**New Journal of Physics** 23 063077 (2021)

**175-** A von Hamos spectrometer based on highly annealed pyrolytic graphite crystal in tender x-ray domain.

Iyas Ismail, Loïc Journel, Régis Vacheresse, Oksana Travnikova, Thierry Marin, Denis Céolin, Renaud Guillemin, Tatiana Marchenko, Moustafa Zmerli, Dimitris Koulentianos, Ralph Püttner, Jérôme Palaudoux, Francis Penent & Marc Simon  
**Review of Scientific Instruments** 92 073104 (2021)

**176-** Experimental and theoretical study of the Kr L-shell Auger decay.

N Boudjemia, K Jänkälä, T Gejo, Y Kohmura, M Huttula, MN Piancastelli, M Simon, M Oura & R Püttner

**Physical Review A** 104 012804 (2021)

**177-** Pulse Energy and Pulse Duration Effects in the Ionization and Fragmentation of Iodomethane by Ultraintense Hard X Rays.

X Li, L Inhester, SJ Robatjazi, B Erk, R Boll, K Hanasaki, K Toyota, Y Hao, C Bomme, B Rudek, L Foucar, SH Southworth, CS Lehmann, B Kraessig, T Marchenko, M Simon, K Ueda, KR Ferguson, M Bucher, T Gorkhov, S Carron, R Alonso-Mori, JE Koglin, J Correa, GJ Williams, S Boutet, L Young, C Bostedt, S-K Son, R Santra, D Rolles & A Rudenko

**Physical Review Letters** 127 093202 (2021)

**178-** Inner-Shell-Ionization-Induced Femtosecond Structural Dynamics of Water Molecules Imaged at an X-Ray Free-Electron Laser.

T Jahnke, R Guillemin, L Inhester, S-K Son, G Kastirke, M Ilchen, J Rist, D Trabert, N Melzer, N Anders, T Mazza, R Boll, A De Fanis, V Music, Th Weber, M Weller, S Eckart, K Fehre, S Grundmann, A Hartung, M Hofmann, C Janke, M Kircher, G Nalin, A Pier, J Siebert, N Strenger, I Vela-Perez, TM Baumann, P Grychtol, J Montano, Y Ovcharenko, N Rennhack, DE Rivas, R Wagner, P Ziolkowski, P Schmidt, T Marchenko, O Travnikova, L Journel, I Ismail, E Kukk, J Niskanen, F Trinter, C Vozzi, M Devetta, S Stagira, M Gisselbrecht, AL Jäger, X Li, Y Malakar, M Martins, R Feifel, L Ph H Schmidt, A Czasch, G Sansone, D Rolles, A Rudenko, R Moshammer, R Dörner, M Meyer, T Pfeifer, MS Schöffler, R Santra, M Simon & MN Piancastelli

**Physical Review X** 11 041044 (2021)

**179-** Consistent characterization of the electronic ground state of iron(II) phthalocyanine from valence and core–shell electron spectroscopy.

Jonathan Laurent, John Bozek, Marc Briant, Pierre Çarçabal, Denis Cubaynes, Aleksandar Milosavljević, Ralph Püttner, Niloufar Shafizadeh, Marc Simon, Benoît Soep, Gildas Goldsztejn

**Physical Chemistry Chemical Physics** 24 2656 (2022)

**180-** Ultrafast dissociation of ammonia: Auger Doppler effect and redistribution of the internal energy.

Oksana Travnikova, Edwin Kukk, Farzad Hosseini, Sari Granroth, Eero Itälä, Tatiana Marchenko, Renaud Guillemin, Iyas Ismail, Roba Moussaoui, Loïc Journel, John Bozek, Ralph Püttner, Pavel Krasnov, Victor Kimberg, Faris Gel'Mukhanov, Maria Novella Piancastelli & Marc Simon

**Physical Chemistry Chemical Physics** 24 5842 (2022)

**181-** Simulation of Auger decay dynamics in the hard X-ray regime: HCl as a showcase.

G Goldsztejn, R Guillemin, T Marchenko, O Travnikova, D Céolin, L Journel, M Simon, MN Piancastelli & R Püttner

**Physical Chemistry Chemical Physics** 24 6590 (2022)

**182-** Time-resolved study of recoil-induced rotation by X-ray pump – X-ray probe spectroscopy.

Ji-Cai Liu, Nina Ignatova, Victor Kimberg, Pavel Krasnov, Alexander Föhlisch, Marc Simon & Faris Gel'mukhanov

**Physical Chemistry Chemical Physics** 24 6627 (2022)

**183-** Electron delocalisation in conjugated sulfur heterocycles probed by resonant Auger spectroscopy.

Jessica B Martins, Carlos EV de Moura, Gildas Goldsztejn, Oksana Travnikova, Renaud Guillemin, Iyas Ismail, Loïc Journel, Dimitrios Koulentianos, Mario Barbatti, Alexandre F Lago, Denis Céolin, Maria Luiza M Rocco, Ralph Püttner, Maria Novella Piancastelli, Marc Simon & Tatiana Marchenko

**Physical Chemistry Chemical Physics** 24 8477 (2022)

**184-** Recoil lineshapes in hard X-ray photoelectron spectra of large molecules – free and anchored-on-surface 10-aminodecane-1-thiol.

Edwin Kukk, Ralph Püttner & Marc Simon

**Physical Chemistry Chemical Physics** 24 10465 (2022)

**185-** UV-induced dissociation of CH<sub>2</sub>BrI probed by intense femtosecond XUV pulses.

Hansjochen Köckert, Jason WL Lee, Felix Allum, Kasra Amini, Sadia Bari, Cédric Bomme, Felix Brauße, Mark Brouard, Michael Burt, Barbara Cunha De Miranda, Stefan Düsterer, Per Eng-Johnsson, Benjamin Erk, Marie Géléoc, Romain Geneaux, Alexander S Gentleman, Renaud Guillemin, Gildas Goldsztejn, David MP Holland, Iyas Ismail, Loïc Journel, Thomas Kierspel, Jochen Küpper, Jan Lahl, Stuart R Mackenzie, Sylvain Maclot, Bastian Manschwetus, Andrey S Mereshchenko, Terence Mullins, Pavel K Olshin, Jérôme Palaudoux, Francis Penent, Maria Novella Piancastelli, Dimitrios Rompotis, Arnaud Rouzée, Thierry Ruchon, Artem Rudenko, Nora Schirmel, Marc Simon, Simone Techert, Oksana Travnikova, Sebastian Trippel, Claire Vallance, Enliang Wang, Joss Wiese, Farzaneh Ziaeef, Tatiana Marchenko, Daniel Rolles & Rebecca Boll

**Journal of Physics B: Atomic, Molecular and Optical Physics** 55 014001 (2022)

**185-** UV-induced dissociation of CH<sub>2</sub>BrI probed by intense femtosecond XUV pulses.

Hansjochen Köckert, Jason WL Lee, Felix Allum, Kasra Amini, Sadia Bari, Cédric Bomme, Felix Brauße, Mark Brouard, Michael Burt, Barbara Cunha De Miranda, Stefan Düsterer, Per Eng-Johnsson, Benjamin Erk, Marie Géléoc, Romain Geneaux, Alexander S Gentleman, Renaud Guillemin, Gildas Goldsztejn, David MP Holland, Iyas Ismail, Loïc Journel, Thomas Kierspel, Jochen Küpper, Jan Lahl, Stuart R Mackenzie, Sylvain Maclot, Bastian Manschwetus, Andrey S Mereshchenko, Terence Mullins, Pavel K Olshin, Jérôme Palaudoux, Francis Penent, Maria Novella Piancastelli, Dimitrios Rompotis, Arnaud Rouzée, Thierry Ruchon, Artem Rudenko, Nora Schirmel, Marc Simon, Simone Techert, Oksana Travnikova, Sebastian Trippel, Claire Vallance, Enliang Wang, Joss Wiese, Farzaneh Ziaeef, Tatiana Marchenko, Daniel Rolles & Rebecca Boll

**Journal of Physics B: Atomic, Molecular and Optical Physics** 55 014001 (2022)

**186-** Resonant Auger decay induced by the symmetry-forbidden 1a<sub>1g</sub> → 6a<sub>1g</sub> transition of the SF<sub>6</sub> molecule.

ACF Santos, O Travnikova, N Boudjemaa, T Marchenko, R Guillemin, I Ismail, D Koulentianos, D Céolin, F Gel'mukhanov, M Simon, MN Piancastelli & R Püttner

**Journal of Vacuum Science & Technology A: Vacuum, Surfaces, and Films** 40 042801 (2022)

**187-** Formation and relaxation of K<sup>-2</sup> and K<sup>-2</sup>V double-core-hole states in *n*-butane.

Dimitris Koulentianos, Vincenzo Carravetta, Rafael C Couto, Jonas Andersson, A Hult Roos, Richard J Squibb, Måns Wallner, John HD Eland, Marc Simon, Hans Ågren, Raimund Feifel

**Journal of Chemical Physics** 157 044306 (2022)

**188-** Manifestation of postcollision interaction in Krypton LMN Auger spectra following K-shell photoionization.

S Li, D Koulentianos, SH Southworth, G Doumy, L Young, DA Walko, R Püttner, JD Bozek, D Céolin, A Verma, R Guillemin, MN Piancastelli, M Simon, LG Gerchikov & SA Sheinerman

**Physical Review A** 106 023110 (2022)

**189-** Postcollision-interaction effects in multistep Auger transitions following Ar 1s photoionization.

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

**Physical Review A** 106 033114 (2022)

**190-** Photochemical Ring-Opening Reaction of 1,3-Cyclohexadiene: Identifying the True Reactive State.

O. Travnikova, T. Pitesă, A. Ponzi, M. Sapunar, R. J. Squibb, R. Richter, P. Finetti, M. Di Fraia, A. De Fanis, N. Mahne, M. Manfredda, V. Zhaunerchyk, T. Marchenko, R. Guillemin, L. Journel, K. C. Prince, C. Callegari, M. Simon, R. Feifel, P. Decleva, N. Doslic & M. N. Piancastelli

**Journal of the American Chemical Society** 144 21878 (2022)

**191-** Dynamics of core-excited ammonia: disentangling fragmentation pathways by complementary spectroscopic methods.

Oksana Travnikova, Farzad Hosseini, Tatiana Marchenko, Renaud Guillemin, Iyas Ismail, Roba Moussaoui, Loïc Journel, Aleksandar R Milosavljević, John D Bozek, Edwin Kukk, Ralph Püttner, Maria Novella Piancastelli & Marc Simon

**Physical Chemistry Chemical Physics** 25 1063 (2023)

**192-** Concerted and sequential three-body fragmentation of deep-core-ionized carbon disulfide.

Renaud Guillemin, Thierry Marin, Moustafa Zmerli, Cédric Bomme, Iyas Ismail, Loïc Journel, Tatiana Marchenko, Oksana Travnikova, Maria Novella Piancastelli & Marc Simon

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**193-** Generalization of the post-collision interaction effect from gas-phase to solid-state systems demonstrated in thiophene and its polymers.

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- 37-** International Symposium XFEL, 16th-20th September 2013 Dinard.  
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- 61-** International Workshop on x-ray Science. Uppsala, Sweden, 7th May 2019.  
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23-30 juillet 2019  
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Himeji, Japon, virtuel, 31 mai-3 juin 2022.  
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Madrid, Espagne, 4-7 octobre 2022.  
Dynamics and structures perspectives in Atomic and Molecular Physics in the tender x-ray  
region (2-12 keV)
- 72-** International Workshop on Photoionization (IWP) and Resonant Inelastic X-ray Scattering  
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Discussion leader and overview on Atomic and Molecular Physics using Synchrotron  
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- 73-** VUVX international conference, Campinas, Brésil, 3-7 juillet 2023  
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