

List of publications - Dr. V. Zamudio-Bayer

50. J. Haitjema, S. Castellanos, O. Lugier, I. Bespalov, R. Lindblad, M. Timm, C. Bülow, **V. Zamudio-Bayer**, J. T. Lau, B. von Issendorff, R. Hoekstra, K. Witte, B. Watts, T. Schlathölter, and A.M. Brouwer, *Soft X-Ray Absorption and Fragmentation of Tin-oxo Cage Photoresists* Phys. Chem. Chem. Phys. 26, 5986 (2024).
49. O. S. Ablyasova, **V. Zamudio-Bayer**, M. Flach, M. da Silva Santos, J. T. Lau, and K. Hirsch, *Direct Spectroscopic Evidence for the High-Spin State of Dioxidomanganese(V)* Phys. Chem. Chem. Phys. 26, 5830 (2024).
48. P.H.W. Svensson, L. Schwob, O. Gränäs, I. Unger, O. Björneholm, N. Timneanu, R. Lindblad, A.-L. Vieli, **V. Zamudio-Bayer**, M. Timm, K. Hirsch, C. Caleman, and M. Berholts, *Heavy Element Incorporation in Nitroimidazole Radiosensitizers: Molecular-Level Insights into Fragmentation Dynamics* Phys. Chem. Chem. Phys. 26, 770 (2024).
47. Y. Huo, S. K. Espinoza Cangahuala, **V. Zamudio-Bayer**, M. Goulart, M. Kubin, M. Timm, J. T. Lau, B. von Issendorff, R. Hoekstra, S. Faraji, and T. Schlathölter, *A comparative laboratory study of soft X-ray-induced ionization and fragmentation of five small PAH cations* Eur. Phys. J. D 77, 181 (2023).
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45. O. S. Ablyasova, M. Guo, **V. Zamudio-Bayer**, M. Kubin, T. Gitzinger, M. da Silva Santos, M. Flach, M. Timm, M. Lundberg, J. T. Lau, and K. Hirsch, *Electronic Structure of the Complete Series of Gas-Phase Manganese Acetylacetones by X-ray Absorption Spectroscopy* J. Phys. Chem. A 127, 7121 (2023).

44. M. da Silva Santos, R. Medel, M. Flach, O. S. Ablyasova, M. Timm, B. von Issendorff, K. Hirsch, **V. Zamudio-Bayer**, S. Riedel, and J. T. Lau, *Exposing the Oxygen-Centered Radical Character of the Tetraoxido Ruthenium(VIII) Cation $[\text{RuO}_4]^+$* ChemPhysChem e202300390 (2023).
43. **V. Zamudio-Bayer**, K. Hirsch, L. Ma, K. De Knijf, X. Xu, A. Ławicki, A. Terasaki, P. Ferrari, B. von Issendorff, P. Lievens, W. A. de Heer, J. T. Lau, and E. Janssens, *Magnetic nanodoping: Atomic control of spin states in cobalt doped silver clusters* Phys. Rev. Research 5, 033103 (2023).
42. Y. Huo, S. K. Espinoza Cangahuala, **V. Zamudio-Bayer**, M. Goulart, M. Kubin, M. Timm, J. T. Lau, B. von Issendorff, R. Hoekstra, S. Faraji, T. Schlathölter, *An X-ray spectroscopy study of structural stability of superhydrogenated pyrene derivatives* Mon. Not. R. Astron. Soc. 523, 865 (2023).
41. M. Liu, D. O'Reilly, L. Schwob, X. Wang, **V. Zamudio-Bayer**, J. T. Lau, S. Bari, T. Schlathölter, J.-C. Pouilly, *Direct observation of charge, energy and Hydrogen transfer between the backbone and nucleobases in isolated DNA oligonucleotides* Chem. Eur. J. e202211555 (2023).
40. Y. Huo, S. K. Espinoza Cangahuala, M. Goulart, **V. Zamudio-Bayer**, M. Kubin, M. Timm, J. T. Lau, B. von Issendorff, R. Hoekstra, S. Faraji, T. Schlathölter, *Soft X-ray spectroscopy of coronene $^+$ and (coronene $+H$) $^+$ cations: The influence of hydrogenation on electronic structure and photofragmentation* Phys. Rev. A 106, 063104 (2022).
39. R. Lindblad, L. Kjellsson, E. De Santis, **V. Zamudio-Bayer**, B. von Issendorff, Stacey L. Sorensen, J. T. Lau, W. Hua, V. Carravetta, J. -E. Rubensson, H. Ågren, and R. C. Couto, *Experimental and theoretical near-edge x-ray-absorption fine-structure studies of NO $^+$* Phys. Rev. A 106, 042814 (2022).
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37. M. Flach, K. Hirsch, M. Timm, O. S. Ablyasova, M. da Silva Santos, M. Kubin, C Bülow, T. Gitzinger, B. von Issendorff, J. T. Lau, and **V. Zamudio-Bayer**, *Iron L₃-edge energy shifts for the full range of possible 3d occupations within the same oxidation state of iron halides* Phys. Chem. Chem. Phys. 24, 19890 (2022).
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35. X. Wang, S. Rathnachalam, **V. Zamudio-Bayer**, K. Bijlsma, W. Li, R. Hoekstra, M. Kubin, M. Timm, B. von Issendorff, J. T. Lau, S. Faraji, T. Schlathölter, *Intramolecular hydrogen transfer in DNA induced by site-selective resonant core excitation* Phys. Chem. Chem. Phys. 24, 7815 (2022).
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29. S. Dörner, L. Schwob, K. Atak, K. Schubert, R. Boll, T. Schlathölter, M. Timm, C. Bülow, **V. Zamudio-Bayer**, B. von Issendorff, J. T. Lau, S. Techert, and S. Bari, *Probing structural information of gas-phase peptides by near-edge X-ray absorption mass spectrometry* J. Am. Soc. Mass Spectrom. 32, 670 (2021).
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16. **V. Zamudio-Bayer**, K. Hirsch, A. Langenberg, M. Kossick, A. Lawicki, A. Terasaki, B. von Issendorff, and J. T. Lau, *Direct observation of high-spin states in manganese dimer and trimer cations by x-ray magnetic circular dichroism spectroscopy in an ion trap*
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