

CORRIGENDUM

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Corrigendum

Corrigendum: Inner shell photofragmentation of 2Cl-pyrimidine studied by mass spectrometry and electron–ion coincidence experiments (2020 *J. Phys. B: At. Mol. Opt. Phys.* **53** 244004)

Paola Bolognesi^{1,*} , Antti Kettunen², Patrick O’Keeffe¹ , Robert Richter³, Antonella Cartoni^{1,4}, Anna Rita Casavola¹, Matteo C Castrovilli¹, Sanja Tosic⁵, Bratislav P Marinkovic⁵  and Lorenzo Avaldi¹ 

¹ CNR-Istituto di Struttura della Materia, Area della Ricerca Roma 1, Roma, Italy

² Department of Physics, University of Oulu, Finland

³ Elettra—Sincrotrone Trieste, Area Science Park, Basovizza (Trieste), Italy

⁴ Chemistry Department, Sapienza Università di Roma, Roma, Italy

⁵ Institute of Physics, University of Belgrade, Belgrade, Serbia

E-mail: paola.bolognesi@cnr.it

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(Some figures may appear in colour only in the online journal)

Due to a mistake during the calibration of the photon energy in the NEXAFS spectrum measured in the region of the Cl 2p edge, the energy position of the Cl ($2p \rightarrow \sigma^*$) transition has been wrongly set to 200.4 eV instead of 201.4 eV.

By using the correct energy scale, the following amendments apply:

Caption of figure 1:

The sentence ‘All the spectra have been reported on BE scale by subtracting the kinetic energy of the measured electron from the photon energy’ has to be replaced by ‘The spectra have been reported on the BE scale by comparing the

photoelectron spectra measured below N, C and Cl inner shell resonances with the valence spectra of 2Cl-pyrimidine [31]’.

Page 3:

The valence electron spectra were measured at 60 eV photon energy while the RAE spectra were measured at the photon energies corresponding the Cl($2p \rightarrow \sigma^*$), C4/6($1s \rightarrow \pi^*$), C2($1s \rightarrow \pi^*$) and N($1s \rightarrow \pi^*$) transitions to the lowest unoccupied molecular orbitals, at photon energies **201.4**, 285.53, 287.40 and 398.7 eV, respectively.

Caption of figure 3:

The ‘off-resonance’ spectra were measured below the lowest resonance, i.e. at **197.2**, 284.2 and 397.6 eV, respectively. The ‘on-resonance’ spectra are integrated in the regions

* Author to whom any correspondence should be addressed.

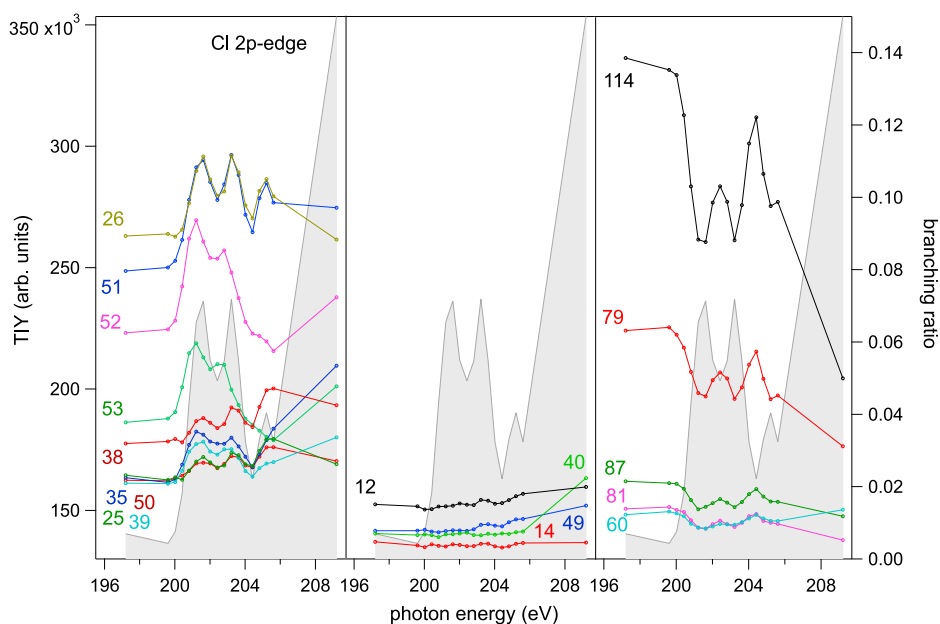


Figure 4. (Top) NEXAFS spectra (grey full area) and branching ratio of the most representative fragments at the Cl(2p) excitation/ionization regions. The three panels arbitrarily regroup smaller (left panel) and larger (right panel) fragments, as well as fragments which do not show any significant resonant effect (central panel), see text.

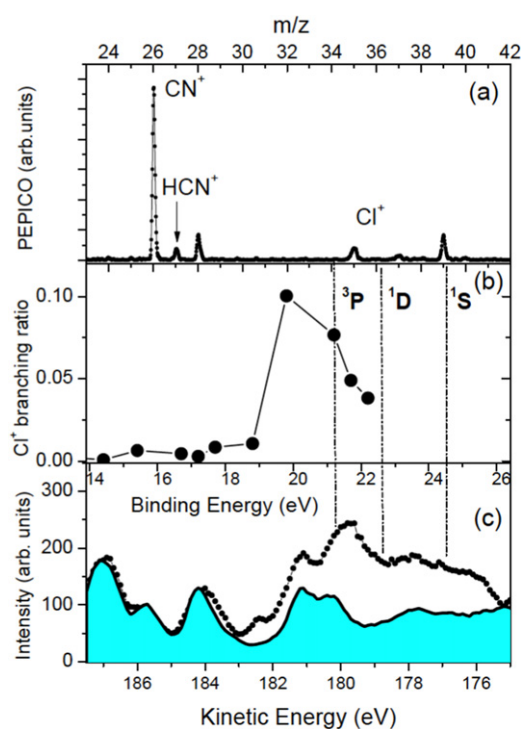


Figure 7. (a) Sum of all PEPICO spectra in the BE region 9–23 eV and m/z range 23–42 measured at the Cl(2p \rightarrow σ^*) excitation energy of 2Cl-pyrimidine; (b) the breakdown curve of Cl⁺ (m/z 35/37) in the BE region 13–23 eV; (c) the Cl(2p_{3/2} \rightarrow σ^*) RAE spectrum (dots) and a photoelectron spectrum (shaded area) measured 4 eV below it and properly shifted to superimpose the 3b₂ band. The dashed lines indicate the energy position of the decay to the Cl⁺ 3p⁴ (³P, ¹D, ¹S) states [46].

200.4–204.0 and 284.6–288 eV for the Cl and C cases, respectively, and measured at 398.8 eV for the N case. . .

The **top panels of figures 4 and 7** of the paper have to be replaced by the following, where the photon energy and kinetic energy scale, respectively, are shifted by 1 eV.

These changes do not affect either the discussion of the results or the conclusions of the paper.

ORCID iDs

Paola Bolognesi  <https://orcid.org/0000-0002-6543-6628>

Patrick O'Keeffe  <https://orcid.org/0000-0002-8676-4436>

Bratislav P Marinkovic  <https://orcid.org/0000-0002-6904-6360>

Lorenzo Avaldi  <https://orcid.org/0000-0002-2990-7330>