AU Cafarelli, P, Carcabal, P, Champeaux, JP, Le Padellec, A, Moretto-Capelle, P, Rabier, J, Sence, M
AF Cafarelli, Pierre, Carcabal, Pierre, Champeaux, Jean-Philippe, Le Padellec, Arnaud, Moretto-Capelle, Patrick, Rabier, Julien, Sence, Martine
ED Tokesi, K; Sulik, B
TI Ionization and Fragmentation of 5-Chlorouracil induced by 100 keV protons collisions
SO RADIATION DAMAGE IN BIOMOLECULAR SYSTEMS
SE AIP CONFERENCE PROCEEDINGS
LA English
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CT 5th International Conference on Radiation Damage in Biomolecular Systems
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SP European Sci Fdn, Elect Induced Processing, Molecular Level, Hungarian Natl Off Res & Technol, Hungarian Acad Sci
DE Haloggenated uracil; radiosensitizer; proton collision; multiple coincidence detection
AB We present preliminary experimental results on the dissociation of singly and doubly ionized 5-Chlorouracil induced by collisions with proton of 100 keV energy. Multiple coincidence techniques are used to detect the ionic fragments from single dissociation events. This enables a thorough analysis of kinetic momentums of the charged and neutral species involved in the dissociation. In many cases, this leads to the establishment of the scenario the molecule undergoes after ionization as well as the determination of the nature of intermediate (undetected) species. In other cases, the dissociation scenario cannot be unambiguously identified and further analysis as well as theoretical support is needed.
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RP Cafarelli, P, Univ Toulouse 3, CNRS, UMR 5589, Lab Collis Agregats React,IRSAMC, F-31062 Toulouse, France.
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