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## Enhancement of radiative recombination of ions with low energy electrons in cold magnetized plasma

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The radiative recombination (RR) is a one of the most important processes occurring in the interaction of highly charged ions with electrons. During the last decades the RR was actively studied in various aspects related to atomic and plasma physics, astrophysics, and accelerator physics. Recently, the RR of U92+ ions with electrons was studied in a subshell-selective manner by observing the emitted x-ray photons from recombination into the K and L shells at nonzero collision energies in an electron cooler. In this experiment the measured electron energy dependence of the RR rate coefficients was found to be sensitive to relativistic effects. The experiment yielded also hints for an enhancement of RR rate coefficients into the K and L shells, i.e., into low-n shells. This new state-selective experimental method is very promising for further experimental studies at CRYRING, for example, with more energy steps across and below the onset threshold of the RR enhancement.

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