Dipole angular distribution and spin polarization of photoelectrons from semi-filled shell atoms MIRON AMUSIA\textsuperscript{1}, Racah Institute of Physics, the Hebrew University, Jerusalem 91904, Israel, LARISSA CHERNY-SHEVA, 2 A. F. Ioffe Physical-Technical Institute, St. Petersburg 194021, Russia

— We calculated photoelectrons’ dipole angular anisotropy and spin-polarization parameters for a number of semi-filled shell atoms in the frame of the Spin Polarized Random Phase Approximation with Exchange. We consider photoelectrons from semi-filled and closed shells that are neighbours. We studied also photoelectrons from Cr\textsuperscript{*} and Mo\textsuperscript{*} that are formed by spin-flip of the outer \textit{s}—electrons. To see the role of the nuclear charge variation, we have treated the case of \textit{3p} - electrons in K, Ar and K\textsuperscript{+}. The following subshell were considered: N (\textit{2p}), P (\textit{3p}), Ar (\textit{3p}), K\textsuperscript{+}(\textit{3p}), K(\textit{3p}), Cr(\textit{3p}, \textit{3d}), Cr\textsuperscript{*}(\textit{3d}), Mn(\textit{3p}, \textit{3d}), As(\textit{3d}, \textit{4p}), Mo(\textit{4p}, \textit{4d}), Mo\textsuperscript{*}(\textit{4d}), Tc(\textit{4p}, \textit{4d}), Sb(\textit{4d}, \textit{5p}), Eu(\textit{4f}). The detailed information can be found in [1]. The peculiarities of obtained parameters as functions of photon frequency are quite prominent and deserve experimental investigation.


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