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Fano Parameters for Li Inner-Shell Resonances in the 70–74.5 eV Region[1] DRAGAN LUKIC, Institute of Physics, Belgrade, Serbia, SCOTT B. WHITFIELD, Dept. of Physics and Astronomy, Univ. of Wisconsin–Eau Claire, RALF WEHLITZ, Synchrotron Radiation Center, Univ. of Wisconsin–Madison —
We have measured the relative ion-yield of lithium between 70 and 74.5 eV in the region of $1s3\ell n\ell'$ ($n >= 3$) inner-shell excitations using highly monochromatized photons. We employed the PGM undulator beamline at the Synchrotron Radiation Center with a resolving power of 13,000 and have tracked the autoionizing resonances to higher energies than in previous experiments[2,3]. Using Fano profiles to fit our data we have analyzed the resonances in our ion yield spectra and obtained resonance parameters that we compare to previously published experimental and theoretical values. We find good agreement with the theoretical calculations of Chung and Chang[4].

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