

Abstract Submitted
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Electron impact excitation of calcium.¹ OLEG ZATSARINNY, KLAUS BARTSCHAT, Drake University, VICTOR GEDEON, LUDMILA BANDURINA, Ushgorod State University (Ukraine) — We have used the B -spline R -matrix (close-coupling) method with non-orthogonal sets of orbitals [1] to extend our recent calculation for low-energy elastic electron collisions with calcium atoms [2] to excitation of the lowest few excited states. Our results for state-selected angle-integrated and angle-differential cross sections, as well as angle-differential electron-impact correlation parameters, measured in electron-photon coincidence or superelastic scattering setups, will be compared with recent experimental data [3,4] and predictions from other theoretical methods [5,6].

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Klaus Bartschat
Drake University

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