Abstract Submitted
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Electron Impact Excitation of Ni II C.M. CASSIDY, C.A. RAMSBOTTOM, M.P. SCOTT, P.G. BURKE, Queens University Belfast, UK, V.M. BURKE, C.J. NOBLE, STFC Daresbury, Warrington, UK — Considerable demand exists for electron excitation data for the ions of Fe, Co and Ni, since lines from these elements in low ionization stages are observed in many types of astrophysical spectra. Electron scattering from these ions is complicated by the 'open' 3d-shell in the target, which gives rise to hundreds of fine structure levels, and thousands of coupled channels. In this study we are using the new parallel R-matrix codes (PRMAT) to obtain Maxwellian averaged effective collisions strengths for low-lying forbidden transitions in Ni II, over a range of astrophysically significant temperatures. Latest results will be presented at the conference.

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