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Electron-impact ionization of atomic ions in the B isonuclear sequence JULIAN BERENGUT, STUART LOCH, MICHAEL PINDZOLA, Auburn University, CONNOR BALLANCE, DON GRIFFIN, Rollins College, FL — Electron-impact ionization cross sections for several atomic ions in the B isonuclear sequence are calculated using both perturbative and non-perturbative theoretical methods. A distorted wave calculation in a mixed V^N/V^{N-1} potential for neutral B exhibits a large shape resonance in the 2s and 2p subshell ionization cross-sections near their thresholds, which is not found in an all V^{N-1} potential distorted-wave calculation. The time-dependent close-coupling and R-matrix with pseudo-states methods provide a check for the different distorted wave methods. We also plan to present ionization cross section results for B^+, B^{2+}, and B^{3+}.

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