

ABSOLUTE CROSS SECTIONS FOR NEAR-THRESHOLD ELECTRON-IMPACT EXCITATION OF THE $2s\ ^2S \rightarrow 2p\ ^2P$ TRANSITION IN C^{3+} (Ref. 1)

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Absolute total cross sections for electron-impact excitation of the $2s\ ^2S \rightarrow 2p\ ^2P$ transition in C^{3+} were measured from 7.35 eV to 8.45 eV using the merged electron-ion beams energy-loss technique. The results settle the discrepancy between two previous experiments using the crossed-beams fluorescence method, being in very good agreement with the older results⁶ but less so with the more recent ones.⁷ The present measurements are also in good agreement with unitarized Coulomb-Born and close-coupling calculations.

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