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Evaluation of Cross Section for Electron Collisions with SF6 and BCl3 MI YOUNG SONG, DEUK-CHUL KWON, WON-SEOK JHANG, JUN-HYUNG PARK, SUNG-HA HWANG, YEONG-KYEONG KANG, JUNG-SIK YOON, National Fusion Research Institute, CONVERGENCR PLASMA RE-SEARCH CENTER TEAM — Electron-impact cross sections for SF6 and BCl3, including their radicals, are important in developing plasma processing. Low-energy electron collision data for these gases are sparse and only the limited cross section data are available. We interest to evaluate of cross section including various processes such as elastic and inelastic processes for electron collisions with SF6 and BCl3, including their radicals. The research objective is to provide a more complete data set for electron collisions with SF6 and BCl3, their radicals than those published before. We collected cross section data through journal, report, web database and reviewed available cross section data using critical evaluation rule. Through this processes, we determined a set of recommended values of cross section, as far as possible. The literature has been surveyed through early 2011.

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