

ELECTRON SCATTERING CROSS SECTIONS REPRESENTED IN BELGRADE ELECTRON-ATOM/MOLECULE DATABASE (BEAM)

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Abstract. Electron scattering cross sections have been maintained within BEAM database with the specific emphasis on the electron interactions with metal vapour atoms. Processes that have been covered are elastic scattering, electronic state excitations and ionization.

BEAM database was promoted in 2015 (Marinković *et al.* 2015) and from the beginning it was a part of Virtual Atomic/Molecular Data Centre (Albert *et al.* 2020). Different set of electron-scattering cross sections, either differential or integral, have been maintained and curated. Currently, 17 atomic species and 18 molecular species are included in BEAM database. The usefulness of database has been demonstrated in analyzing data from Rosetta Mission (Marinković *et al.* 2017) or showing collisional datasets of importance for molecular dynamics (Vujčić *et al.* 2023).

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