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TI Merged beam study of the associative ionization  $O^- + D^+ / O^{++} D^-$  and  $C^{++} D^-$

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AB Absolute total cross sections have been measured for the associative ionization (AI) reactions  $O^- + D^+ / O^+ + D^-$  and  $C^+ + D^-$  using a merged beam set-up. These original measurements might be relevant to the understanding of several astrophysical objects. The internal excitation of the target ions is discussed, and structures appearing in the different cross section curves are related to the interplay between AI and other non-associative reaction channels, such as detachment and multiple ionization.

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