

Abstract Submitted
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Vibrational Excitation of Water by Low-Energy Electrons¹ MUR-
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Physics, Caltech, Pasadena, USA — Experimental and calculated differential and
integral cross-sections for electron-impact excitation of the unresolved stretching
modes (100+001) and the bending mode (010) of water will be presented. The
experimental DCSs are taken over an extensive range of incident energies (1eV to
100eV) and scattering angles (10 to 130 degrees) and are normalized to the recently
measured elastic DCSs.² The calculations are carried out in the adiabatic approxi-
mation using the Schwinger multichannel method. The present results are compared
to previous theoretical and experimental results in the literature.

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²Khakoo et al., Phys. Rev. A 78, 052710 (2008).

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