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Electron Impact Excitation of the lowest-lying A^1B_1 Electronic state of Water P.J.O. TEUBNER, P.A. THORN, M.J. BRUNGER, L. CAMPBELL, ARC Centre for Antimatter-Matter Studies, SoCPES, Flinders University, GPO Box 2100, Adelaide, 5001 Australia, H. KATO, C. MAKOCHEKANWA, M. HOSHINO, H. TANAKA, Physics Dept., Sophia University, Chiyoda-ku, Tokyo 102-8554, Japan — We report differential and integral cross sections for excitation of the A^1B_1electronic state of water. The energy range of these measurements is 15–50eV and, where possible, comparison is made to the results of available theory. We additionally report generalised oscillator strengths (at energies 30, 100 and 200eV) and a value of the optical oscillator strength (OOS) for this state. The present OOS is also compared to the results of earlier studies.

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