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Title:Vibrational spectra of chloroform, freon-11 and selected isotopomers in the terahertz region
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Abstract:The fundamental bands of the CCl3 asymmetric deformation modes of selected isotopomers of chloroform (CHClinf3/inf) and freon-11 (CFClinf3/inf) have been measured in a static cell at ambient temperature using a laser-based source of tunable radiation in the terahertz region of the electromagnetic spectrum. The analysis of the rotational contours of the bands enabled the derivation of the fundamental frequencies with an accuracy of better than 3 GHz. 
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