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标题: New investigation on THz spectra of OH and SH radicals (X-2 Pi(i))

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摘要: Pure rotational transitions of OH and SH radicals have been recorded in the THz spectral range using cw-THz and synchrotron-based FT-FIR techniques. Line lists on these radicals have been completed in the three and two lowest vibrational states for OH and SH, respectively. Furthermore, the hyperfine structure of OH and SH has been observed for the first time using infrared IR FT-spectroscopy, and at frequencies higher than 1 THz, respectively. A combined fit has been made for each of these radicals including $v = 0, 1$ and 2 for OH and $v = 0$ and 1 for SH. (c) 2012 Elsevier B.V. All rights reserved.

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