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Sommario/riassunto	This book discusses the mechanical and opto-electronic design of laser spectrometers for measuring two very important atmospheric gases, namely water vapor and its isotopic ratios, and formaldehyde. For measuring water vapor, shot-noise limited sensitivity has been achieved by a careful choice of system components and data processing. For measuring formaldehyde, a selective sample modulation exploiting the Stark effect has been used to greatly improve the sensitivity.