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Sommario/riassunto	The detection of single molecules opens up new horizons in analytical chemistry, biology and medicine. This discipline, which belongs to the expanding field of nanoscience, has been rapidly emerging over the last ten years. This handbook provides a thorough overview of the field. It begins with basics of single molecule detection in solution, describes methods and devices (fluorescense correlation spectroscopy, surface enhanced Raman scattering, sensors, especially dyes, screening techniques, especially confocal laser scanning microscopy). In the second part, various applications in life sciences and medicine provide the latest research results. This modern handbook is a highly accessible reference for a broad community from advanced researchers, specialists and company professionals in physics, spectroscopy, biotechnology, analytical chemistry, and medicine. Written by leading authorities in the field, it is timely and fills a gap -

up to now there exists no handbook concerning this theme.