



Confocal raman microscopy

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Monografía

Confocal Raman Microscopy is a relatively new technique that allows chemical imaging without specific sample preparation. By integrating a sensitive Raman spectrometer within a state-of-the-art microscope, Raman microscopy with a spatial resolution down to 200nm laterally and 500nm vertically can be achieved using visible light excitation. Recent developments in detector and computer technology as well as optimized instrument design have reduced integration times of Raman spectra by orders of magnitude, so that complete images consisting of tens of thousands of Raman spectra can be acquired in seconds or minutes rather than hours, which used to be standard just one decade ago. The purpose of this book is to provide the reader a comprehensive overview of the rapidly developing field of Confocal Raman Microscopy and its applications

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