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3D Confocal Raman Imaging of Endothelial Cells and Vascular Wall: Perspectives in Analytical Spectroscopy of Biomedical Research

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Supplementary Materials

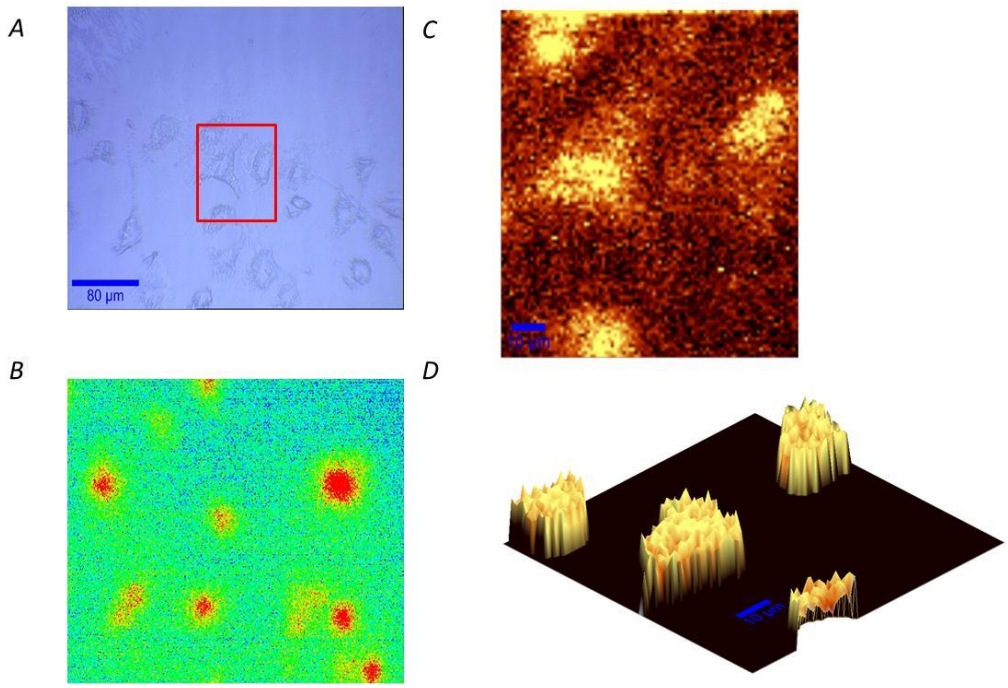

Fig. S1. Fluorescence microscopic images of EA.hy 926 cells. Fluorescence staining for nucleic acids distribution (DNA, RNA) was carried out by adding a SYTO 16 (Green Fluorescent Nucleic Acid Stain; excitation at 488 nm). Fluorescence images were collected ca. 30 min. after the stain was added. The measured area denoted by the red rectangular (A); fluorescence pictures showing the distribution of nucleic acids after adding a SYTO 16 obtained with Olympus fluorescence microscope (B) and Witec alpha 300 system (C, D). (D) is a view side showing 3D visualization of nucleic acids distribution in cells. All fluorescence pictures were obtained using objectives with 20x magnification.

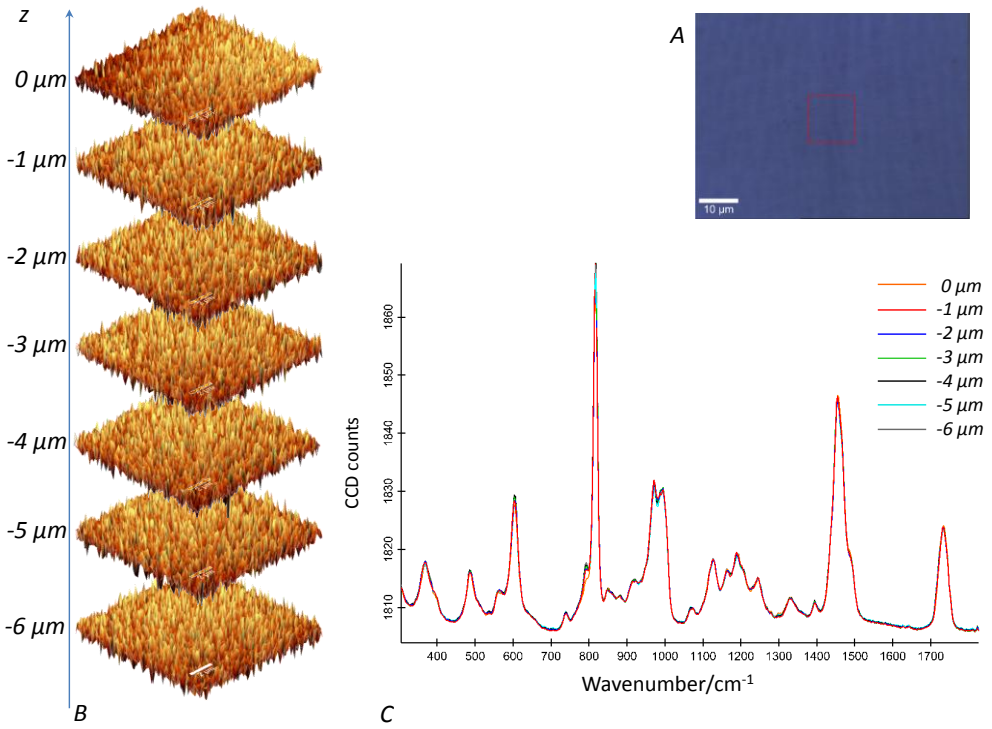

Fig. S2. The visible image of poly(methyl methacrylate) (PMMA, 100×); the measured area denoted by the red rectangular (A), integration maps over the well-separated $\nu_{C=O}$ band at 1735 cm^{-1} (1692-1782 cm^{-1} range) obtained for 6 layers (B), the fingerprint region of the average spectra for every layer normalized for the band at 1735 cm^{-1}.