

Article

# PLLA Coating of Active Implants for Dual Drug Release

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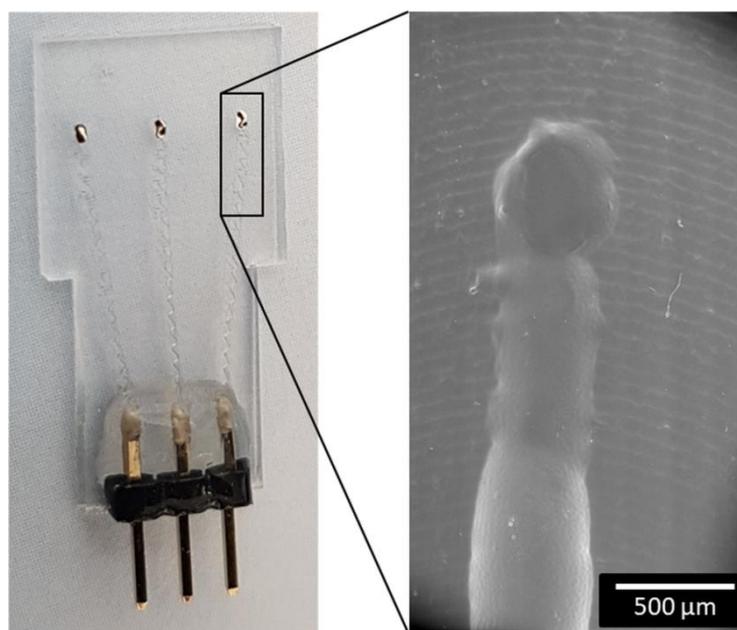
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## Section: Materials and Methods Impedance measurements of coated samples



**Figure S1.** Silicone sample as used for impedance measurements; (a) uncoated sample with three Pt-contacts and the connector; (b) enlargement of one contact—coated version.

## Section Results Contact Angle Measurements

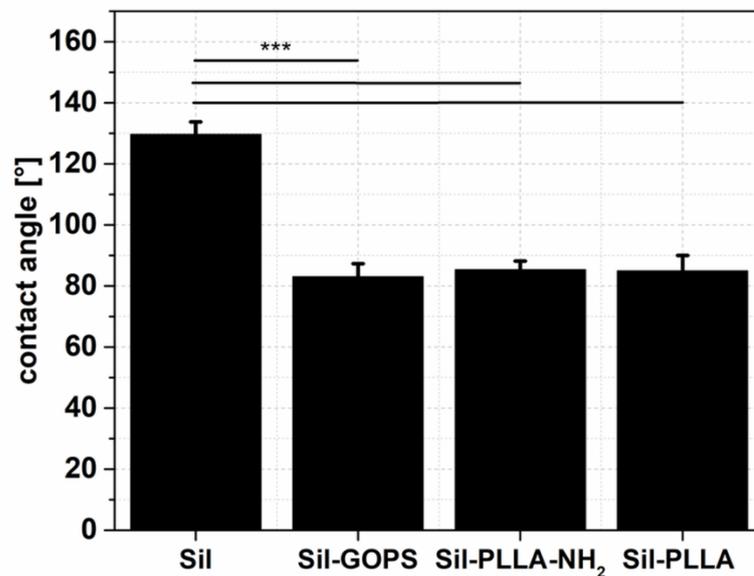


Figure S2. Water contact angle  $\Theta_W \pm$  standard deviation (SD) on silicone surfaces after each reaction step for sessile drop method (N = 5). \*\*\*  $p < 0.001$ .

## Section Results ATR-FTIR

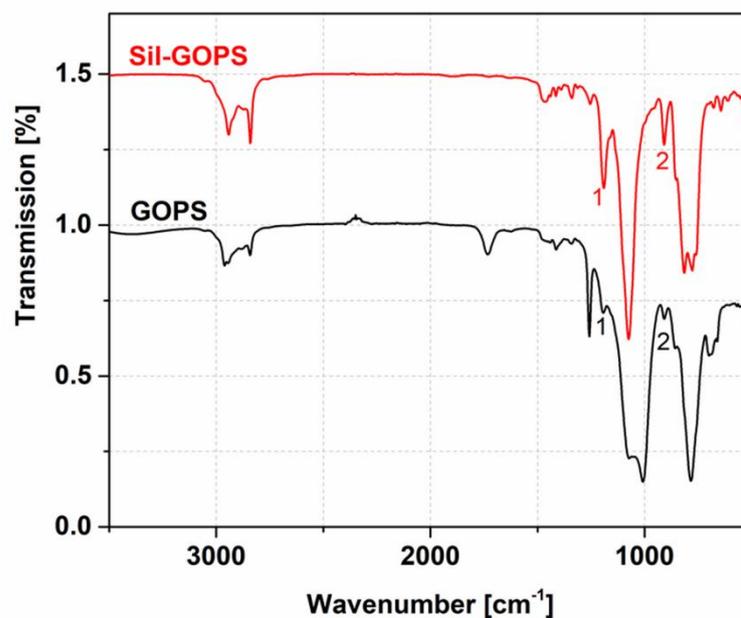
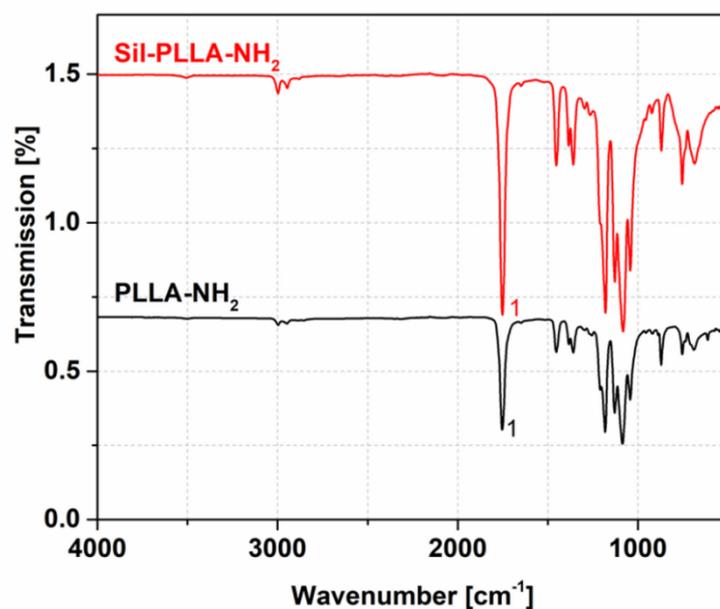
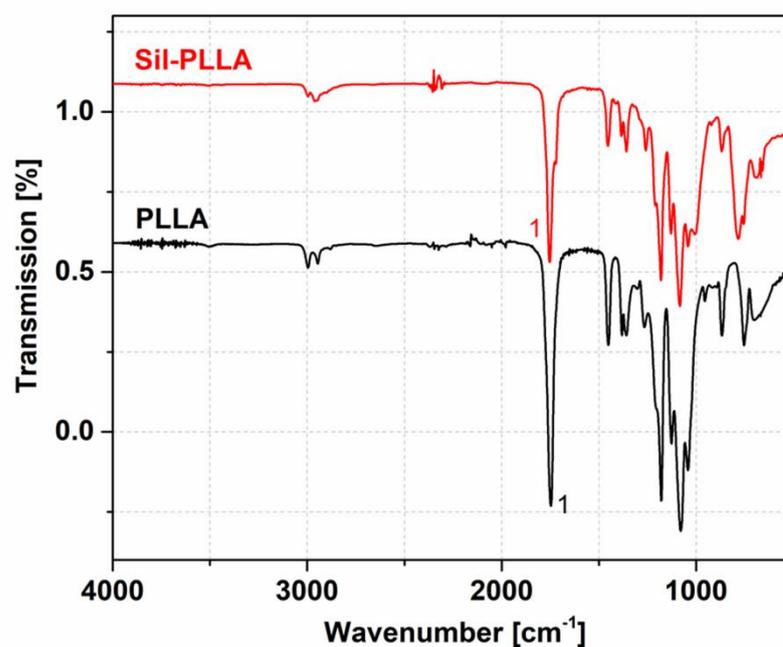


Figure S3. Fourier transform infrared spectra of investigated Sil-GOPS in comparison with pure GOPS in the range of 3500-500 cm<sup>-1</sup>; (1) the prominent band at 1254 cm<sup>-1</sup> depicts Si-CH<sub>2</sub> bond from the GOPS structure (2) the prominent band around 1254 cm<sup>-1</sup> represents oxirane group from the GOPS structure.



**Figure S4.** Fourier transform infrared spectra of investigated Sil-PLLA-NH<sub>2</sub> in comparison with pure PLLA-NH<sub>2</sub> in the range of 4000–500 cm<sup>-1</sup>; prominent band at 1751 cm<sup>-1</sup> corresponds to the C=O stretching vibration from the PLLA structure.



**Figure S5.** Fourier transform infrared spectra of investigated Sil-PLLA in comparison with pure PLLA in the range of 4000–500 cm<sup>-1</sup>; prominent band at 1751 cm<sup>-1</sup> corresponds to the C=O stretching vibration from the PLLA structure.

## Section Materials and Methods Immunohistochemistry



**Figure S6.** Microscopic image of stained spiral ganglion neurons (dark cell bodies) with five traced neurites (red). Treatment:  $3.2 \times 10^{-7}$  mol/L DCF. Scale bar: 50 µm.