Submitted: 21 February 2014
Accepted: 04 April 2014
Published Online: 15 April 2014

# Cell adhesion and growth on surfaces modified by plasma and ion implantation

Journal of Applied Physics **115**, 154701 (2014); https://doi.org/10.1063/1.4871541

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## ABSTRACT

In this study, we show and discuss the results of the interaction of living CHO (Chinese Hamster Ovary) cells, in terms of adhesion and growth on glass, SU-8 (epoxi photoresist), PDMS (polydimethylsiloxane), and DLC (hydrogen free diamond-like carbon) surfaces. Glass, SU-8, and DLC but not PDMS showed to be good surfaces for cell growth. DLC surfaces were treated by oxygen plasma (DLC-O) and sulfur hexafluoride plasma (DLC-F). After 24 h of cell culture, the number of cells on DLC-O was higher than on DLC-F surface. SU-8 with silver implanted, creating nanoparticles 12 nm below the surface, increased significantly the number of cells per unit area.

## ACKNOWLEDGMENTS

This study was supported by the Fundação de Amparo a Pesquisa do Estado de São Paulo (FAPESP) and the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq), Brazil.

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