## Author's Accepted Manuscript

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C. Zafiu, Z. Hussain, S. Küpcü, A. Masutani, P. Kilickiran, E.-K. Sinner



 PII:
 S0956-5663(16)30019-7

 DOI:
 http://dx.doi.org/10.1016/j.bios.2016.01.017

 Reference:
 BIOS8357

To appear in: Biosensors and Bioelectronic

Received date: 28 September 2015 Revised date: 22 December 2015 Accepted date: 6 January 2016

Cite this article as: C. Zafiu, Z. Hussain, S. Küpcü, A. Masutani, P. Kilickirar and E.-K. Sinner, Liquid crystals as optical amplifiers for bacterial detection *Biosensors and Bioelectronic*, http://dx.doi.org/10.1016/j.bios.2016.01.017

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## **ACCEPTED MANUSCRIPT**

Liquid Crystals as Optical Amplifiers for Bacterial Detection

Authors

C. Zafiu<sup>a, b</sup>, Z. Hussain<sup>c, d</sup>, S. Küpcü<sup>a</sup>, A. Masutani<sup>d, e</sup>, P. Kilickiran<sup>d, f\*</sup>, and E.-K. Sinner<sup>a\*</sup>

<sup>a</sup>Laboratory for Synthetic Bio-architectures, Department of Nanobiotechnology, University of Natural Resources and Life Sciences, Vienna, Muthgasse 11, 1190 Vienna, Austria

<sup>b</sup>Institute of Complex Systems, Structural Biochemistry (ICS-6), Forschungszentrum Jülich, 52425 Jülich, Germany

<sup>c</sup>School of Chemical and Materials Engineering (SCME), National University of Sciences &

Technology (NUST), Sector H-12, 44000 Islamabad, Pakistan

<sup>d</sup>SONY Deutschland GmbH, Materials Science Laboratory, Hedelfingerstrasse 61, 70327, Stuttgart, Germany

<sup>e</sup>Johnson Matthey Advanced Glass Technologies, Stuttgart, Germany

<sup>f</sup>CAST Gründungszentrum GmbH, Wilhelm-Greil-Straße 15, 6020 Innsbruck, Austria

\*Corresponding author: Eva-Kathrin Sinner,

Laboratory for Synthetic Bio-architectures, Department of Nanobiotechnology, University of Natural Resources and Life Sciences, Vienna Address: Muthgasse 11, A-1190 Vienna, Austria Tel: +43147654-2220 Fax: +4314789112 Email: eva.sinner@boku.ac.at

Keywords: liquid crystal-based sensing, bacterial detection, lipopolysaccharide

Abstract

Interactions of bacteria with target molecules (e. g. antibiotics) or other microorganisms are of growing interest. The first barrier for targeting gram-negative bacteria is layer of a Lipopolysaccharides (LPS). Liquid crystal (LC) based sensors covered with LPS monolayers, as presented in this study, offer a simple model to study and make use of this type of interface

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