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Title:	Liquid Crystal Biosensors: A New Therapeutic Window to Point-of-Care Diagnostics
Authors:	Pani, Ipsita (/jspui/browse?type=author&value=Pani%2C+Ipsita) Sil, Soma (/jspui/browse?type=author&value=Sil%2C+Soma) Pal, Santanu Kumar (/jspui/browse?type=author&value=Pal%2C+Santanu+Kumar)
Keywords:	Liquid Crystal Biosensors Therapeutic Window Point-of-Care Diagnostics
Issue Date:	2022
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Citation:	Langmuir, 39(1), 909-917.
Abstract:	After revolutionizing the field of electro-optic displays, liquid crystals (LCs) are emerging as functional soft materials with wide-ranging biomedical implications. Integrating smart sensor designs with label-free imaging presents exciting opportunities in diagnostics. In this Perspective, we present an elegant collage of the key findings that demonstrate the utility of LC biosensors in diagnosing a disease or infection in clinical samples, cellular microenvironments, or bodily fluids. We emphasize the currently prevalent diagnostic techniques and the advances made using LCs in achieving greater sensitivity, a simplified strategy, multiplexed detection, and so on. We collate the landmark contributions in translational research in LC-based diagnostics. We believe that developing LC-based biosensors presents a new therapeutic window in point-of-care diagnostics.
Description:	Only IISER Mohali authors are available in the record.
URI:	<a href="https://doi.org/10.1021/acs.langmuir.2c02959">https://doi.org/10.1021/acs.langmuir.2c02959</a> ( <a href="https://doi.org/10.1021/acs.langmuir.2c02959">https://doi.org/10.1021/acs.langmuir.2c02959</a> ) <a href="http://hdl.handle.net/123456789/5051">http://hdl.handle.net/123456789/5051</a> ( <a href="http://hdl.handle.net/123456789/5051">http://hdl.handle.net/123456789/5051</a> )
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