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PLUG-AND-PLAY PAPER-BASED TOOLKIT FOR RAPID PROTOTYPING OF MICROFLUIDICS AND ELECTRONICS TOWARDS POINT-OF-CARE DIAGNOSTIC SOLUTIONS

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Abstract

We present a plug-and-play toolkit for the rapid assembly of paper-based microfluidic and electronic components for quick prototyping of paper-based components towards point-of-care diagnostic solutions. Individual modules, each with a specific function, have been developed to connect together in different sequences and combinations, allowing for a variety of microfluidic and electronic functions to be implemented and integrated in a rapid, interchangeable and re-usable fashion.