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Title:Metamaterials on paper as a sensing platform

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Abstract:A paper-based metamaterial (MM) device, which can potentially be utilized for quantitative analysis in biochemical sensing applications is introduced. Proof-of-concept demonstrations are accomplished by patterning micrometer-sized MM resonators on paper substrates and monitoring the resonance shift induced by placing different concentrations of glucose solution on the paper MM. Copyright &copy; 2011 WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim.