Per aspera ad astra: getting light through highly scattering medium

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Strong light scattering can make an optically non-absorbing object opaque. Many far-reaching applications, such as deep brain imaging, could greatly benefit from a better coupling of light into scattering medium and increased penetration depth resulting into greater transmission through a highly scattering medium. In this talk we discuss a simple, but efficient way of increasing light coupling through optical interface engineering [1–3]. Capitalizing on our prior work [4–9], we provide a theoretical foundation for our experimental findings and discuss potential applications for imaging and sensing [2,4,6–7].

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References


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