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Linking brain vascular physiology to hemodynamic response in ultra-high field MRI

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Abstract

Functional MRI using blood oxygenation level-dependent (BOLD) contrast indirectly probes neuronal activity via evoked cerebral blood volume (CBV) and oxygenation changes. Thus, its spatio-temporal characteristics are determined by vascular physiology and MRI parameters. In this paper, we focus on the spatial distribution and time course of the fMRI signal and their magnetic field strength dependence.

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