



MRE

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RF Coil Design for High Field MR Applications

Kai Zhong

High Magnetic Field Laboratory, Chinese Academy of Sciences, China

RF coil design for ultra-high field MR remains a challenge. Multiple transmission/receiver design has been implemented for human 7T MRI and above. This however significantly increased the MR system cost. For large animal MRI, such as rhesus monkey, uniform RF excitation problem remains to be solved. We have proposed a novel conformal coil design that maintained quadrature detection with sufficient SNR as demonstrated in various applications. The coil can be adapted to existing hardware and the coil design can be applied from rodent (up to 20 T), primate (up to 14 T) to human (up to 10 T).

Keywords: RF Coil, High Field