Homogenisation of the system of Maxwell equations on thin structures

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Abstract

I shall discuss norm-resolvent convergence estimates of order $O(\varepsilon)$ for the system of Maxwell equations with rapidly periodic coefficients in $L^2(\mathbb{R}^3, d\mu^\varepsilon)$, where μ^ε is the ε-scaling of an arbitrary periodic Borel measure μ. This includes the case of periodic "singular structures", when μ is supported by lower-dimensional manifolds.