

# Boundary Recovery of Anisotropic Electromagnetic Parameters for the Time-Harmonic Maxwell's Equations

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**Abstract:** This work concerns inverse boundary value problems for the time-harmonic anisotropic Maxwell's equations on differential 1-forms. We formulate the boundary value problem on a 3-dimensional compact and simply connected Riemannian manifold  $M$  with boundary  $\partial M$  endowed with a Riemannian metric  $g$ . In this context, the impedance and admittance maps are pseudodifferential operators and we compute their principle symbols as well as the principle symbols of some related operators. We then show consequences for the recovery of anisotropic electric parameters at the boundary  $\partial M$ .