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Eric Stachura* (eric.stachura@kennesaw.edu). *Analysis of the Bi-anisotropic Maxwell system in Lipschitz domains.*

We prove well-posedness of an initial boundary value problem for the time dependent, bi-anisotropic Maxwell system in a Lipschitz domain. In such a setting there are 8 material parameters, which are allowed to depend on space and time. We in particular taken into account memory effects and impose nonzero Dirichlet boundary data. Similar results in higher order Sobolev spaces are obtained as well, assuming the material parameters satisfy a certain multiplier property. (Received September 13, 2019)