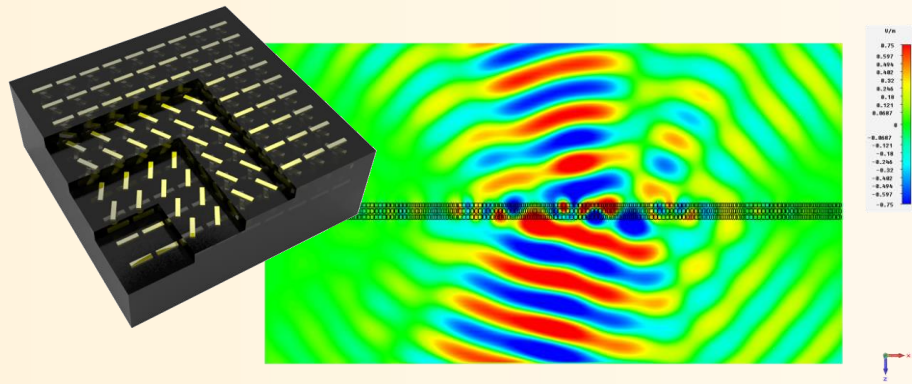
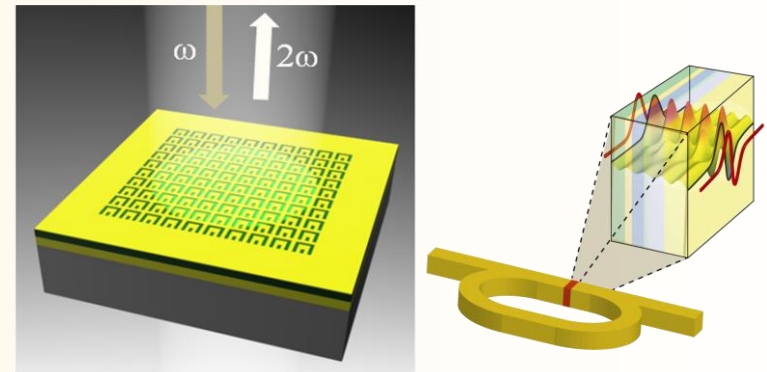


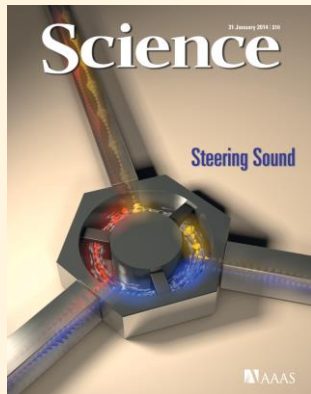
# METAMATERIALS AND METASURFACES FOR WAVE MANIPULATION



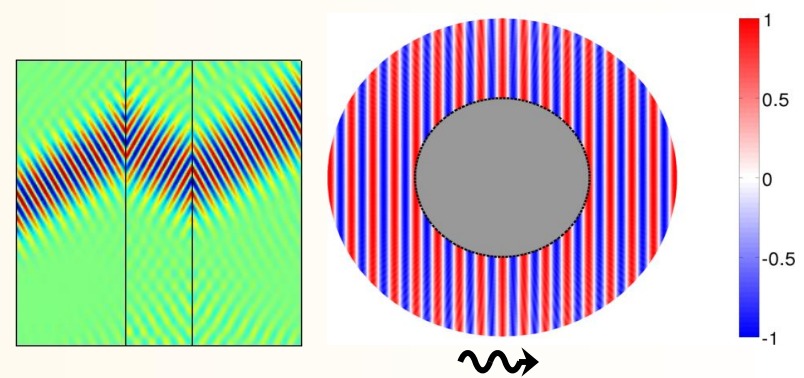
A new degree of control for electromagnetic and acoustic waves



Giant nonlinear response at the nanoscale, Computing metamaterials



Magnetic-free nonreciprocal devices using angular-momentum biased meta-atoms



New venues for negative refraction, focusing, cloaking and sensing based on parity-time symmetry