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## **【644】 Magnetically actuated angular dependent metasurfaces**

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Our recent developments in magnetically controlled micromachines enable precise angular motion control and device reconfigurability. Pairing this capability with metasurfaces exhibiting angular-dependent optical responses generates devices with a magnetically controlled coloration, opening avenues for advancements in angular-dependent optical properties. We will present our approach that integrates shape-morphing systems composed of silicon nitride panels incorporating reprogrammable nanomagnets and structurally colored components. Taking advantage of the reprogrammability of the nanomagnet arrays, we envision a new generation of reconfigurable optical devices that exploit the angular-dependent optical properties in micro-electromechanical systems (MEMS).

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