

# Magnetostrictive Nanowires for Acoustic Sensing

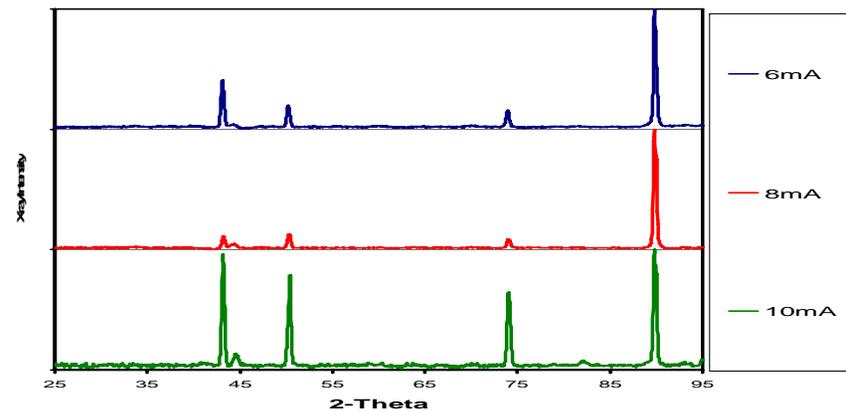
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- Motivation: Use electrochemical deposition to fabricate biologically inspired artificial cilia transducers.
- Applications: Sensors for acoustics, ultrasound, chemistry, flow.

- X-ray Microdiffraction for the appropriate magnetostrictive phase (Galfenol).

X-ray Diffraction Peaks for Nanowires



- Energy Dispersive Spectroscopy (EDS) for compositional analysis of  $\text{Fe}_{1-x}\text{Ga}_x$  nanowires

