

Abstract Submitted
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Towards an NV Diamond Based Pressure Imager TIMOTHY MILBOURNE, Department of Physics, Harvard University, JOHN BARRY, Harvard-Smithsonian Center for Astrophysics, Department of Physics, Harvard University, MATTHEW TURNER, Department of Physics, Harvard University, HUILIANG ZHANG, Harvard-Smithsonian Center for Astrophysics, Department of Physics, Harvard University, KEIGO ARAI, Department of Physics, Massachusetts Institute of Technology, RONALD WALSWORTH, Harvard-Smithsonian Center for Astrophysics, Department of Physics, Harvard University — The ability to image applied pressures is of great interest for various biological and physical applications. Using an array of wires printed on a thin layer of polydimethylsiloxane (PDMS), nitrogen-vacancy (NV) center-based magnetic field imaging techniques may be used to realize a combination of high sensitivity and spatial resolution not offered by current sensing technologies. Here we present the first steps toward such a NV-based pressure imager.

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