Cavity-enhanced nitrogen-vacancy ensemble magnetometry

We demonstrate magnetic-field sensing using the intrinsic nitrogen-vacancy concentration of a single-crystal diamond placed in an optical cavity resonant with the pump field. We investigate two approaches based on fluorescence detection and pump absorption, respectively.

General information
State: Published
Organisations: Department of Physics, Quantum Physics and Information Technology
Number of pages: 2
Publication date: 2018

Host publication information
Title of host publication: Proceedings of 2018 Conference on Lasers and Electro-Optics (CLEO)
Publisher: IEEE
ISBN (Print): 978-1-5386-5733-1
Source: FindIt
Source-ID: 2438378079
Research output: Research - peer-review › Article in proceedings – Annual report year: 2018