

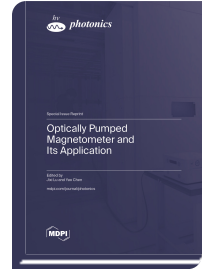
*Special Issue Reprint*

## Optically Pumped Magnetometer and Its Application

[www.mdpi.com/books/reprint/11290](http://www.mdpi.com/books/reprint/11290)

Edited by  
Jixi Lu  
Yao Chen

ISBN 978-3-7258-4693-1 (Hardback)  
ISBN 978-3-7258-4694-8 (PDF)



The optically pumped magnetometer (OPM) is a class of atomic devices that rely on the measurement of Larmor precession of an atomic spin ensemble in a magnetic field. They need the specific frequency light to complete the pumping and detection process. OPMs typically work under the Earth's magnetic field or a limited field. When operating in near-zero field, they can realize the spin-exchange relaxation-free (SERF) regime, thereby promoting a substantial increase in sensitivity. At present, OPMs have been widely used in magnetoencephalography, magnetocardiography, geomagnetic detection, and inertia measurement (comagnetometer). There are a large number of researchers engaged in the study of relevant mechanisms, devices, technologies, and applications. More importantly, supported by MEMS technology and micro/nano optics, OPMs have the potential to move toward chip-scale sensors. This special issue contains some latest developments in OPMs and related areas. We hope the reprint can provide valuable references for researchers in the related field.

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access – high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



## Open Access

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License.



## Author Focus

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



## High Quality & Rapid Publication

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



## High Visibility

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



## Print on Demand and Multiple Formats

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.