## Frontiers of **Optoelectronics**

Vol. 14 No. 1 March 2021

## **Cover Illustration**

Terahertz time-domain spectroscopy (THz-TDS) has proven to be an invaluable tool for the study of elementary and collective excitations in condensed matter systems. Adding a high magnetic field to THz-TDS can lead to further insight into microscopic physics behind complex manybody behaviors of solids and allow one to access new exotic states of matter. Here, we review recent progress in combining THz-TDS and strong magnetic fields in condensed matter spectroscopy. After discussing the advantages and disadvantages of different types of high-field magnets and THz radiation detection schemes, we describe some of the new physical phenomena that were enabled by this unique "marriage" of the two methods.

For more details, please refer to the article entitled "Time-domain terahertz spectroscopy in high magnetic fields" by Andrey BAYDIN et al., Front. Optoelectron., 2021, 14(1): 110-129.

Available online http://www.springerlink.com

光电子前沿 CN 10-1029/TN 邮发代号: 80-976





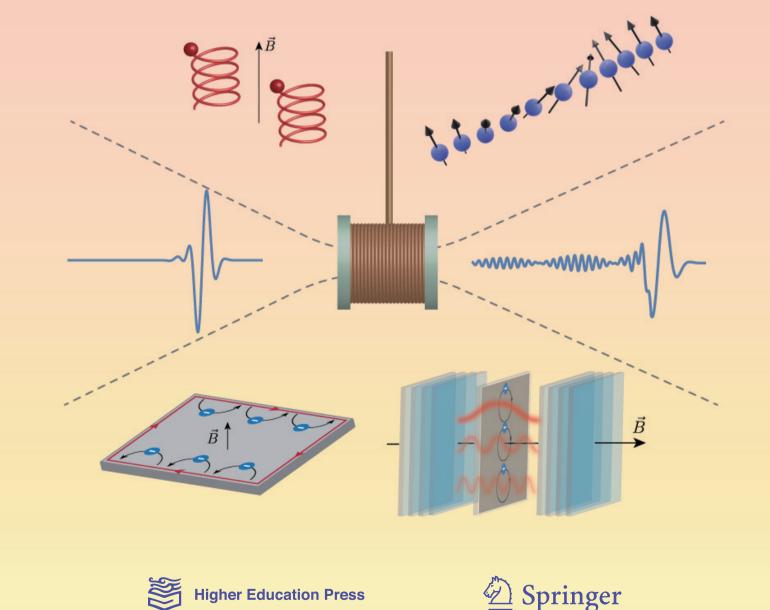


ISSN 2095-2759 Volume 14 • Number 1 March 2021

2021/4/12 下午2:19

Frontiers of Optoelectronics

Marriage of THz Spectroscopy and High Magnetic Fields



**Higher Education Press** 

11-283-14-1光电子.indd:

**FRONTIERS**