23rd International Young Scientists Conference Optics and High Technology Material Science - SPO 2022 ONLINE "STAND WITH UKRAINE"

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Type: Invited Talk

Spin transport at terahertz frequencies

Friday, 25 November 2022 12:00 (30 minutes)

The time-domain terahertz (THz) spectroscopy has proven to be a powerful technique for investigation of the ultrafast electron transport. In this talk, it will be shown that it can also evidence the ultrafast dynamics of spin currents: their generation, spin-to-charge conversion and relaxation in conventional spintronic metals, as well as compensated magnetic materials or van der Waals systems. In addition, the synergy between the ultrafast spintronics and THz spectroscopy will be demonstrated on novel spintronic emitters of THz pulses.

Topics

Session A. Physics of condensed matter and spectroscopy

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