

## **Spintronics and optoelectronics - the light makes them closer**

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Last decade very rapid development became a new direction of the microelectronics of 21<sup>st</sup> century – spintronics, or spin-dependent electronics. It is similar to the extremely rapid development of the optoelectronics in last decade of the 20<sup>th</sup> century – new devices and optoelectronic systems appeared very rapid one after the other that time. What is similar to these two exotic branches of microelectronics? The most important feature, which make them closer each to other – the short operating time. Plasmonic frequencies of spin relaxation in spintronic devices (means working frequencies of spintronics is in terahertz electromagnetic range) is very close to the light wavelength – one can conclude, that the light makes them closer.

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