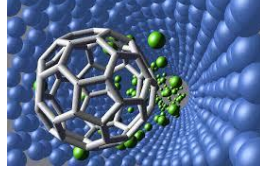


Transport spinu w nanodrutach o strukturze powłokowo-rdzeniowej

promotor: prof. Janusz Adamowski (adamowski@fis.agh.edu.pl)
promotor pomocniczy: dr Paweł Wójcik (pawel.wojcik@fis.agh.edu.pl)



NANOMEDICINE

NANOCHEMISTRY

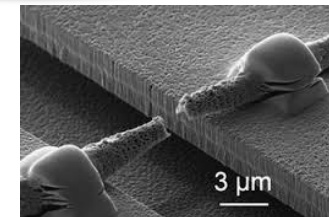
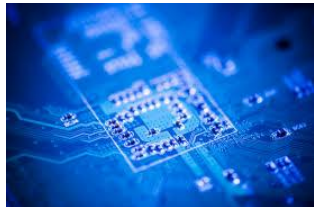
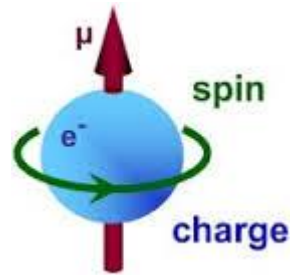
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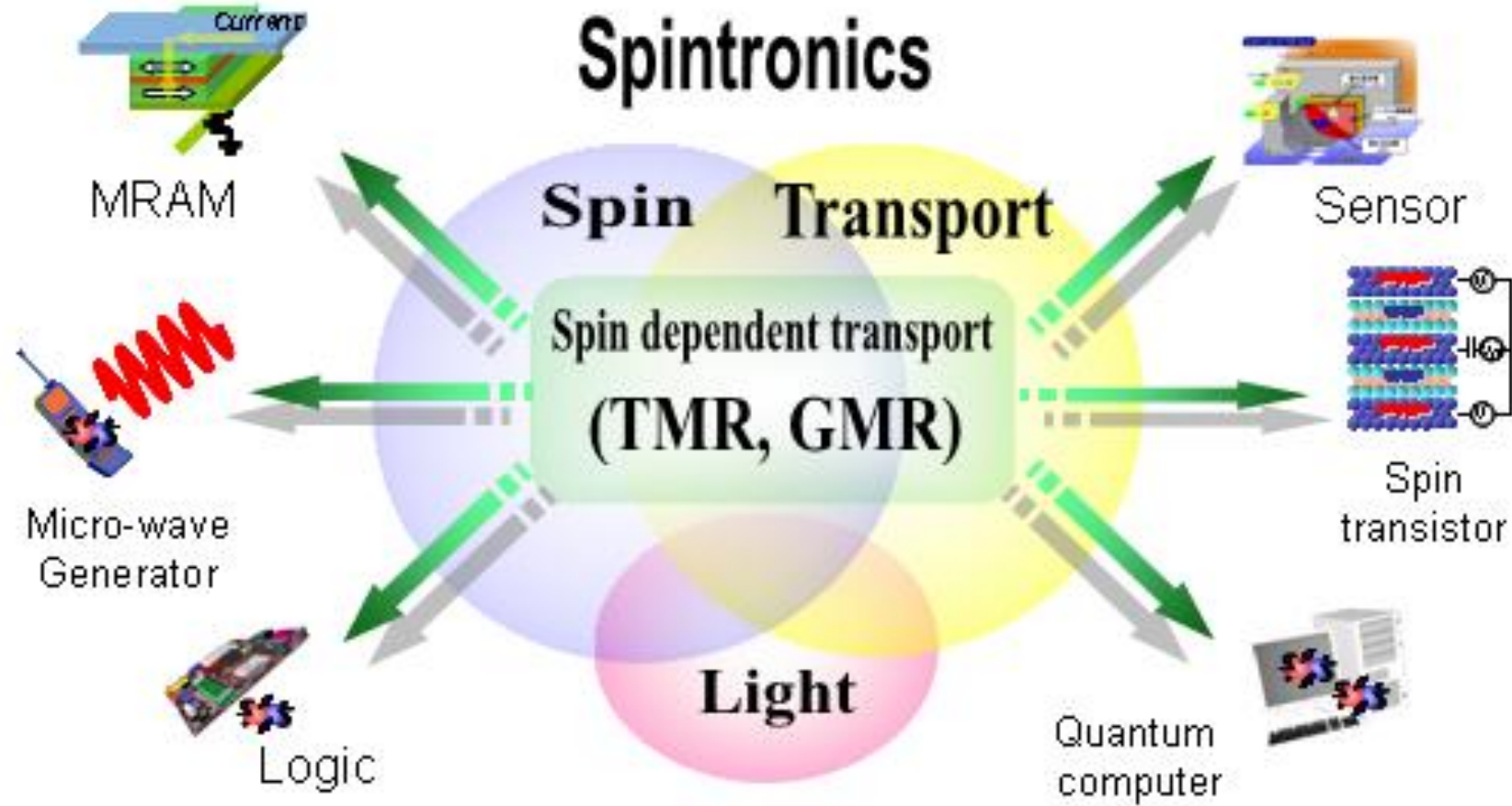
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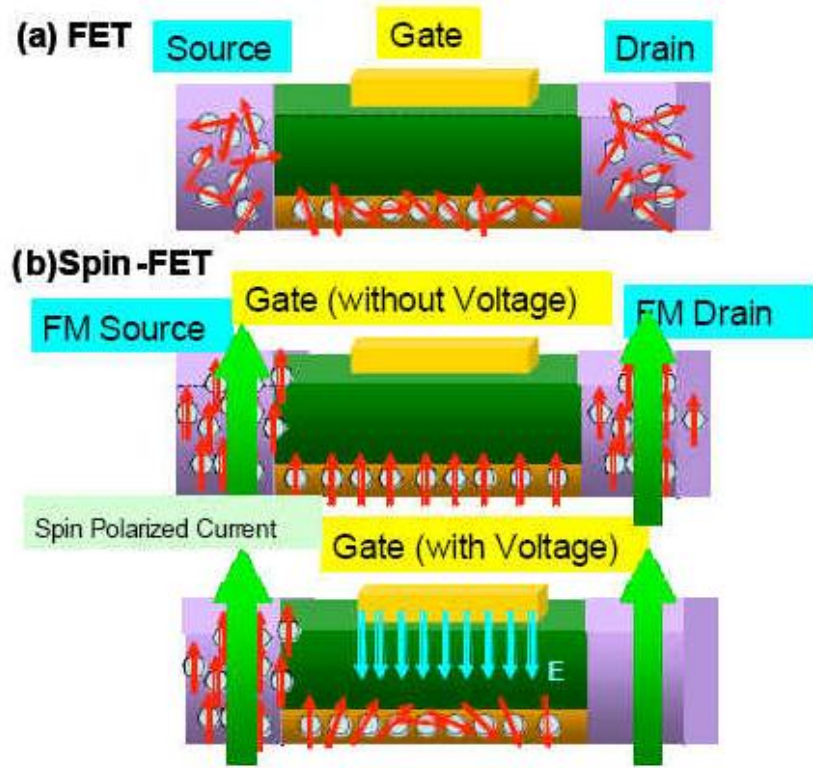
SPINTRONICS



SPINTRONICS

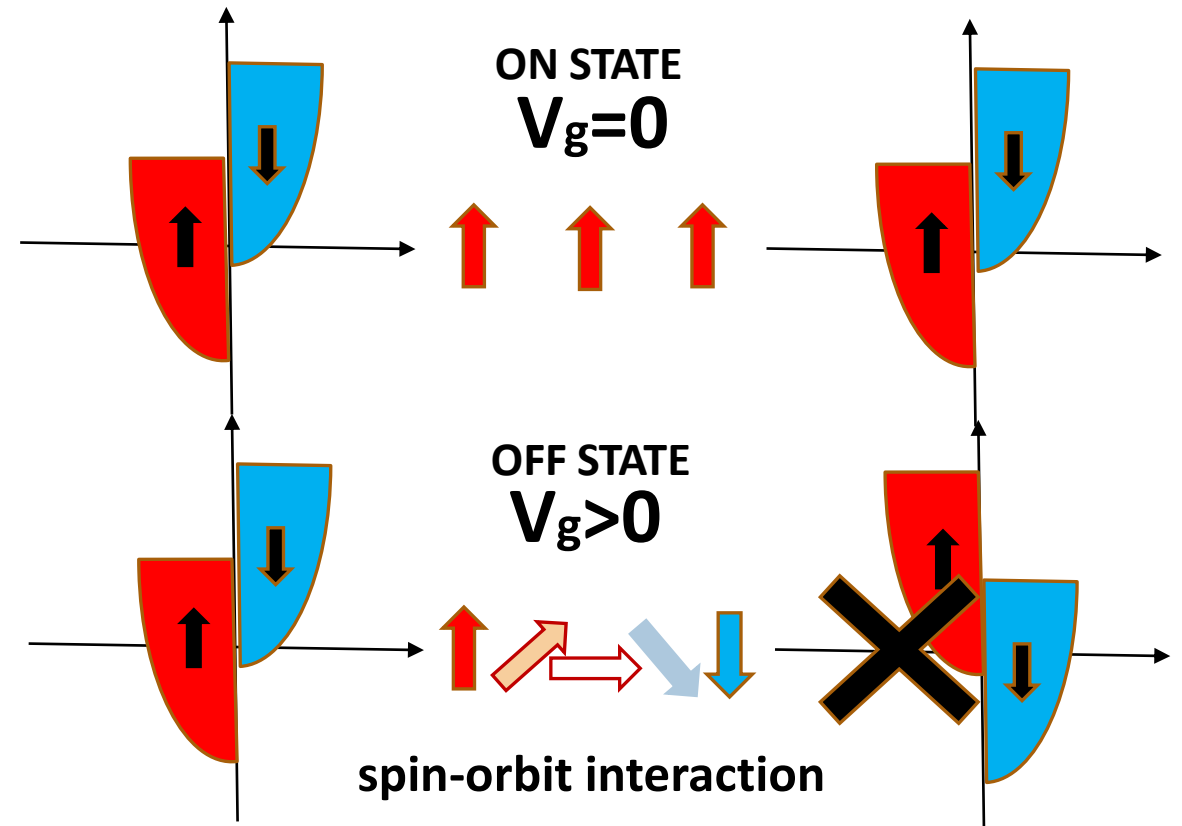


TRANZYSTOR SPINOWY



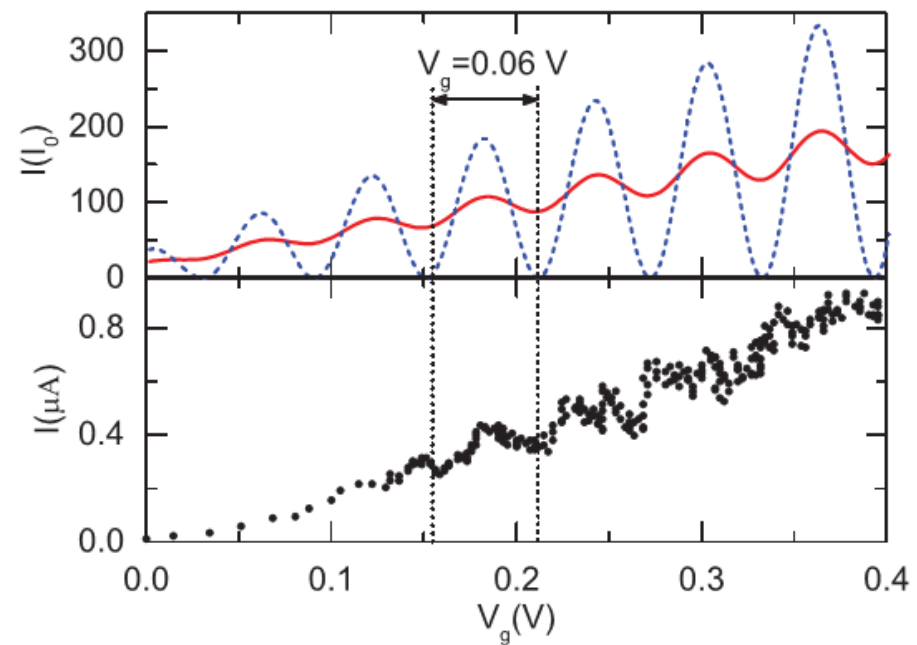
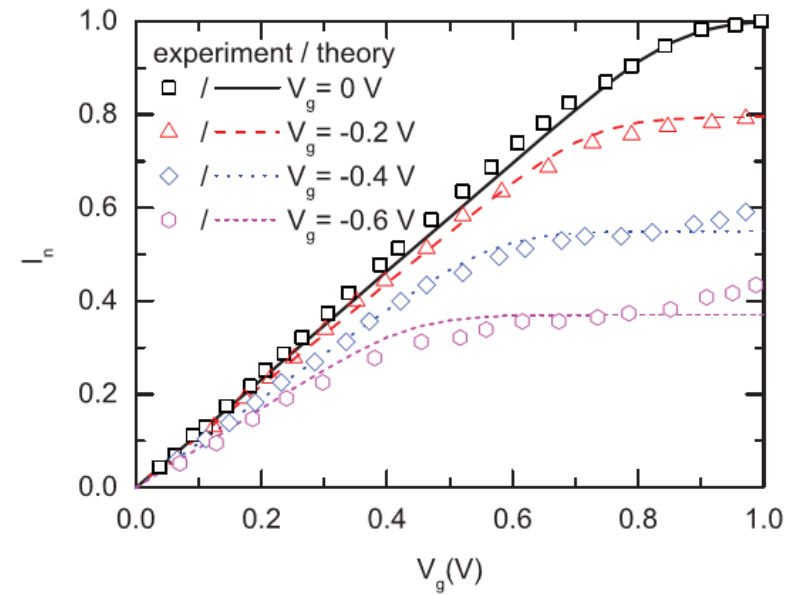
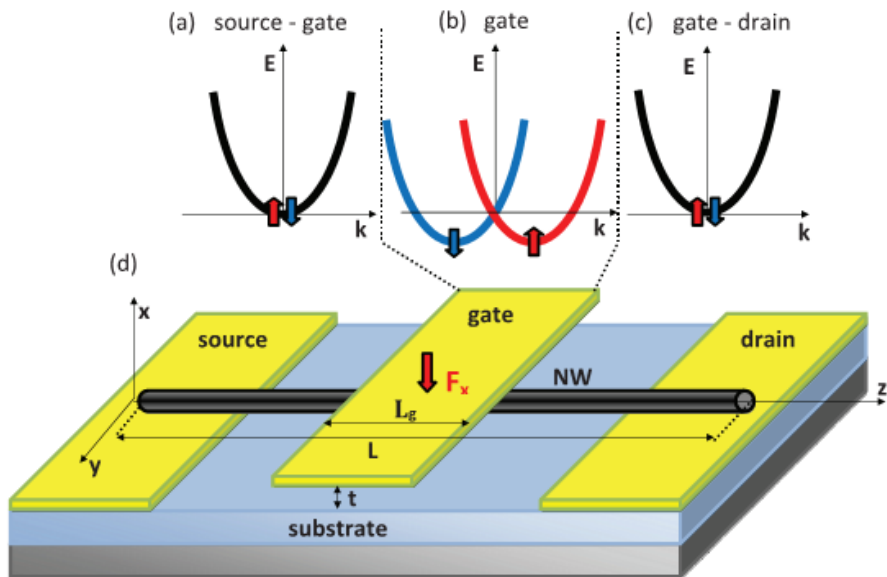
Problemy do rozwiązania

- wstrzykiwanie spinu
- kontrola spinu
- detekcja spinu



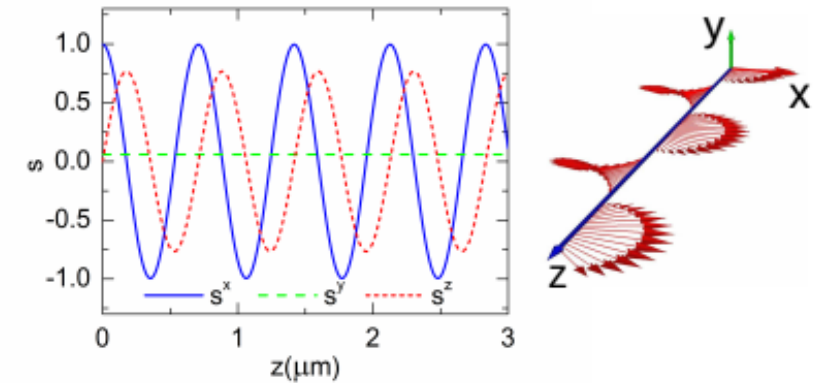
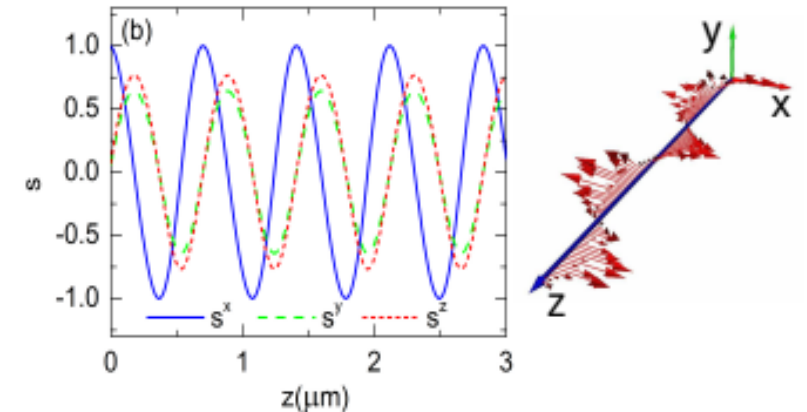
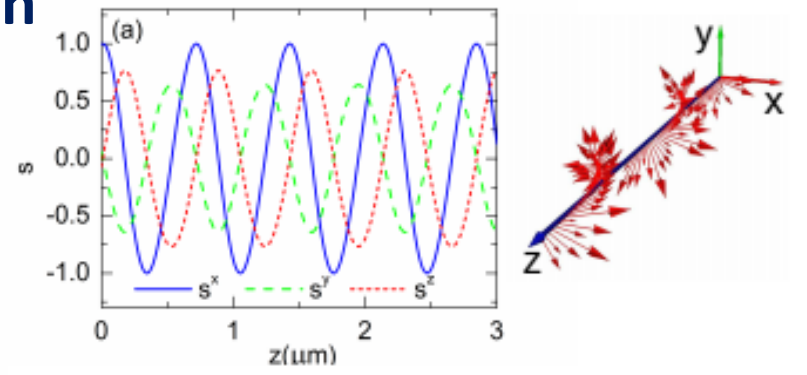
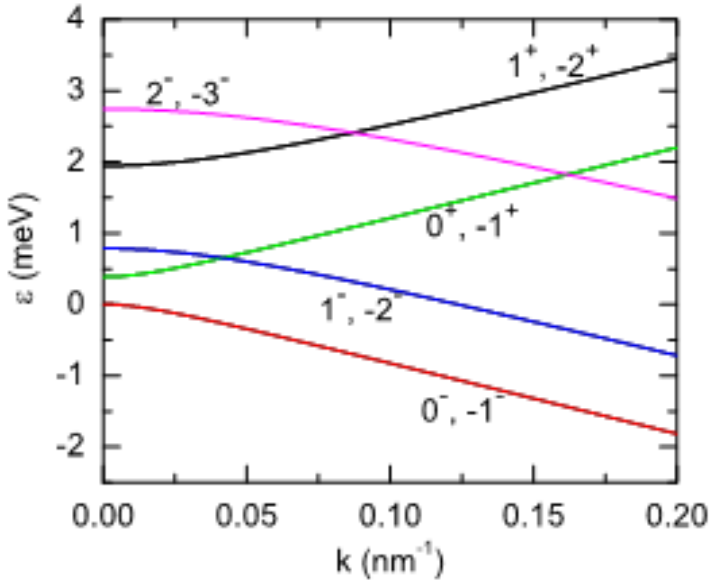
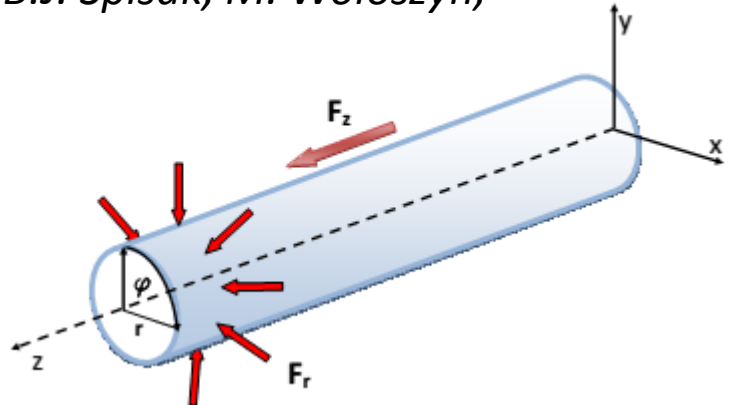
TRANZYSTOR SPINOWY NA NANODRUCIE Z BOCZNĄ BRAMKĄ

*P. Wójcik, J. Adamowski, B.J. Spisak, M. Wołoszyn
Journal of Applied Physics, 115, 104310 (2014)*



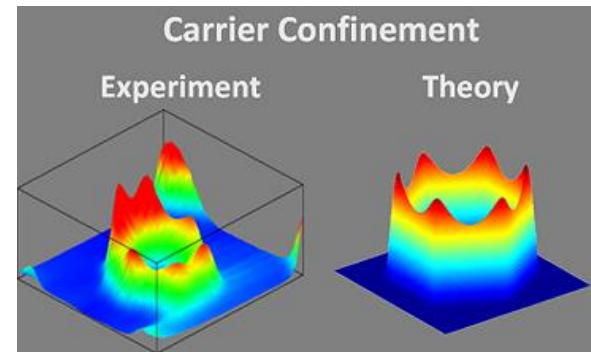
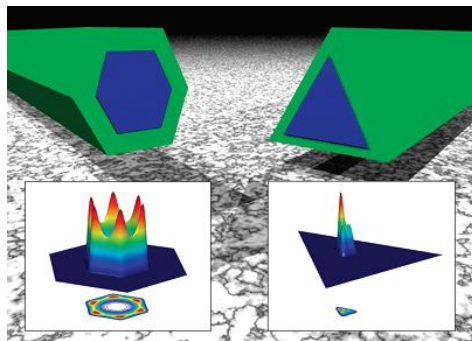
Kontrola spinu w nanodrutach rdzeniowo-powłokowych

P. Wójcik, J. Adamowski, B.J. Spisak, M. Wołoszyn, *Physica E*, 59, 19 (2014)



Plan badań:

1. Badanie magnetotransportu w nanodrutach rdzeniowo-powłokowych o różnej symetrii – symulacje komputerowe
2. Badanie transportu zależnego od spinu w nanodrutach rdzeniowo-powłokowych o różnej symetrii z oddziaływaniem spin-orbita
3. Sterowanie prądem zależnym od spinu w nanodrutach rdzeniowo-powłokowych za pomocą elektrod bramek



Zapraszamy do współpracy.
