

Otwarte Seminarium Naukowe

Instytut Fizyki CND

6-03-2019, godz. 14:00

Aula B, budynek CNT, ul. Konarskiego 22B

Nanofibers

for neuromorphic computing

From bio-inspired structures to

electrospun multifunctional networks

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Fibrous structures can be found everywhere around us, from nature to nanotechnology. The presentation will give an overview on recent simulations of magnetic properties of biologically inspired fibrous structures, especially ferromagnetic Fibonacci spirals, and shed light on the broad variety of magnetic states available in such nanostructures as well as possibilities to use these states for data storage applications. Going one step further, networks of randomly arranged magnetic nanofibers, created by electrospinning, are experimentally prepared and simulated, showing even more complex magnetization reversal processes which may enable using them for the biologically inspired approach of neuromorphic computing.

Serdecznie zapraszamy wszystkich zainteresowanych