物性セミナー

日時	2022年10月28日(金) 11:00-12:30
場 所	9号館7階 9-753室
題目	Development of Iron-Based Materials for Drug Delivery Application
講師	Togar Saragi (Department of Physics, Padjadjaran Univ., Indonesia)
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Abstract:

Fe-based magnetic materials have many functions and applications that can be developed. The most studied Fe-based materials are Fe₂O₃ and Fe₃O₄. Fe₃O₄ is a more stable compound compared to Fe₂O₃, so Fe₃O₄ is very suitable to be studied and further developed for various applications, such as ferrofluid, magnetic refrigeration, detoxification of biological fluids, and magnetically controlled transportation of anticancer drugs. We have carried out research and development of Fe₃O₄ materials intended for drug delivery For this application the Fe₃O₄ material must have applications. special magnetic properties, namely having a coercivity and residual magnetization values equal to zero. The detail of synthesis process of Fe₃O₄ and its magnetic properties that can be used for drug delivery will be presented.

[1] T. Saragi *et al.*, Materials **15**, 1573 (2022).

[2] T. Saragi *et al.*, Key Eng. Mater. **855**, 172 (2020).

[3] T. Saragi et al., Mater. Sci. Forum 966, 277 (2019).

多数御来聴下さるようお願い致します。

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