The influence of thickness of YIG samples on generated Spin Seebeck voltage

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Thermoelectric conversion, that converts wasted heat into electric power, due to spin Seebeck effect (SSE) seems to be very promising. Level of such harvested power should be as high as possible. In this paper the influence of magnetic insulator thickness on generated spin voltage is investigated. The bulk $Y_3Fe_5O_{12}$ (YIG) samples were investigated. It has been proven that the increasing of the dimensions of the tested samples provides a higher value of the obtained thermoelectric voltage in platinum interface. Obtained results confirm possible future SSE application in TEG large-scale devices.