Title:	Proposed 1/f Noise Measurements in hall voltage for nickel thin films
Authors:	Yadav, Sarita
Keywords:	thin films Measurements
Issue Date:	Apr-2022
Publisher:	IISER Mohali
Abstract:	This thesis initially talks of the Hall Effect measurements in Nickel Thin Films(20 nm) at room temperature. A graph of Voltage vs Magnetic Field was plotted and linear and saturation regions were obtained as expected because Nickel is a Ferromagnet. During this process we wanted to figure out that the sample when placed in perpendicular magnetic fields, Is it subject to the dimensions and configuration of the Hall Bar. To see that differ- ent hall bars were designed in ECP and laid on the silicon chip by E-Beam Lithography. We wish to measure 1/f Noise in the Nickel Thin Films at room temperature and expect maximum noise in the transition region from linear to saturation region and relatively less noise in the saturation region. To do Noise Measurements I also made an Instrumentation Amplifier.
URI:	http://hdl.handle.net/123456789/4199
Appears in Collections:	MS-17

Files in This Item:

File	Description	Size	Format	
Yet to obtain consent.pdf		144.56 kB	Adobe PDF	View/Open

Show full item record