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Title:	Optimization of 1/f noise measurement setup
Authors:	Mancheykhun, Taseng (/jspui/browse?type=author&value=Mancheykhun%2C+Taseng)
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Abstract:	1/f noise has been observed in almost every material. It is the least understood type of noise. There is no general model and theory that explains 1/f noise in different materials, although there are models that describe certain observations or measurements in specific materials. In this project, I have tried to experimentally measure 1/f noise in resistors like metal film resistor and wire-wound resistor, using wheatstone bridge implementation and 0-90 degree subtraction technique. I have shown the measurement improvement of the experimental setup with wheatstone bridge implementation for frequency as low as 15mHz as compared to measurement using four-probe and OFFSET feature of the lock-in amplifier.
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