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this is abstract

I. INTRODUCTION

this is main.

II. METHOD

An ADTL082J was used as the Op-Amp, and IRF1010E was used for the n-channel MOSFETs. The $I - V$ characteristics of the MOSFETs were measured prior to the experimental process, in order to obtain a gating voltage and the effective resistance when the MOSFET was open. The negative resistor was designed and measured with the circuit as in Fig. , and the current was measured via a resistor in series in the negative resistor(R). The output voltage of the Op-Amp was also measured to compensate the saturation effects of the real world Op-Amp.

III. RESULT

IV. CONCLUSION

Appendix A: MOSFET $I - V$ Characteristics

Appendix B: Derivation of the theoretical $I - V$ Characteristics of the Negative Resistor

a. Op-Amp

b. Op-Amp and MOSFETs

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