# **Multi-Disc Power Analysis of Piezoelectric Composite Materials Utilizing Compliant Layers**





- Disc symmetry analysis

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### After original disc analysis is complete

- Alterations to top, bottom, and side encapsulations
- Effects of parallel wiring and stacking methods
- Improvements to specimen manufacturing techniques
- Validation of finite element analysis
- Effects of wires in specimen
- Capacitance effects

### Significance

### **Discs Location and Encapsulation**

- Determining the most efficient stacking methods and encapsulation methods could influence cost and production time
- Maximizing power generation for a given size could increase versatility of piezoelectric generators for biomedical applications

### **Piezoelectric Understanding**

- Effects of compliant layers in increasing PTZ strain
- Collecting more accurate data for future modeling purposes using FEA
- Understanding possible electrical configuration effects on stacked piezoelectric with CLACS design

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### References

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