Investigation Into the State of Superconducting Electronics

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Abstract

Superconducting electronics are looking to be one of the most promising technologies to break the barriers present in traditional Metal-Oxide-Semiconductor Field Effect Transistor (MOSFET) based computing today. Superconducting Quantum Interference Devices (SQUIDS) are at the forefront of this technology, offering unparalleled sensitivity and speed for a wide range of applications.

1. Introduction

2. Background

2.1 A bit of History

The field of superconductivity was born accidentally in 1911 when Heike Kamerlingh Onnes [1] was investigating the electr

2.2 BCS Theory

2.3 Computing

3. Recent Developments

4. Conclusion

References

[1] H. Kamerlingh Onnes, “Investigations on the properties of substances at low temperatures,” *Proceedings*, vol. 13, no. II, p. 1274, 1911.

Appendix