# Article information:

A 13.56-MHz Wireless Power and Data Transfer System With Current-Modulated Energy-Reuse Back Telemetry and Energy-Adaptive Voltage Regulation | IEEE Journals & Magazine | IEEE Xplore
<https://ieeexplore.ieee.org/document/9906056>

# Article summary:

1. Implantable medical devices (IMDs) are effective tools for monitoring nerve systems, restoring sensory modalities, alleviating neurological diseases, processing bio-signals, and enabling optogenetics.

2. IMDs require higher performance while consuming limited power to prevent tissue damage from overheating.

3. Energy-efficient techniques are needed to improve overall efficiency while ensuring precise, safe, and effective functions.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy as it provides a comprehensive overview of the current state of implantable medical devices (IMDs). The article is well-researched and provides evidence for its claims in the form of references to relevant studies. The article also acknowledges potential risks associated with IMDs such as tissue damage from overheating due to limited power consumption. However, the article does not explore counterarguments or present both sides equally when discussing the need for energy-efficient techniques to improve overall efficiency while ensuring precise, safe, and effective functions. Additionally, there is no mention of potential biases or sources of bias in the research presented in the article which could be explored further.

# Topics for further research:

* Implanted medical device safety
* Risks associated with implantable medical devices
* Energy efficiency techniques for implantable medical devices
* Biases in research on implantable medical devices
* Regulatory standards for implantable medical devices
* Ethical considerations for implantable medical devices

# Report location:

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