02/15/2024

My research interest lies in power electronic circuit design, specifically in pulsed power supply systems for applications such as MRI machines, particle accelerators, and NMR machines. Given that the requirements vary significantly depending on the application area, designing pulsed power supplies demands a comprehensive understanding not only of power electronics but also of the specific application domains (e.g., plasma science). Consequently, research on pulsed power supplies intersects between circuit-based journals and physics-based journals. Power electronic researchers predominantly publish their work in journals. The challenge with conferences lies in their sheer number and the time-consuming process of setting up experiments.

Journals:

1. IEEE Transactions on Power Electronics (TPEL): TPEL is a flagship journal in power electronics publishing high-quality research articles, reviews, and technical papers covering various aspects of power electronics, including pulsed power supply technologies.

2. IEEE Journal of Emerging and Selected Topics in Power Electronics (JESTPE): JESTPE focuses on emerging trends, novel technologies, and selected topics in power electronics, providing a platform for in-depth research articles and discussions relevant to pulsed power supply and related areas.

3. IEEE Transactions on Plasma Science: This specialized journal covers research on plasma science and technology, including topics related to pulsed power systems, plasma generation, and applications in various fields.

4. IEEE Transactions on Dielectrics and Electrical Insulation: This journal publishes research on dielectric materials, electrical insulation, and related phenomena, which are fundamental to understanding and optimizing pulsed power supply systems.

5. IEEE Transactions on Industrial Applications: Focuses on the industrial applications of electrical engineering, including power electronics, motor drives, control systems, and energy conversion technologies, relevant to pulsed power supply applications in industrial settings.

6. IEEE Transactions on Industrial Electronics: Covers research on industrial electronics and applications, including power electronics, control systems, automation, and emerging technologies applicable to pulsed power supply in industrial environments.

Conferences:

1. IEEE Energy Conversion Congress and Exposition (ECCE):

- ECCE is a premier conference focusing on energy conversion technologies, including power electronics, renewable energy systems, and energy storage. It provides a platform for presenting

and discussing innovative research and applications in pulsed power supply.

2. IEEE Applied Power Electronics Conference and Exposition (APEC):

- APEC is a leading conference in applied power electronics, featuring technical sessions, workshops, and exhibits on the latest advancements and trends in power electronics technology, including pulsed power supply solutions.

These categorizations reflect the diversity and breadth of publication venues available for researchers working on pulsed power supply within the field of power electronics. Each venue offers unique opportunities for disseminating research findings, and advancing knowledge in this specialized area of study.