

### **Design and development of solid state circuit breaker with residual current protection for residential prosumer DC microgrids**

**Jalakas, Tanel; Chub, Andrii; Roasto, Indrek; Vinnikov, Dmitri; Kurnitski, Jarek** Proceedings of the Estonian Academy of Sciences 2025 / p. 281-290 <https://doi.org/10.3176/proc.2025.2S.02>

### **Design issues of SSCBs for residential DC microgrid**

**Jalakas, Tanel; Chub, Andrii; Roasto, Indrek; Vinnikov, Dmitri** 2024 IEEE 65th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON) 2024 / 6 p <https://doi.org/10.1109/RTUCON62997.2024.10830826>

### **Design of solid state circuit breaker**

**Jalakas, Tanel; Chub, Andrii; Roasto, Indrek; Vinnikov, Dmitri** 2022 IEEE 63th International Scientific Conference on Power and Electrical Engineering of Riga Technical University (RTUCON): conference proceedings 2022 / p. 1-5  
<https://doi.org/10.1109/RTUCON56726.2022.9978903>

### **Hybrid residual current device and solid state circuit breaker for residential DC microgrids**

**Jalakas, Tanel; Chub, Andrii; Roasto, Indrek; Vinnikov, Dmitri** 2024 19th Biennial Baltic Electronics Conference (BEC) 2024 / 5 p <https://doi.org/10.1109/BEC61458.2024.10737970> [Article at Scopus](#) [Conference proceedings at Scopus](#) [Article at WOS](#)

### **Performance analysis of protection methods in residential DC microgrids**

**Jalakas, Tanel; Banavath, Satish Naik; Chub, Andrii; Roasto, Indrek; Vinnikov, Dmitri** 2023 IEEE 17th International Conference on Compatibility, Power Electronics and Power Engineering (CPE-POWERENG) 2023 / 6 p <https://doi.org/10.1109/CPE-POWERENG58103.2023.10227388>