

I INTERNATIONAL CONFERENCE
KRASNOYARSK, RUSSIA
30 July 2020



CAMSTech
International Conference on Advances
in Material Science and Technology

Science and Technology City Hall
KRASNOYARSK, RUSSIA

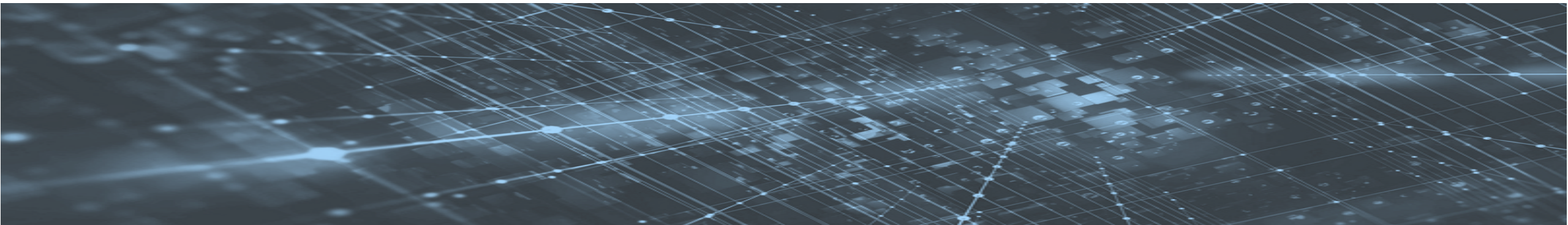
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«Step-down converter with voltage stabilization for the electric power
plant based on hydrogen fuel elements for unmanned aerial vehicles.
Design and investigation»

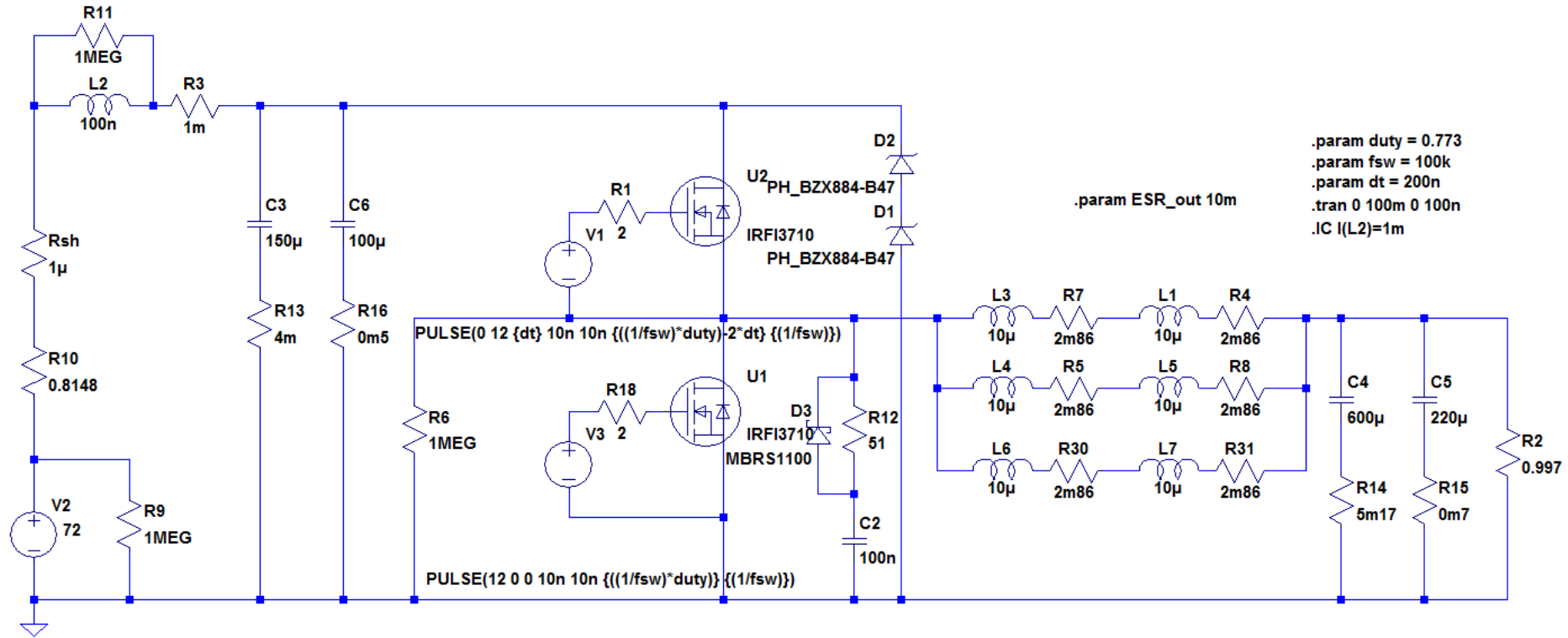
I Vasyukov, V Puzin, A Pavlenko

Problem statement

- Development of the step-down converter with voltage stabilization for the electric power plant based on fuel elements
- Choice of the converter structure with the stabilization circuit
- Numerical simulation of the main operation converter modes
- Experimental studies of the prototype, confirming its performance

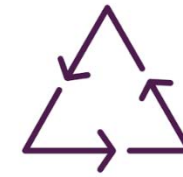


1300 W Converter model



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Conclusions

Results, implementation

- The structure and design of the step-down converter for the UAV electric power plant on hydrogen fuel elements were proposed
- The test sample experimental studies that have been carried out confirmed its efficiency, adequacy of the methods of design calculation and simulation of converter operation modes

Contacts

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