

## **Planar SOFCs and Stacks Development at IPPE**

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Institute for Physics and Power Engineering (IPPE) has been developing planar SOFCs and power systems, based on them, since 1996. The research works include SOFC material investigations, SOFC and stack design and technology, single cells and stacks tests, small-scale power plant design development, creation of the base for power plant long-term tests. Currently our efforts have been concentrated mainly on development and optimization of electrolyte-supported and anode-supported planar SOFC technologies. More than two hundred of single SOFCs have been tested. Maximum power density of 700 mW/cm<sup>2</sup> at 950°C has been achieved. Recently several three- and five-cell planar SOFC stacks have been tested. The status of research works on planar SOFC at IPPE and some results are discussed in this paper.