

Research project and supervisory team

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Short introduction & description of research project	<p>With the rapid development of air transport, the gas emissions bring more and more pressure to the environment. In order to achieve energy conservation and emission reduction in the aviation field, electrification innovation, which centered on multi-electricity and all-electricity, becomes a global trend in aviation industry. The use of advanced electromechanical energy conversion equipment can replace 70% of the traditional secondary energy, in terms of generation, distribution and consumption, and reduce the direct operating cost of the aircraft by up to 30%. The related technology is an important technical approach to China “carbon peaking and carbon neutrality” goals, as well as global environmental strategy, in the field of air transport, and road as well.</p> <p>This project is looking at the key technologies of electromechanical energy conversion equipment for next-generation aircraft. And devoted to cutting edge investigations in electrical machine drive systems, with themes of: innovative motor topology, motor and controller system-level joint design and optimization technology, and efficient thermal management strategy under extreme operating conditions and environments, etc.</p>
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