

### **11.06.01 Electronics, Radio Engineering and Communication Systems**

“Solid-State Electronics, Radio Components, Micro- and Nanoelectronics, Devices  
Based on Quantum Effects”

#### **Program objective:**

to train qualified researchers in the following fields:

- new semiconductor heterostructure materials based on A<sub>3</sub>B<sub>5</sub>, SiC, graphite and diamond;
- modern nanotechnology;
- organic semiconductor structures;
- spintronics;
- mathematical functional models and parameters of electronic devices;
- quantum design of nanotransistors, resonant tunneling diodes, etc.;
- epitaxial growth technologies for microwave, functional and optoelectronics;
- radiation-resistant electronic components