VIRTUAL LABORATORY PRACTICAL TRAINING SESSION INTO MATHEMATICAL SIMULATION

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Research object is mathematical simulation microelectronics processes.

Aim of this work is creation a virtual laboratory practical training session into mathematical simulation. Objects of simulation are implantation doping and bipolar transistor.

This work consists of theoretical and practical parts. First is about simulation models and second is programming. I chose simulation models, optimized them, found and learned some special modules, which I needed and built program. Also I created some help documentation.

The virtual laboratory practical training session includes two labs: mathematical simulation implantation doping and mathematical simulation and bipolar transistor. I used Python and some special additional libraries wxWigets, mathplotlib and numpy.

The result program can be used into study process of course «Mathematical simulation microelectronics».

References

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