

I. IDENTIFICATION DATA

Thesis title:	The Structure of Quantum Dots
Author's name:	Ruhani Dadashov
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Microelectronics
Thesis reviewer:	Stanislav Novak
Reviewer's department:	Faculty of Science, J. E. Purkyne University in Usti nad Labem

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
<i>How demanding was the assigned project?</i>	
The assignment needs very good physical skills and theoretical knowledge.	

Fulfilment of assignment	fulfilled
<i>How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.</i>	
The author fulfilled the tasks given.	

Methodology	correct
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
The student chose a good method for the solution of the thesis using Synopsis Quantum ATK software.	

Technical level	C - good.
<i>Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?</i>	
The technical level is good. Nevertheless, the student could explain some parts in the theoretical chapter in more details as well as he could describe the design of his model more precisely.	

Formal and language level, scope of thesis	D - satisfactory.
<i>Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?</i>	
The thesis has a logical structure. However, English needs to be improved, sometimes difficult to understand. There are formal mistakes or shortcomings in the thesis, e.g. missing Figures 2.2.7 and 2.2.8, incorrect Figure number on page 31.	

Selection of sources, citation correctness	C - good.
<i>Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?</i>	
The thesis makes adequate reference to many sources. But not all sources are complete, e.g. [2], [3], [9], moreover, the citation [3] is strange.	

Additional commentary and evaluation (optional)
<i>Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.</i>
The assignment of the thesis was not easy, needs higher level of physical knowledge and student's skills. The student has mastered this difficult topic well.

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

Summarize your opinion on the thesis and explain your final grading. Pose questions that should be answered during the presentation and defense of the student's work.

The grade that I award for the thesis is **B - very good**.

Q: What approach was chosen to build the diamond cluster in the QuantumATK?

Date: **3.6.2021**

Signature:

