

Lectures, Presentations etc. (Only for subscribers)

SPQEO Journal goes on the rubric “Lectures, Presentations etc.” to disseminate information about fundamentals of sciences close to SPQEO directions and areas. This issue starts the cycle of lectures of Prof. Vyacheslav Kochelap. This cycle is devoted to the one of actual directions in modern physics, namely, nanophysics and nanoelectronics.

Lecture 1 from the cycle. “Introduction to nanoelectronics and optoelectronics” by Prof. Vyacheslav O. Kochelap.

Here you can find the following:

1. Relationships between
 - 1.1. End-use technologies
 - 1.2. Technical systems
 - 1.3. Single devices
 - 1.4. Engineering
 - 1.5. Materials science
 - 1.6. Physics.



1978



2018

Horst Störmer. He was awarded the 1998 Nobel Prize in Physics jointly with [Daniel Tsui](#) and [Robert Laughlin](#) "for their discovery of a new form of [quantum fluid](#) with fractionally charged excitations" (the [fractional quantum Hall effect](#)).¹

Lecture 2 from the cycle. “Introduction to nanoelectronics: Science, Nanotechnology, Engineering and application” by Prof. Vyacheslav O. Kochelap.

Here you can find the following

2. Particles and waves
 - 2.1. Introduction
 - 2.2. Classical particles
 - 2.3. Classical waves
 - 2.4. Wave-particle duality
 - 2.5. Closing remarks
 - 2.6. Problems

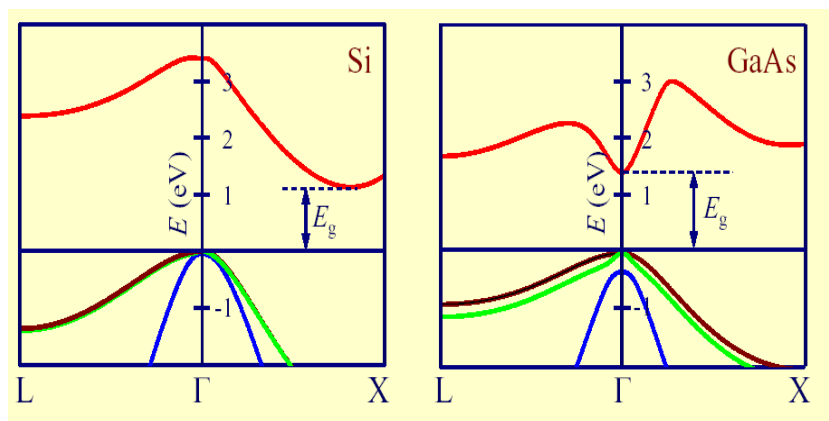


Fig. 1. Energy spectra of quasi-particles. Electrons & holes in Si and GaAs

We are looking for feedback, new proposals for lectures, presentations, etc.