Пример текста для аудирования -- 1500 зн.

Semiconductor nanowires have witnessed an explosion of interest in the last few years because of advances in synthesis and the unique thermal, optoelectronic, chemical, and mechanical properties of these materials. The potential applications of single-crystalline nanowires are truly impressive, including computational technology, communications, spectroscopic sensing, alternative energy, and the biological sciences.

While lithographic Si processes are rapidly approaching their physical size limits, optical information processing promises to be a low-power, high-bandwidth alternative for the continuation of Moore's law. In the context of global energy needs, low-cost solution-phase nanowire synthesis has also sparked interest in novel solar cell architectures that may play a significant role in the renewable energy sector. Additionally, the use of compact, integrated optical sensors can be envisioned for the detection of pathogenic molecules in the arena of national security or for the diagnosis and study of human disease. This breadth of application naturally requires a multidisciplinary community, including but not limited to materials scientists, chemists, engineers, physicists, and microbiologists, all coming together to solve challenging optical problems at nanometer length scales. However, it is essential for the materials to be synthesized and characterized before the exploration of their properties and applications can take place.

Possible questions:

1) Why have semiconductor nanowires become so popular recently?
2) What are, according to the text, the potential applications of single-crystalline nanowires?
3) What does this breadth of applications require?