



1. Polymer systems for drug delivery.
2. Vitamins: their structure, diversity, biological role.
3. Peptides: their structure, diversity, biological role.
4. Nucleosides, nucleotides, nucleic acids: their structure, diversity, biological role.
5. RNA and DNA: their structure, biological role.
6. Enzymes: their structure, diversity, biological role.
7. Structure and biological functions of proteins.
8. Lipids: structure, properties, and biological functions.
9. The structure of animal cells and their application in bioengineering.
10. Nanomaterials in bioengineering: structure, properties, application.
11. Polysaccharides: structure, properties. The value of starch, cellulose, chitin.
12. Polymer composites in bioengineering.
13. Biosensors.
14. Biocatalysis.
15. Substances obtained by microbiotechnology.
16. Methods for modeling polymer systems.
17. Nanotechnologies in bioengineering and medicine.
18. Nanoparticles: properties, application in bioengineering.
19. Polymers: structure, properties.
20. Intermolecular interactions in polymer systems.
21. Cross-linked polymers: structure, properties, application. Hydrogels.
22. Polyelectrolytes: structure, properties, application.
23. Structure and properties of biopolymers.
24. Biocompatible polymeric materials: features, application, examples.
25. Biodegradable materials: features, applications, examples.
26. Physical and chemical research methods.
27. Optical research methods.
28. Bioelectronics.
29. Bioinformatics.
30. Physical and mechanical characteristics of materials and research methods.
31. Prokaryotes: structure and application in biotechnology.
32. Plant cells: structure and application in bioengineering.
33. Thermal characteristics of materials and research methods.