

Special section of

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Call for Papers:

This special section is planned as a collection of selected papers presented at Saratov Fall Meeting 2023 – International Symposium on Optics and Biophotonics (September 25 – 29, 2023, Saratov, Russia). Papers focused on optical and laser technologies for medicine and biology, morphology, precision mechanics and control of tissues and cells, related material and environmental problems, optical imaging, spectroscopy and molecular modeling are invited.

The following topics are of interest for the special section:

- Photon migration in tissues
- Diffusion wave and correlation spectroscopy of tissues
- Spectrophotometry, fluorescence, nonlinear and Raman spectroscopy of tissues
- Static and dynamic light scattering in tissues
- Coherent optical methods for medical diagnostics
- Cell and tissue coherent microscopy
- Optical diffusion and coherent medical topography and tomography
- Laser Doppler measuring systems for medicine and biology
- Full field speckle-correlation biomedical techniques
- Optical techniques of biovibrations measurements
- Optical polarimetric methods for study of tissues and cell structures
- Photothermal and photoacoustic methods for tissue diagnostics
- Optical biopsy
- Optical microelastography of tissues
- Osmotic effects and optical monitoring of matter diffusion in tissues

- Tissue and blood optical clearing
- Optical glucose sensing
- Laser and optical technologies in microbiology
- Tissue phantoms designing
- Photochemical, photothermal and photobiological effects, mechanisms of phototherapy
- High energy laser interactions with cells and tissues, laser surgery techniques
- Lasers and optical technologies in dermatology, ophthalmology, gynecology, cardiology, dentistry, etc
- Microchannel and photonic crystal technologies in biology and medicine
- Biosensors

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Manuscripts due date **December 15, 2023**