

1. Record Nr.	UNINA9910734873303321
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Titolo	Phase Mapping of Human Biological Tissues : Data Processing Algorithms for Forensic Time of Death Estimation // by Zhengbin Hu, V. T. Bachinsky, O. Y. Vanchulyak, Iryna V. Soltys, Yu. A. Ushenko, A. G. Ushenko, Igor Meglinski
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2023
ISBN	981-9932-69-6
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (81 pages)
Collana	SpringerBriefs in Applied Sciences and Technology, , 2191-5318
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Disciplina	621.36
Soggetti	Optics Medical jurisprudence Microscopy Medical physics Applied Optics Forensic Medicine Optical Microscopy Medical Physics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Novel Diagnosis Capabilities and Prospects for Determining Post-mortem Changes in Biological Tissues and the Time of Hematoma Formation in Forensic Medicine -- Coordinate Distributions of Phase Shifts Values Between Orthogonal Components of the Amplitude of the Laser Radiation Field -- Computer Modeling of the Evolution of Statistical Parameters of the Phase Distributions of the Laser Radiation Field Converted by Optically Anisotropic Layers -- Spectral Phase Measurement of Laser Images of Sections of Biological Tissues of a

Sommario/riassunto

This book presents numerical computer-aided smart-methods as part of a comprehensive statistical, correlation and fractal analysis of laser polarimetry data. It highlights relationships between polarization (azimuth distributions, polarization ellipticities, Stokes vector parameters, Mueller matrix elements) parameters of laser images of biological tissues of a human corpse in different spectral ranges and temporal dynamics of their postmortem morphological changes. The book discusses the effectiveness of correlation analysis of two-dimensional distributions of polarization inhomogeneous images of histological sections of the main types of biological tissues in determining the time of death. It also discusses the development of basic principles of phase measurements (phasometry) of microscopic images of biological tissues to determine the age of death and the time of hematoma formation. Also presented in the book are possibilities of complex laser spectral photopolarimetry images of histological sections of biological tissues of human corpse in different spectral regions, with the simultaneous development and substantiation of a set of statistical and correlational criteria for objective determination of the time of death.
