

# Advances in Optical Technologies

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Editorial

## Correlation Optics

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The papers presented in this special issue are the selected reflecting the topics of the Ninth International Conference “Correlation Optics,” which became traditional being held biannually under the auspices of SPIE, ICO, OSA, and EOS in Chernivtsi (Ukraine). Distribution of the papers over the conference topics reflects current tendencies in correlation optics, when, to say, the use of well-established approaches, methods, and techniques of optical correlation data processing [1–4], singular optical [5–8], and fractal optics [9, 10] approaches provides successful solving of the problem of looking for important diagnostic information in biology and medicine [11–15], as it is seen from several papers in this issue. It is worthy to note that interconnection between spatially inhomogeneously distributed “unconventional polarization states of light” and measured correlation characteristics of optical fields are put in the base of diagnostics of states of biological tissue tomes in these papers. Timeliness and topicality of this papers approach are confirmed in Special Issue Unconventional Polarization States of Light in the journal “Optics Express” from May 12, 2010.

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