CHALLENGES AND ADVANCES IN COMPUTATIONAL CHEMISTRY AND PHYSICS

Radiation Induced Molecular Phenomena in Nucleic Acids

A Comprehensive Theoretical and Experimental Analysis

Edited by
Manoj Shukla and Jerzy Leszczynski

Series Editor
Jerzy Leszczynski

This volume presents a comprehensive overview of theoretical and experimental data on Ultraviolet radiation and low energy electron induced phenomena in nucleic acid fragments. The elucidation of possible mechanisms of these events is important for all living species and hence the technical challenges involved in the exploration of these processes are discussed. This volume will be of particular interest for those involved in understanding the photophysical and photochemical properties of nucleic acid bases, base assemblies, and also model systems related to nucleic acids. The chapter contributions assembled in *Radiation Induced Molecular Phenomena in Nucleic Acids* are written by theoreticians and experimentalists of international distinction.

Radiation Induced Molecular Phenomena in Nucleic Acids will be a useful reference to advanced undergraduates, postgraduates, academics, and researchers in computational chemistry and physics, physical chemistry, biochemistry, photochemistry, biophysics, molecular biology, materials science, and those engaged in nucleic acid research.

ISBN 978-1-4020-8183-5

9 781402 081835

springer.com

COCH 5