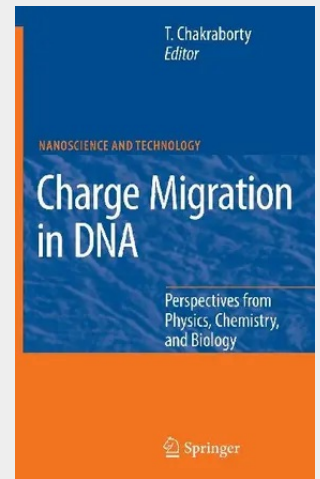


Charge Migration in DNA

Perspectives from Physics, Chemistry, and Biology

Charge migration through DNA has been the focus of considerable interest in recent years. A deeper understanding of the nature of charge transfer and transport along the double helix is important in fields as diverse as physics, chemistry and nanotechnology. It has also important implications in biology, in particular in DNA damage and repair. This book presents contributions from an international team of researchers active in this field. It contains a wide range of topics that includes the mathematical background of the quantum processes involved, the role of charge transfer in DNA radiation damage, a new approach to DNA sequencing, DNA photonics, and many others. This book should be of value to researchers in condensed matter physics, chemical physics, physical chemistry, and nanoscale sciences.

Charge migration through DNA has been the focus of considerable interest in recent years. A deeper understanding of the nature of charge transfer and transport along the double helix is important in fields as diverse as physics, chemistry and nanotechnology. It has also important implications in biology, in particular in DNA damage and repair. This book presents contributions from an international team of researchers active in this field. It contains a wide range of topics that includes the mathematical background of the quantum processes involved, the role of charge transfer in DNA radiation damage, a new approach to DNA sequencing, DNA photonics, and many others. This book should be of value to researchers in condensed matter physics, chemical physics, physical chemistry, and nanoscale sciences.



160,49 €

149,99 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9783540724933

Medium: Buch

ISBN: 978-3-540-72493-3

Verlag: Springer

Erscheinungstermin: 20.07.2007

Sprache(n): Englisch

Auflage: 2007

Serie: NanoScience and Technology

Produktform: Gebunden

Gewicht: 629 g

Seiten: 288

Format (B x H): 160 x 241 mm

