

1. Record Nr.	UNINA9910823117203321
Titolo	Multifunctional materials and modeling // edited by Mikhail. A. Korepanov, DSc, and Alexey M. Lipanov, DSc ; series editors-in-chief : Vjacheslav B. Dement'ev, DSc, and Vladimir I. Kodolov, DSc Gennady E. Zaikov, DSc, and A. K. Haghi, PhD Review
Pubbl/distr/stampa	Oakville, Ontario : , : Apple Academic Press, , [2015] ©2015
ISBN	0-429-11367-6 1-4987-0954-0
Edizione	[1st ed.]
Descrizione fisica	1 online resource (365 p.)
Collana	Innovations in Chemical Physics and Mesoscopy
Disciplina	541/.2
Soggetti	Materials - Research Surface chemistry Materials - Thermal properties - Research Nanostructured materials - Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	FRONT COVER; ABOUT THE SERIES INNOVATIONS IN CHEMICAL PHYSICS AND MESOSCOPY; BOOKS IN THE SERIES; ABOUT THE EDITORS; REVIEWERS AND ADVISORY BOARD MEMBERS; CONTENTS; LIST OF CONTRIBUTORS; LIST OF ABBREVIATIONS; LIST OF SYMBOLS; PREFACE; CHAPTER 1 - THE CALCULATIONS OF THE COMPLEX OF THE RED MERCURIC IODIDE FUNDAMENTAL OPTICAL FUNCTIONS; CHAPTER 2 - EXPERIMENTAL RESEARCH OF GRASSY RAGS IGNITION BY HEATED UP TO HIGH TEMPERATURES CARBON PARTICLE; CHAPTER 3 - SIMULATION OF STRUCTURAL TRANSFORMATIONS OF SPRING STEEL DURING THE QUENCHING PROCESS CHAPTER 10 - POST-CASCADE SHOCK WAVES INFLUENCE ON VACANCY PORES STRUCTURAL TRANSFORMATIONS CHAPTER 11 - ELECTRONIC STRUCTURE OF PLUMBUM SELENIDE; CHAPTER 12 - SIMULATION OF POLLUTANTS GENERATION IN THE COMBUSTION CHAMBER OF THE GAS TURBINE POWER PLANT; CHAPTER 13 - THE EXCITON SPECTRA OF STRONTIUM SULFIDE; CHAPTER 14 - SIMULATION OF THE INTERACTION

OF FULLERENE AND IRON FE (100); CHAPTER 15 - FORMATION, OPTICAL AND ELECTRICAL PROPERTIES OF Ca_3Si_4 FILMS AND $\text{Si}/\text{Ca}_3\text{Si}_4/\text{Si}$ (111) DOUBLE HETEROSTRUCTURES
CHAPTER 16 - STRUCTURAL AND CHEMICAL TRANSFORMATIONS OF THE MECHANO-ACTIVATED CALCIUM LACTATE IN VORTEX MILL
CHAPTER 17 - NONMONOTONIC CHANGE OF THE COMPOSITION OF SURFACE LAYERS OF THE MELT $\text{Co}_{57}\text{Ni}_{10}\text{Fe}_5\text{Si}_{11}\text{B}_{17}$ DURING ISOTHERMAL PROCESS; CHAPTER 18 - NICKEL(II) AND ETHYLENEDIAMINETETRAACETATE ACID INTERREACTION IN WATER SOLUTION OF AMINOPROPIONIC ACID; CHAPTER 19 - EFFECT OF MAGNETIC FIELD AND UV RADIATION ON STRUCTURAL STATE AND BIOLOGICAL PROPERTIES OF OLEIC ACID AND OLIVE OIL; CHAPTER 20 - METASTABLE INTERSTITIAL PHASES BY BALL MILLING OF TITANIUM IN LIQUID HYDROCARBONS
CHAPTER 21 - PARAMETERS OF MOBILITY FOR POLLUTION BY SODIUM ARSENITE FOR SOIL OF KAMBARKA DISTRICT
CHAPTER 22 - X-RAY PHOTOELECTRON STUDY OF THE INFLUENCE OF THE AMOUNT OF CARBON NICKEL-CONTAINING NANOSTRUCTURES ON THE DEGREE OF THE POLYMETHYLMETHACRYLATE MODIFICATION; CHAPTER 23 - DEPENDENCE OF THE DEGREE OF NANOMODIFICATION OF POLYMERS ON THE CONTENT OF OXYGEN ATOMS IN THEIR STRUCTURE; CHAPTER 24 - FEATURES OF DEFORMATION RELIEF OF THE SURFACE OF THE METAL STRIP, OBTAINED BY THE HIGH PRESSURE SHEAR
CHAPTER 25 - THE STRUCTURAL ANALYSIS OF THE MICROHARDNESS OF PLASTICIZED POLYPROPYLENE AND ITS COMPOSITES

Sommario/riassunto

This important book presents a valuable collection of new research and new trends in nanomaterials, mesoscopy, quantum chemistry, and chemical physics processes. It highlights the development of nanomaterials as well as investigation of combustion and explosion processes. It highlights new trends in processes and methods of the treatment of polymeric materials and also covers material modification, including super small quantities of metal/carbon nanocomposites as well as new information on the modeling of processes and quantum calculations. Nonlinear kinetic appearances and their applications
