

Functional Nanomaterials

Version: 22.04.2016

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Chapters/Papers	University	Contributor	Number of pages	e-Mail
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Introduction	BSU	A. Fedotov, V. Odzhaev	5	fedotov@bsu.by odzhaev@bsu.by
Chapter 1: Concepts of Low-Dimensional Effects	BSU	A. Fedotov	25	fedotov@bsu.by
Chapter 2: Introduction to Physics of Surface/Interface	BSU	A. Fedotov	20	fedotov@bsu.by
Chapter 3: Thermal Properties of Nanomaterials	BSU	M. Tivanov	20	Tivanov@bsu.by
Chapter 4: Chemistry of Nanomaterials	BSU	A. Mazanik	20	mazanikalexander@gmail.com
Chapter 5: Physics of Carbon Low-dimensional Systems	BSU	N. Poklonski	15	poklonski@bsu.by

and Device Structures				
Chapter 6: Arrays of carbon nanostructures : fabrication, properties and applications	BSU	V. Ksenevich	20	ksenevich@bsu.by
Chapter 7: Conductive Polymers	BSU	V. Odzhaev (V.Odjjev)	15	odzjev@bsu.by
Chapter 8: Electrically conductive composites	BSU	N. Gorbachuk, A. Fedotov	25	gorbachuk@bsu.by
Chapter 9: Magnetotransport and Magnetism in Nanocomposite and Multilayered Materials	BSU	J. Fedotova, J. Kasiuk	30	Julia@hep.by
Chapter 10: Nanoscale Materials and Structures for Spintronics	BSU	M. Lukashevich	15	lukashevich@bsu.by
Chapter 11: Nanomaterials for Power Engineering	BSU	A. Mazanik	20	mazanikalexander@gmail.com
Chapter 12: Nanobiomaterials	BSU	P. Bulay	25	BulayPM@bsu.by
Chapter 13. Fluorescent quantum dots for bioimaging	GrSU	N. Strekal	15	nat@grsu.by
Chapter 14: Plasmonic nanomaterials for photonics, biochemistry and quantum technology	GrSU	N. Strekal	25	nat@grsu.by
Chapter 15: Nanofibers: synthesis, properties and applications	BSTU	N.R. Prokopchuk Zh.S. Shashok	25	zhanna-shashok@mail.ru
Chapter 16: Elastomeric compositions with carbon nanomaterials	BSTU	K.V. Vishnevskii Zh.S. Shashok	20	vik@belstu.by
Chapter 17: Paints and coatings, modified carbon nanomaterials	BSTU	N.R. Prokopchuk A.L. Shutova	15	a.l.shutova@mail.ru
Chapter 18: Plasma-chemical synthesis of nanocomposite	GSU	A.V. Rogachev	20	simmak@mail.ru

polymer coatings		A.A. Rogachev M. Yarmolenko		
Chapter 19: Carbon coatings doped with metals	GSU	A.V. Rogachev D.Pilipcov N. Fedosenko	20	fedosenko@gsu.by
Chapter 20: Sol-gel synthesis of functional materials	GSU	D. Kovalenko V. Gaishun A. Semchenko	20	dkov@gsu.by
Chapter 21: Micro- and nanosensors	KU Leuven	Joan Peuteman	10	joan.peuteman@kuleuven.be
			~400 pages	
References				