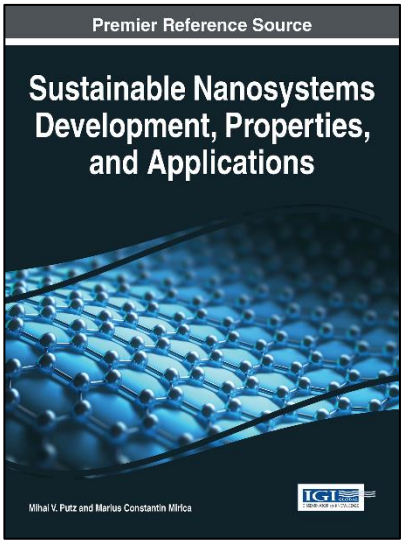
Sustainable Nanosystems Development, Properties, and Applications



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Description:

Global economic demands and population surges have led to dwindling resources and problematic environmental issues. As the climate and its natural resources continue to struggle, it has become necessary to research and employ new forms of sustainable technology to help meet the growing demand.

Sustainable Nanosystems Development, Properties, and Applications features emergent research and theoretical concepts in the areas of nanotechnology, photovoltaics, electrochemistry, and materials science, as well as within the physical and environmental sciences. Highlights progressive approaches and utilization techniques.

Readers:

This publication is a critical reference source for researchers, engineers, students, scientists, and academicians interested in the application of sustainable nanotechnology.

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Mihai V. Putz is a laureate in physics (1997), with an MS degree in spectroscopy (1999), and PhD degree in chemistry (2002), with many post-doctorate stages: in chemistry (2002-2003) and in physics (2004, 2010, 2011) at the University of Calabria, Italy, and Free University of Berlin, Germany, respectively. He is currently Associate Professor of theoretical and computational physical chemistry at West University of Timisoara, Romania. He has made valuable contributions in computational, quantum, and physical chemistry through seminal works that appeared in many international journals. He is Editor-in-Chief of the International Journal of Chemical Modeling (at NOVA Science Inc.) and the New Frontiers in Chemistry (at West University of Timisoara). He is member of many professional societies and has received several national and international awards from the Romanian National Authority of Scientific Research (2008), the German Academic Exchange Service DAAD (2000, 2004, 2011), and the Center of International Cooperation of Free University Berlin (2010). He is the leader of the Laboratory of Computational and Structural Physical Chemistry for Nanosciences and QSAR at Biology-Chemistry Department of West University of Timisoara, Romania, where he conducts research in the fundamental and applicative fields of quantum physical-chemistry and QSAR. In 2010 Mihai V. Putz was declared through a national competition the Best Researcher of Romania, while in 2013 he was recognized among the first Dr.-Habil. in Chemistry in Romania. In 2013 he was appointed Scientific Director of newly founded Laboratory of Structural and Computational Physical Chemistry for Nanosciences and QSAR in his alma mater of West University of Timisoara, while from 2014, he was recognized by the Romanian Ministry of Research as Principal Investigator of the first degree at National Institute for Electrochemistry and Condensed Matter (INCEMC) Timisoara, and also becoming full member of International Academy of Mathematical Chemistry.

Marius Constantin Mirica is a Doctor engineer, scientific researcher of second order at National Institute of Research for Electrochemistry and Condensed Matter, Timisoara. He has a Bachelor Degree (1998) and Advanced studies degree (1999) in Chemical engineering at Industrial Chemistry and Environmental Engineering, Polytechnic University of Timisoara, and activate in electrochemistry and photovoltaic domain. He has several specializations and qualifications: class Management – basic principle and practices (2005), class Financial accounting system (2005), class Management through projects (2006), class Quality management (2006), class Intellectual property and technologic transfer (2006), class Invention patents (2007), Horizontal Training on Structural Instruments (2007), class Projects management (2009). Since 2004 he participates in many scientific research programs, and from 2010-2014 he was the Project Director of "POS CCE O.2.2.1. 907/14678 Laboratory of Renewable Energies – photovoltaic". In 2008 he received the Gold medal of the 2nd Congress of Romanian Engineers Association (CNCIR) Bucharest. He is the General Director of the Technologic and Scientific Park TIM SCIENCE PARK, Timisoara since 2004 until present.