

## Contents

<i>Editorial Foreword</i>	vii
<i>Preface</i>	ix
<i>Selected Books Authored by Youzhong Guo</i>	xiii
1. Periodic Boundary Problems for Analytic Function Including Automorphic Functions <i>Haitao Cai and Jian-Ke Lu</i>	1
2. Subharmonic Bifurcations and Chaos for a Model of Micro-Cantilever in MEMS <i>Yushu Chen, Liangqiang Zhou and Fangqi Chen</i>	37
3. Canonical Sample Spaces for Random Dynamical Systems <i>Jinqiao Duan, Xingye Kan and Bjorn Schmalfuss</i>	53
4. Epidemic Propagation Dynamics on Complex Networks <i>Xinchu Fu, Zengrong Liu, Michael Small and Chi Kong Tse</i>	71
5. Inverse Problems for Equations of Parabolic Type <i>Zhibin Han, Yongzhong Huang and Ming Jian</i>	93
6. The Existence and Asymptotic Properties of Nontrivial Solutions of Nonlinear $(2 - q)$ -Laplacian Type Problems with Linking Geometric Structure <i>Gongbao Li and Zhaofen Shen</i>	115

7.	Chaotic Dynamics for the Two-component Bose-Einstein Condensate System	135
	<i>Jibin Li</i>	
8.	Recent Developments and Perspectives in Nonlinear Dynamics	145
	<i>Zengrong Liu</i>	
9.	Mathematical Aspects of the Cold Plasma Model	181
	<i>Thomas H. Otway</i>	
10.	Gravitating Yang–Mills Fields in All Dimensions	211
	<i>Eugen Radu and D. H. Tchrakian</i>	
11.	Hamiltonian Constraint and Mandelstam Identities over Extended Knot Families $\{\psi_i\}_2^2$ , $\{\psi_i\}_3^4$ and $\{\psi_i\}_4^6$ in Extended Loop Gravity	241
	<i>Dan Shao, Liang Shao and Changgui Shao</i>	
12.	Lattice Boltzmann Simulation of Nonlinear Schrödinger Equation with Variable Coefficients	253
	<i>Baochang Shi</i>	
13.	Exponential Stability of Nonlocal Time-Delayed Burgers Equation	265
	<i>Yanbin Tang</i>	
14.	Bifurcation Analysis of the Swift-Hohenberg Equation with Quintic Nonlinearity and Neumann Boundary Condition	275
	<i>Qingkun Xiao and Hongjun Gao</i>	
15.	A New GL Method for Mathematical and Physical Problems	293
	<i>Ganquan Xie and Jianhua Li</i>	
16.	Harmonically Representing Topological Classes	307
	<i>Yisong Yang</i>	
	<i>Postscript</i>	353