

Table of Contents

Microfluidic Cell Trapping Device Based on Standard PCB Technology <i>Nuria B Palacios Aguilera, Ting Zhou, Jeroen Bastemeijer, Jeff Mollinger, and Andre Bossche</i>	1
Integration of Nanostructured Multifunctional Surfaces into Analytical Chip <i>Andrej Orinak, Renata Orinakova, Lenka Skantarova, Zuzana Novakova, and Jozef Radonak</i>	7
Evanescent Wave-based Near-wall Thermometry Utilizing Brownian Motion <i>Reza Sadr and Anoop Kanjirakat</i>	12
Effect of Erythrocyte Sedimentation and Aggregation on the Conductivity of Blood in a Miniature Chamber <i>Alexander Zhanov and Sung Yang</i>	18
Schemes for Deterministic Joint Remotely Preparing an Arbitrary Three-qubit State <i>You-Bang Zhan, Yuan-Shun Cui, A-Long Yu, Xiao-Wei Li, and Gui-Bin Chen</i>	25
Quantum Interference in Cognition: Structural Aspects of the Brain <i>Sandro Sozzo and Diederik Aerts</i>	33
Assessment of High-Frequency Performance Potential of Graphene Field-Effect Transistors <i>Jyotsna Chauhan, Leitao Liu, Yang Lu, and Jing Guo</i>	42
Effects of Microstructure on Fiber-Matrix Debonding of Metal Matrix Composites under Transverse Loading <i>Mohammad Tahaye Abadi</i>	46
The Evaluation of Polymeric Nanocomposites from Nuclear Magnetic Resonance Relaxometry <i>Maria Ines Bruno Tavares, Paulo Sergio da Silva, Emerson da Silva, Cintia Legramanti, Adriano Passos, and Roberto Cucinelli Neto</i>	52
Tunable Plasmonic Nanogap Resonators <i>Tiziana Bond, Mihail Bora, and Allan Chang</i>	56
Security of Entanglement Swapping QKD Protocols against Collective Attacks <i>Stefan Schauer and Martin Suda</i>	60
Reservoir Rock Microstructure Evaluation by X-ray Microtomography <i>Alessandra Machado, Inaya Lima, and Ricardo Lopes</i>	65
An Analytical Study of Short-Channel Effects of Strained-Si on Silicon-Germanium-on-Insulator (SGOI) MOSFETs Including Interface Charges <i>Mirgender Kumar, Sarvesh Dubey, Pramod Tiwari, Satyabrata Jit, and Abirmoya Santra</i>	69