

Table of Contents

Preface

Spin-Orbit Coupling of Color Centers for Quantum Applications M. Neubauer, M. Schober, W. Dobersberger and M. Bockstedte	1
Optical Ionization of Qubits and their Silent Charge States M. Bockstedte and M. Schober	9
Thermochromic Properties of 3C-, 6H- and 4H-SiC Polytypes up to 500°C G. Ferro, D. Carole and D. Chaussende	17
Monitoring of Graphene Properties in the Process of Viral Biosensor Manufacturing A.A. Lebedev, N.M. Shmidt, E.I. Shabunina, A.V. Nashchekin, E.V. Gushchina, V.N. Petrov, I.A. Eliseev, S.P. Lebedev, S.I. Priobrazhenskii, E.M. Tanklevskaya, M.V. Puzyk, A.D. Roenkov, A.S. Usikov, S.A. Klotchenko, A.V. Vasin, A.Y. Plehanov, V.A. Golyashov and O.E. Tereshchenko	23
Fabrication of Wafer-Level Vacuum-Packaged 3C-SiC Resonant Microstructures Grown on <111> and <100> Silicon S. Sapienza, L. Belsito, M. Ferri, I. Elmi, M. Zielinski, F. La Via and A. Roncaglia	29
250 µm Thick Detectors for Neutron Detection: Design, Electrical Characteristics, and Detector Performances G. Trovato, A. Meli, A. Muoio, R. Reitano, L. Calcagno, M.H. Kushoro, M. Rebai, M. Tardocchi, A. Trotta, M. Parisi, L. Meda and F. La Via	35
Stress Fields Distribution and Simulation in 3C-SiC Resonators V. Scuderi, A. Muoio, S. Sapienza, M. Ferri, L. Belsito, A. Roncaglia and F. La Via	41
Design of Monolithically Integrated Temperature Sensors in 4H-SiC JFETs F. Monaghan, A. Martinez, J.E. Evans, C. Fisher, O. Guy and M. Jennings	47
Device Modeling of 4H-SiC PIN Photodiodes with Shallow Implanted Al Emitters for VUV Sensor Applications M. Schraml, M. Rommel, N. Papathanasiou and T. Erlbacher	55
Plasmonic Ag Nanoparticles on SiC for Use as SERS Substrate and in Integrated Optical Sensors for Bio-Chemical Applications V. Cantaro, A. Sciuto, A. Brancato, G. Compagnini and G. D'Arrigo	63
Experimental Observation of Raman Assisted and Kerr Optical Frequency Comb in a 4H-Silicon-Carbide on Insulator Microresonator A.A. Afridi, Y.Q. Lu, X.D. Shi, R.X. Wang, J.W. Li, Q. Li and H.Y. Ou	71