

## Table of Contents

Color Invariant Study for Background Subtraction <i>Lorena Guachi, Giuseppe Cocorullo, Pasquale Corsonello, Fabio Frustaci, and Stefania Perri</i>	1
A Hotspot Detection Method Based on Approximate String Search <i>Shuma Tamagawa, Ryo Fujimoto, Masato Inagi, Shinobu Nagayama, and Shin'ichi Wakabayashi</i>	6
Improving the Performance of a SOM-Based FPGA-Placement-Algorithm Using SIMD-Hardware <i>Timm Bostelmann and Sergei Sawitzki</i>	13
A Cost Model for SMARTLAM <i>Max Dobler, James Gourlay, Steffen Scholz, and Andreas Schmidt</i>	16
Novel Conductive Inks for 3D Printing <i>Ayala Kabla, Leo Schranzhofer, Abd El Razek, and Fernando de la Vega</i>	22
Novel Nanoparticle Enhanced Digital Materials for 3D Printing and their Application Shown for the Robotic and Electronic Industry <i>Steffen Scholz, Adrien Brunet, Tobias Muller, and Anita Fuchsbauer</i>	27
Requirements for 3D Printed Applications using Novel Nanoparticle Enhanced Digital Materials <i>Adrien Brunet, Tobias Muller, Steffen Scholz, and Anita Fuchsbauer</i>	31
ADDMANU – An Austrian Lighthouse Project for Additive Manufacturing <i>Christian Woegerer, Michael Muehlbereger, and Markus IKeda</i>	35
Novel FGMOS based Voltage Differencing Buffered Amplifier and its Filter Applications <i>Akanksha Ninawe, Himani Kanwar, Richa Srivastava, and Devesh Singh</i>	41
A High-Speed Programmable Network Intrusion Detection System Based on a Multi-Byte Transition NFA <i>Tomoaki Hashimoto, Shin'ichi Wakabayashi, Shinobu Nagayama, Masato Inagi, Ryohei Koishi, and Hiroki Takaguchi</i>	45
A Dynamically Reconfigurable NoC for Double-Precision Floating-Point FFT on FPGAs <i>Thanh Bui, Braden Phillips, and Michael Liebelt</i>	52