Jurnal Elektronika dan Telekomunikasi

Volume 17, Number 2, December 2017

e-ISSN: 2527-9955; p-ISSN: 1411-8289

Editor-In-Chief

Dr. Goib Wiranto, Indonesian Institute of Sciences, Indonesia

Deputy Editor

I Dewa Putu Hermida, Indonesian Institute of Sciences, Indonesia

Editorial Team

Dr. Purwoko Adhi, Indonesian Institute of Sciences, Indonesia
Dr. Gandi Sugandi, Indonesian Institute of Sciences, Indonesia
Dr. Yusuf Nur Wijayanto, Indonesian Institute of Sciences, Indonesia
Dr. Nasrullah Armi, Indonesian Institute of Sciences, Indonesia
Dr. Dedi, Indonesian Institute of Sciences, Indonesia
Dr. Natalita Maulani Nursam, Indonesian Institute of Sciences, Indonesia

Dr. Xingdong Wang, Commonwealth Scientific and Industrial Research Organization (CSIRO),

Australia

Dr. Jeannie Ziang Yie Tan, Heriot-Watt University, United Kingdom
Dr. Juliana Johari, Universiti Teknologi Mara (UiTM), Malaysia

Managing Editors

Shobih, Indonesian Institute of Sciences, Indonesia
Novrita Idayanti, Indonesian Institute of Sciences, Indonesia
Dayat Kurniawan, Indonesian Institute of Sciences, Indonesia
Hana Arisesa, Indonesian Institute of Sciences, Indonesia
Yahya Syukri Amrullah, Indonesian Institute of Sciences, Indonesia
Winy Desvasari, Indonesian Institute of Sciences, Indonesia
Chaeriah Bin Ali Wael, Indonesian Institute of Sciences, Indonesia

Jurnal Elektronika dan Telekomunikasi

Volume 17, Number 2, December 2017 e-ISSN: 2527-9955; p-ISSN: 1411-8289

Editorial Preface

Dear readers,

We are pleased to present the latest issue of Jurnal Elektronika dan Telekomunikasi (JET) vol. 17 no. 2, which is the second issue published in 2017 by Research Center for Electronics and Telecommunication, Indonesian Institute of Science. We also proud to announce that this is the first issue where all articles are published in English. In addition, we are happy to introduce "article in press" feature in our website to showcase papers that have been accepted to be published in the next issue of JET, thus allowing more rapid publication for our authors.

In this issue we have published five research articles related to the field of electronics, telecommunication, electronic materials, and microelectronics. In electronic materials topic, we have two manuscripts on dye-sensitized solar cell research and fabrication of optical waveguide device. We also have two additional papers in the area of signal processing, which discuss the optimum wavelet basis function for Indonesian vowel voice recognition and latin letters recognition using optical characters. Last but not least, we have a paper related to the electronics research field that presents a tracking system for Indoor TV Antenna.

We would like to thank all authors who contributed their papers for this issue. We also gratefully acknowledge all of the hard work delivered as always by our respectable reviewers. We would also like to thank all of the editorial team members that have given significant effort for the preparation and publication of this issue. Lastly, we would like to invite you to submit research papers to be considered for publication in the upcoming issue of Jurnal Elektronika dan Telekomunikasi vol. 18 no. 1 that is planned to be launched on August 2018. We look forward to having your valuable work published with us!

Bandung, December 2017

Editor-In-Chief

Jurnal Elektronika dan Telekomunikasi

Volume 17, Number 2, December 2017 p-ISSN: 1411-8289; e-ISSN: 2527-9955

Table of Content

Analysis of Catalytic Material Effect on the Photovoltaic Properties of Monolithic Dye-sensitized Solar Cells Natalita Maulani Nursam, Ade Istiqomah, Jojo Hidayat, Putri Nur Anggraini, Shobih	30 - 35
Fabrication of Polyimide Optical Waveguide on Silicon Dioxide Layer Stacked Silicon Substrate Dadin Mahmudin, Shobih, Pamungkas Daud, Yusuf Nur Wijayanto	36 - 41
Determination of the Optimum Wavelet Basis Function for Indonesian Vowel Voice Recognition Syahroni Hidayat, Habib Ratu P.N., Danang Tejo Kumoro	42 - 47
Tracking System for Indoor TV Antenna Based on CVBS Signal Processing Herti Miawarni, M. Mahaputra Hidayat, Surya Sumpeno, Eko Setijadi	48 - 55
Latin Letters Recognition Using Optical Character Recognition to Convert Printed Media Into Digital Format Rio Anugrah, and Ketut Bayu Yogha Bintoro	56 - 62