

## CONTENTS

### Regular Papers

|  |     |
|--|-----|
| #126 Separation capability of proteins using microfluidic system with dendrimer modified surface .....   | 541 |
| Erino Matsumoto, Kazuki Nishizawa, Tomohiro Fukuda, Madoka Takai, Yoshiko Miura  |     |
| #127 Layer-by-Layer Building up of Redox Phospholipid Polymer Hydrogel Electrode for Biosensor .....   | 545 |
| Ziyin Li, Tomohiro Konno, Madoka Takai, Kazuhiko Ishihara  |     |
| #128 Creating Biointerface on Polymer by Plasma-Initiated Graft Polymerization .....   | 549 |
| Nina Andreeva, Takahiro Ishizaki, Pavel Baroch, Nagahiro Saito   |     |
| #129 Damage-free Fabrication of Perfluoropolymer Microaperture Array Device for Single-molecule Imaging .....  | 553 |
| Takao Ono, Ryo Iizuka, Takanori Akagi, Takashi Funatsu, Takanori Ichiki  |     |
| #130 Surface Properties of Ultra-Thin Membrane Composed of Polycarbonate and Polylactide.....  | 557 |
| Kazuhisa Terao, Junpei Miyake, Junji Watanabe, Yoshiyuki Ikeda   |     |
| #131 Synthesis of a Macro-initiator Based on Poly(trimethylene carbonate) and Its Functionalization toward Living Radical Polymerization .....   | 561 |
| Hiroki Tsunematsu, Junpei Miyake, Junji Watanabe, Yoshiyuki Ikeda  |     |
| #132 Design of Poly(trimethylene carbonate) with Hydrophilic Polymer Chain and its Aggregation Property .....  | 565 |
| Yuta Tosaki, Junpei Miyake, Junji Watanabe, Yoshiyuki Ikeda  |     |
| #133 Continuous preparation of cytocompatible poly(2-methacryloyloxyethyl phosphorylcholine) microcapsule for cell immobilization using microfluidics .....                            | 569 |
| Tatsuo Aikawa, Madoka Takai, Kazuhiko Ishihara   |     |
| #134 Bioinspired phospholipid polymer for improvement of biofouling on titanium alloy substrate .....  | 573 |
| Ye Yao, Kyoko Fukazawa, Nan Huang, Kazuhiko Ishihara   |     |
| #135 The effects of nanophase-separated amphiphilic domains on cell adhesion .....   | 577 |
| Takashi Shibayama, Ji-Hun Seo, Kazuhiko Ishihara, Madoka Takai   |     |
| Characterization of biochar-blended composting for carbon offset .....   | 581 |
| #136 Tomnori Sonoki, Koki Suto, Hideki Mizumoto, Toru Furukawa, Kaneaki Kimura, Jia-Chen Fang, Yoshiyuki Sasaki, Keiji Jindo, Miguel Angel Sánchez Monedero                            |     |
| #137 Conversion of alkali-treated lignophenols to monophenols by the nucleus exchange reaction.....  | 585 |
| Keigo Mikame, Masamitsu Funaoka  |     |
| #138 New types of lignin hybrids from grass and softwood native lignins .....  | 589 |
| Minho Jung, Masamitsu Funaoka  |     |
| #139 Effect of chemical species in alkali agents on pore structure at activated carbon of rice husks .....   | 593 |
| Hiroki Ono, Hiroki Akasaka, Ikumi Toda, Hiroe Tanaka, Takuhiro Watanabe, Satoshi Ooki, Yoshihisa Tanaka, Fujio Takada, Shigeo Ohshio, Syuji Himeno, Toshinori Kokubu, Hidetoshi Saitoh |     |
| #140 Formation of closely packed grains with L1 <sub>0</sub> ordering in gas-flow-sputtered FePt thin films .....  | 599 |
| H. Sakuma, R. Odashima, S. Shidara, K. Ishii   |     |
| #141 Antibacterial and Antifungal Activities of Tryptanthrin Derivatives .....   | 603 |
| Jun Kawakami, Noriyuki Matsushima, Yuta Ogawa, Hiroko Kakinami, Akio Nakane, Haruo Kitahara, Masahiko Nagaki, Shunji Ito   |     |
| #142 Sporicidal Activity of Heated Dolomite Powder against Bacillus subtilis Spore.....  | 607 |
| Shogo Yasue, Jun Sawai, Mikio Kikuchi  |     |
| #143 A step annealing effect of SrS:Cu films for blue EL elements .....  | 611 |
| Masaaki Isai and Suguru Kato   |     |
| #144 Ferromagnetic Behaviors of BaTiO <sub>3</sub> Nano-Powder .....   | 615 |
| M. Ishii, M. Uehara, Y. Kimishima  |     |
| #145 First-Principles Calculations of Hydrogen and Hydrogen-Vacancy Pairs in Graphene .....  | 619 |
| Nyayu Siti Nurainun, Jianbo Lin, Mohammad Shafiqul Alam, Kazunori Nishida, Mineo Saito   |     |