

## Contents

<b>About the Editor</b> . . . . .	<b>vii</b>
<b>Preface to "Nanomedicine Formulations Based on PLGA Nanoparticles for Diagnosis, Monitoring and Treatment of Disease: From Bench to Bedside"</b> . . . . .	<b>ix</b>
<b>Musaed Alkholief, Mohd Abul Kalam, Md Khalid Anwer and Aws Alshamsan</b> Effect of Solvents, Stabilizers and the Concentration of Stabilizers on the Physical Properties of Poly(D,L-lactide-co-glycolide) Nanoparticles: Encapsulation, In Vitro Release of Indomethacin and Cytotoxicity against HepG2-Cell Reprinted from: <i>Pharmaceutics</i> <b>2022</b> , <i>14</i> , 870, doi:10.3390/pharmaceutics14040870 . . . . .	<b>1</b>
<b>Ernest L. Vallorz, David Encinas-Basurto, Rick G. Schnellmann and Heidi M. Mansour</b> Design, Development, Physicochemical Characterization, and In Vitro Drug Release of Formoterol PEGylated PLGA Polymeric Nanoparticles Reprinted from: <i>Pharmaceutics</i> <b>2022</b> , <i>14</i> , 638, doi:10.3390/pharmaceutics14030638 . . . . .	<b>31</b>
<b>David Encinas-Basurto, John P. Konhilas, Robin Polt, Meredith Hay and Heidi M. Mansour</b> Glycosylated Ang-(1-7) MasR Agonist Peptide Poly Lactic-co-Glycolic Acid (PLGA) Nanoparticles and Microparticles in Cognitive Impairment: Design, Particle Preparation, Physicochemical Characterization, and In Vitro Release Reprinted from: <i>Pharmaceutics</i> <b>2022</b> , <i>14</i> , 587, doi:10.3390/pharmaceutics14030587 . . . . .	<b>53</b>
<b>Jeongrae Kim, Yongwhan Choi, Suah Yang, Jaewan Lee, Jiwoong Choi and Yujeong Moon et al.</b> Sustained and Long-Term Release of Doxorubicin from PLGA Nanoparticles for Eliciting Anti-Tumor Immune Responses Reprinted from: <i>Pharmaceutics</i> <b>2022</b> , <i>14</i> , 474, doi:10.3390/pharmaceutics14030474 . . . . .	<b>67</b>
<b>Jimin Hwang, Sonya Mros, Allan B. Gamble, Joel D. A. Tyndall and Arlene McDowell</b> Improving Antibacterial Activity of a HtrA Protease Inhibitor JO146 against <i>Helicobacter pylori</i> : A Novel Approach Using Microfluidics-Engineered PLGA Nanoparticles Reprinted from: <i>Pharmaceutics</i> <b>2022</b> , <i>14</i> , 348, doi:10.3390/pharmaceutics14020348 . . . . .	<b>85</b>
<b>Maria Camilla Operti, Alexander Bernhardt, Vladimir Sincari, Eliezer Jager, Silko Grimm and Andrea Engel et al.</b> Industrial Scale Manufacturing and Downstream Processing of PLGA-Based Nanomedicines Suitable for Fully Continuous Operation Reprinted from: <i>Pharmaceutics</i> <b>2022</b> , <i>14</i> , 276, doi:10.3390/pharmaceutics14020276 . . . . .	<b>103</b>
<b>Victoria O. Shipunova, Vera L. Kovalenko, Polina A. Kotelnikova, Anna S. Sogomonyan, Olga N. Shilova and Elena N. Komedchikova et al.</b> Targeting Cancer Cell Tight Junctions Enhances PLGA-Based Photothermal Sensitizers' Performance In Vitro and In Vivo Reprinted from: <i>Pharmaceutics</i> <b>2021</b> , <i>14</i> , 43, doi:10.3390/pharmaceutics14010043 . . . . .	<b>121</b>
<b>Michela Varani, Giuseppe Campagna, Valeria Bentivoglio, Matteo Serafinelli, Maria Luisa Martini and Filippo Galli et al.</b> Synthesis and Biodistribution of <sup>99m</sup> Tc-Labeled PLGA Nanoparticles by Microfluidic Technique Reprinted from: <i>Pharmaceutics</i> <b>2021</b> , <i>13</i> , 1769, doi:10.3390/pharmaceutics13111769 . . . . .	<b>137</b>

<b>Dalia H. Abdelkader, Ahmed Kh. Abosalha, Mohamed A. Khattab, Basmah N. Aldosari and Alanood S. Almurshedi</b> A Novel Sustained Anti-Inflammatory Effect of Atorvastatin—Calcium PLGA Nanoparticles: In Vitro Optimization and In Vivo Evaluation Reprinted from: <i>Pharmaceutics</i> <b>2021</b> , <i>13</i> , 1658, doi:10.3390/pharmaceutics13101658 . . . . .	<b>151</b>
<b>Felicity Y. Han, Weizhi Xu, Vinod Kumar, Cedric S. Cui, Xaria Li and Xingyu Jiang et al.</b> Optimisation of a Microfluidic Method for the Delivery of a Small Peptide Reprinted from: <i>Pharmaceutics</i> <b>2021</b> , <i>13</i> , 1505, doi:10.3390/pharmaceutics13091505 . . . . .	<b>173</b>
<b>Soumyarwit Manna, Anna M. Donnell, Rafaela Q. Caixeta Faraj, Blanca I. Riemann, Christopher D. Riemann and James J. Augsburg et al.</b> Pharmacokinetics and Toxicity Evaluation of a PLGA and Chitosan-Based Micro-Implant for Sustained Release of Methotrexate in Rabbit Vitreous Reprinted from: <i>Pharmaceutics</i> <b>2021</b> , <i>13</i> , 1227, doi:10.3390/pharmaceutics13081227 . . . . .	<b>189</b>
<b>Regina Scherließ and Julia Janke</b> Preparation of Poly-Lactic-Co-Glycolic Acid Nanoparticles in a Dry Powder Formulation for Pulmonary Antigen Delivery Reprinted from: <i>Pharmaceutics</i> <b>2021</b> , <i>13</i> , 1196, doi:10.3390/pharmaceutics13081196 . . . . .	<b>201</b>
<b>Vasilisa Zhukova, Nadezhda Osipova, Aleksey Semyonkin, Julia Malinovskaya, Pavel Melnikov and Marat Valikhov et al.</b> Fluorescently Labeled PLGA Nanoparticles for Visualization In Vitro and In Vivo: The Importance of Dye Properties Reprinted from: <i>Pharmaceutics</i> <b>2021</b> , <i>13</i> , 1145, doi:10.3390/pharmaceutics13081145 . . . . .	<b>215</b>
<b>Anthony Cunha, Alexandra Gaubert, Laurent Latxague and Benjamin Dehay</b> PLGA-Based Nanoparticles for Neuroprotective Drug Delivery in Neurodegenerative Diseases Reprinted from: <i>Pharmaceutics</i> <b>2021</b> , <i>13</i> , 1042, doi:10.3390/pharmaceutics13071042 . . . . .	<b>243</b>
<b>Kaining Zhi, Babatunde Raji, Anantha R. Nookala, Mohammad Moshahid Khan, Xuyen H. Nguyen and Swarna Sakshi et al.</b> PLGA Nanoparticle-Based Formulations to Cross the Blood–Brain Barrier for Drug Delivery: From R&D to cGMP Reprinted from: <i>Pharmaceutics</i> <b>2021</b> , <i>13</i> , 500, doi:10.3390/pharmaceutics13040500 . . . . .	<b>267</b>