

# Supplementary Materials: Polyethylene Films Coated with Antibacterial and Antiviral Layers Based on CO<sub>2</sub> Extracts of Raspberry Seeds, of Pomegranate Seeds and of Rosemary

Magdalena Ordon <sup>1</sup>, Paweł Nawrotek <sup>2</sup>, Xymena Stachurska <sup>2</sup> and Małgorzata Mizielńska <sup>1,\*</sup>

<sup>1</sup> Center of Bioimmobilisation and Innovative Packaging Materials, Faculty of Food Sciences and Fisheries, West Pomeranian University of Technology in Szczecin, Janickiego 35, 71-270 Szczecin, Poland; magdalena.ordon@zut.edu.pl

<sup>2</sup> Department of Microbiology and Biotechnology, Faculty of Biotechnology and Animal Husbandry, West Pomeranian University of Technology in Szczecin, Center for Nanotechnology Research and Education, Piastów Avenue 45, 70-311 Szczecin, Poland; pawel.nawrotek@zut.edu.pl (P.N.); xymena.stachurska@zut.edu.pl (X.S.)

\* Correspondence: malgorzata.mizielinska@zut.edu.pl; Tel.: +48-91-449-6132

**Citation:** Ordon, M.; Nawrotek, P.; Stachurska, X.; Mizielńska, M. Polyethylene Films Coated with Antibacterial and Antiviral Layers Based on CO<sub>2</sub> Extracts of Raspberry Seeds, of Pomegranate Seeds and of Rosemary. *Coatings* **2021**, *11*, 1179. <https://doi.org/10.3390/coatings11101179>

Academic Editor: Ajay Vikram Singh

Received: 20 August 2021

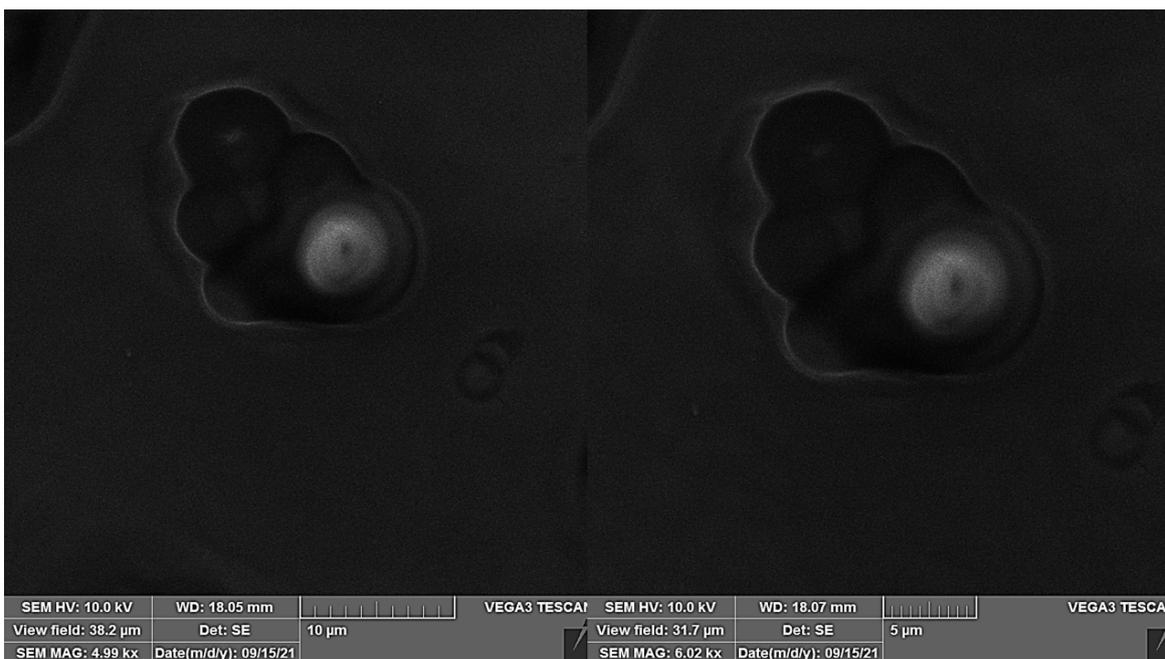
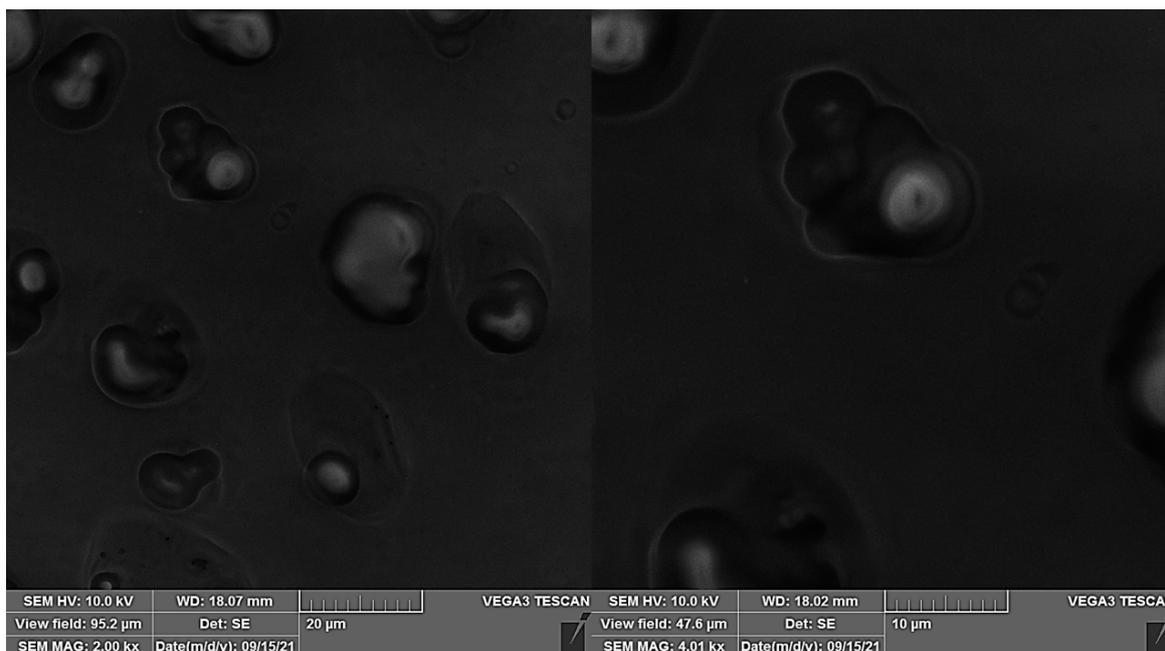
Accepted: 26 September 2021

Published: 28 September 2021

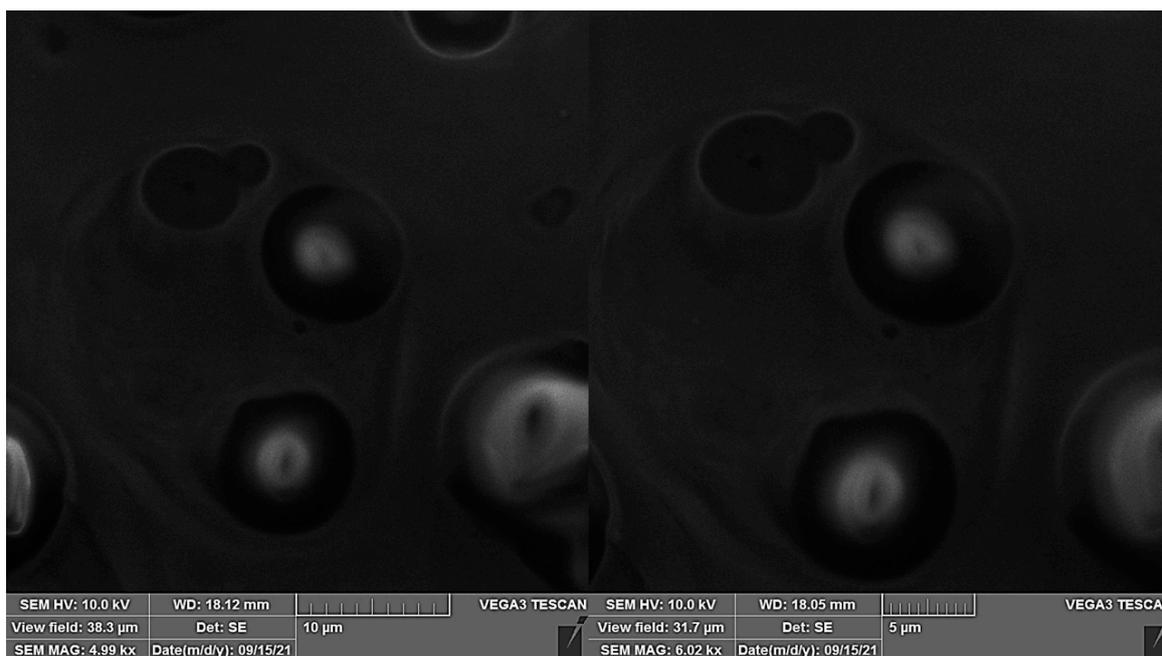
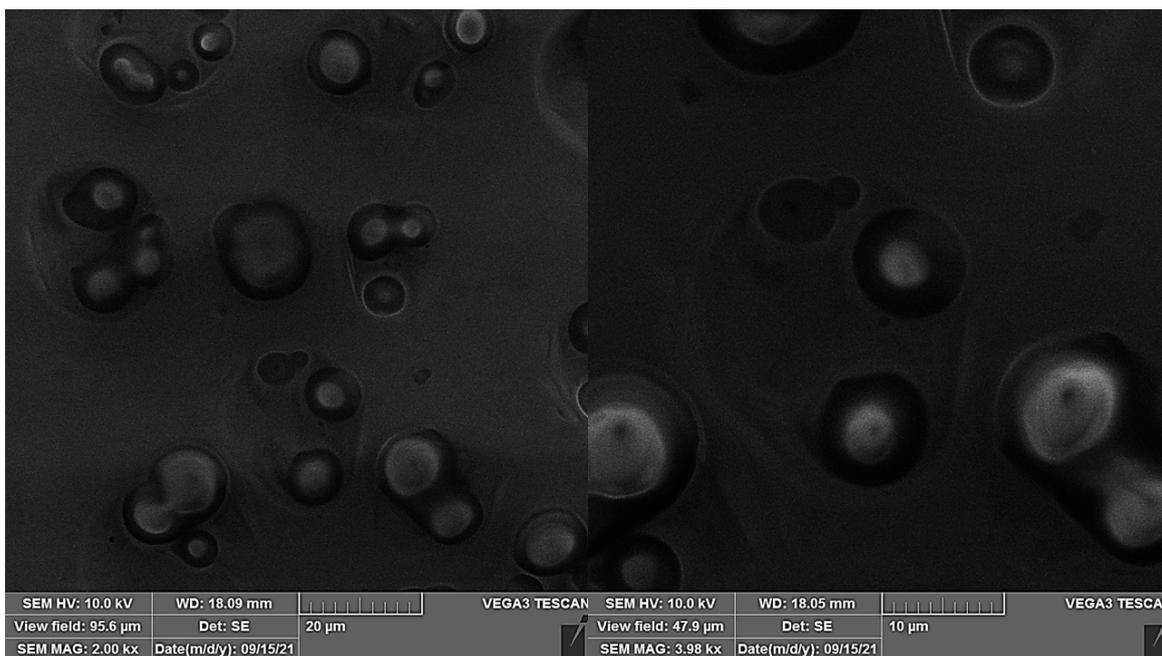
**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



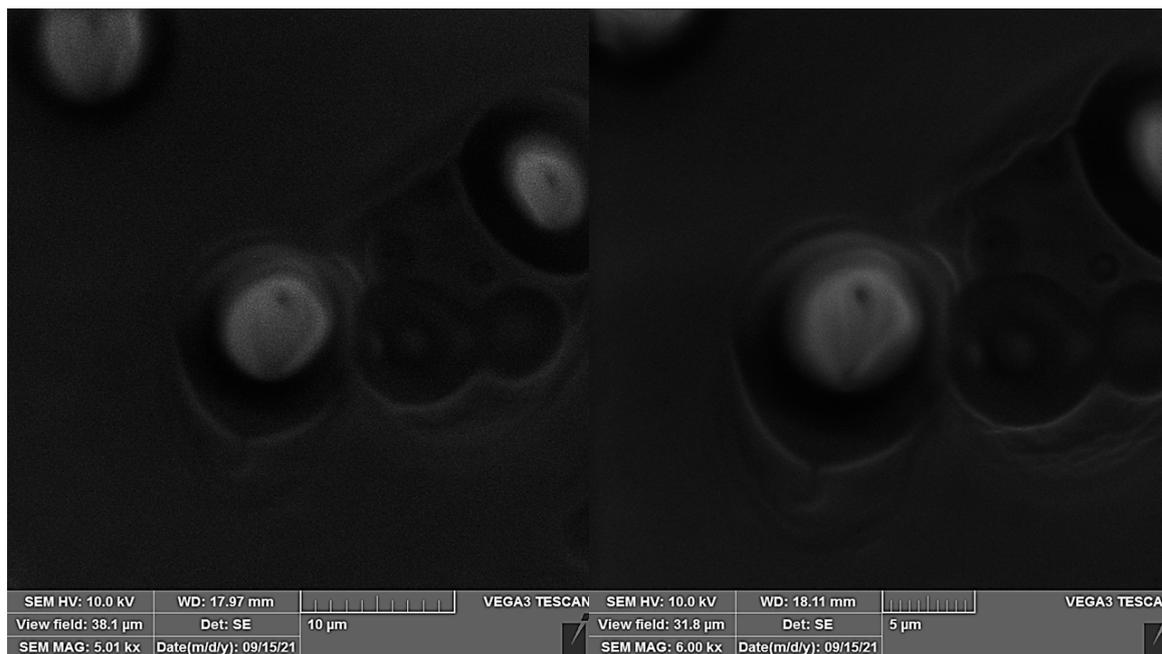
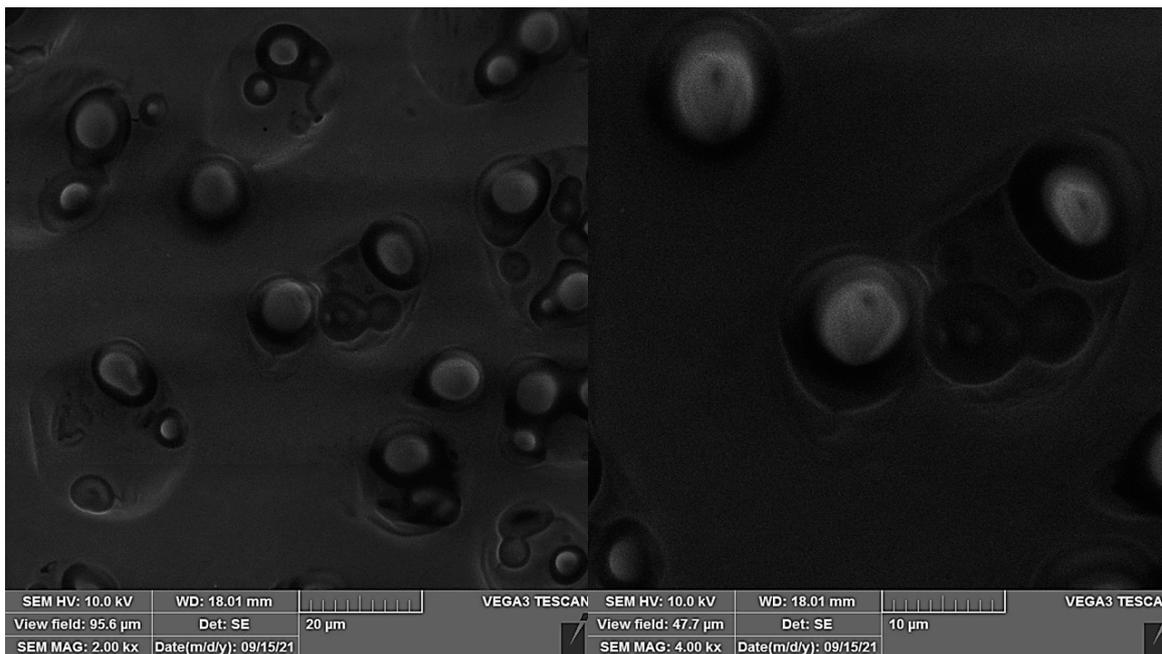
**Copyright:** © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).



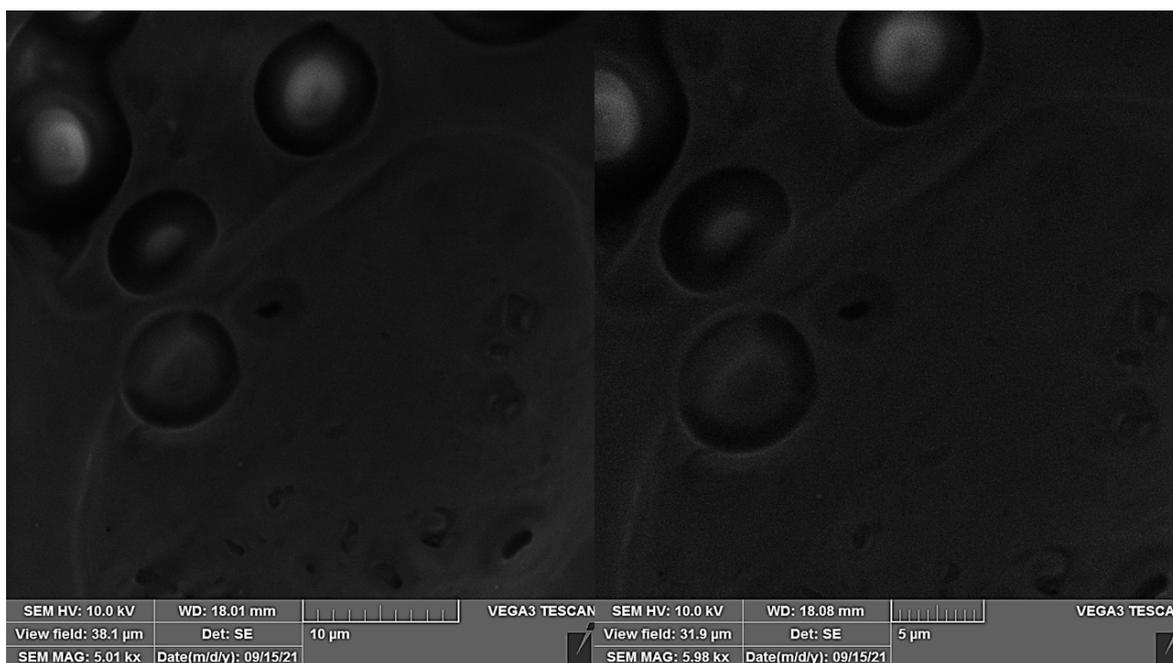
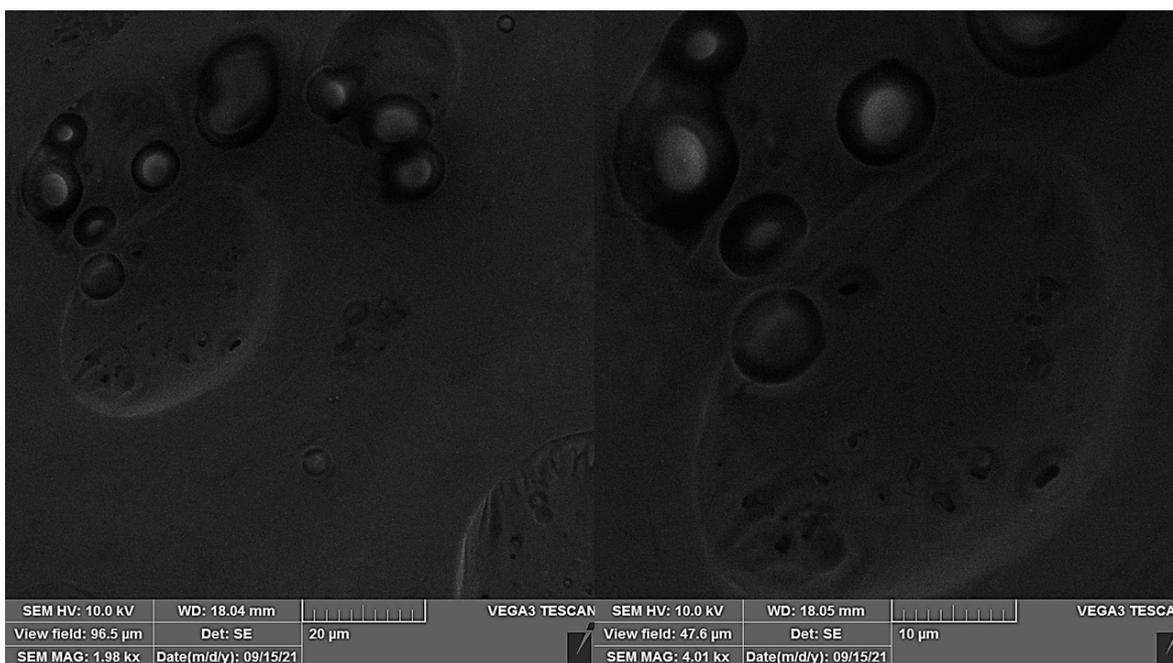
I



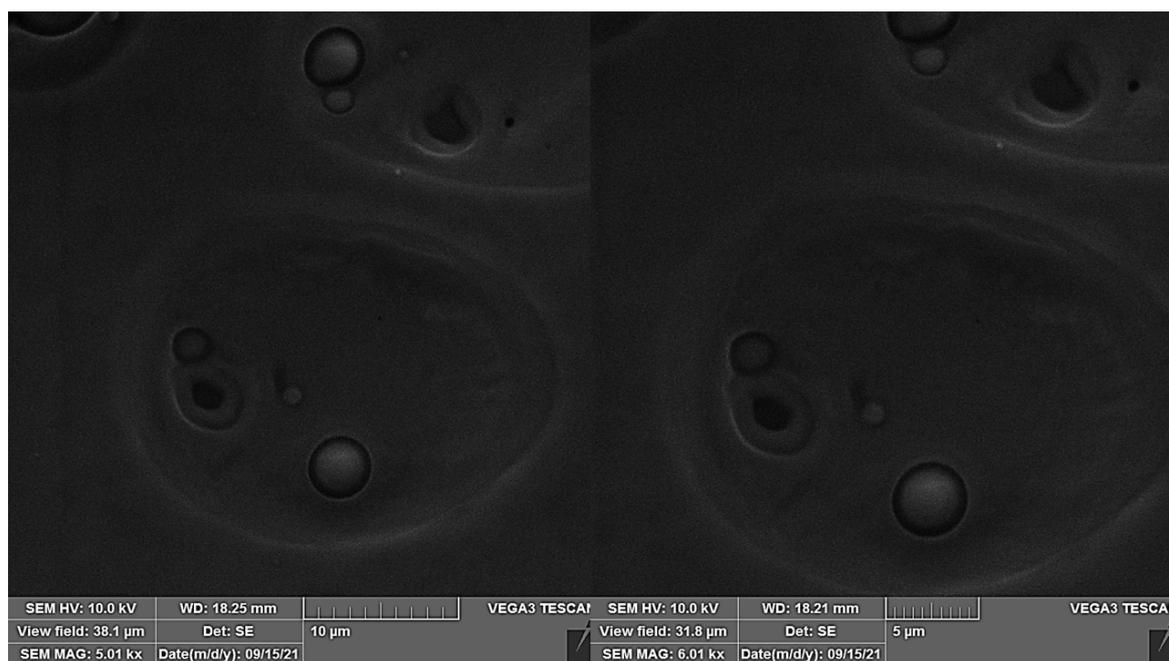
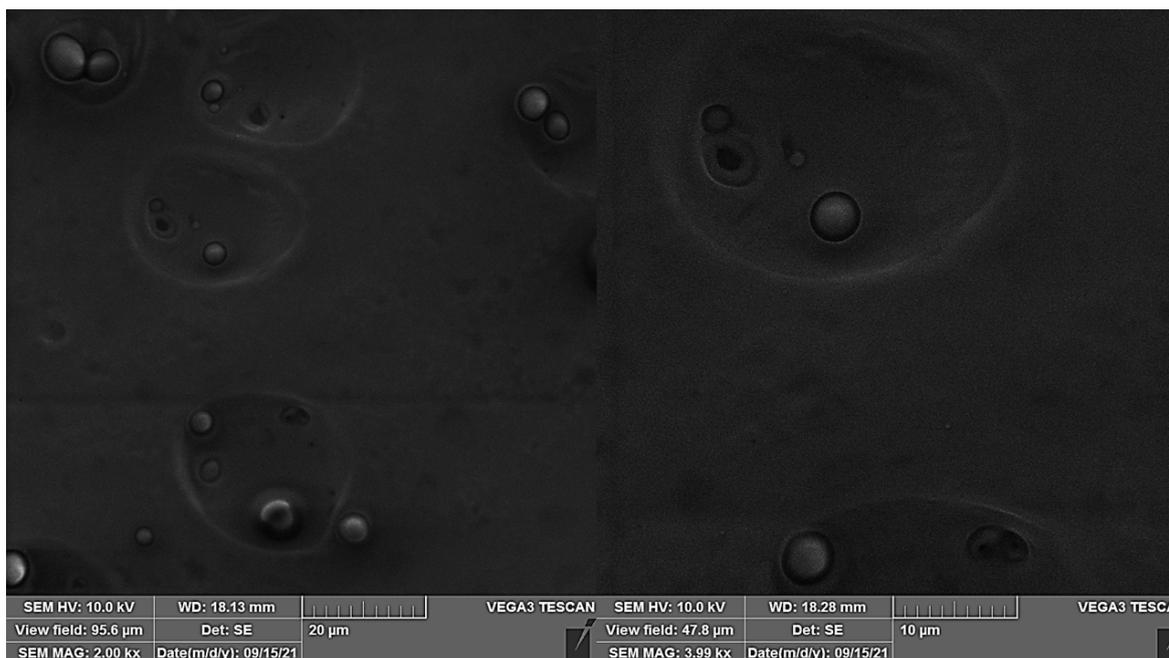
II



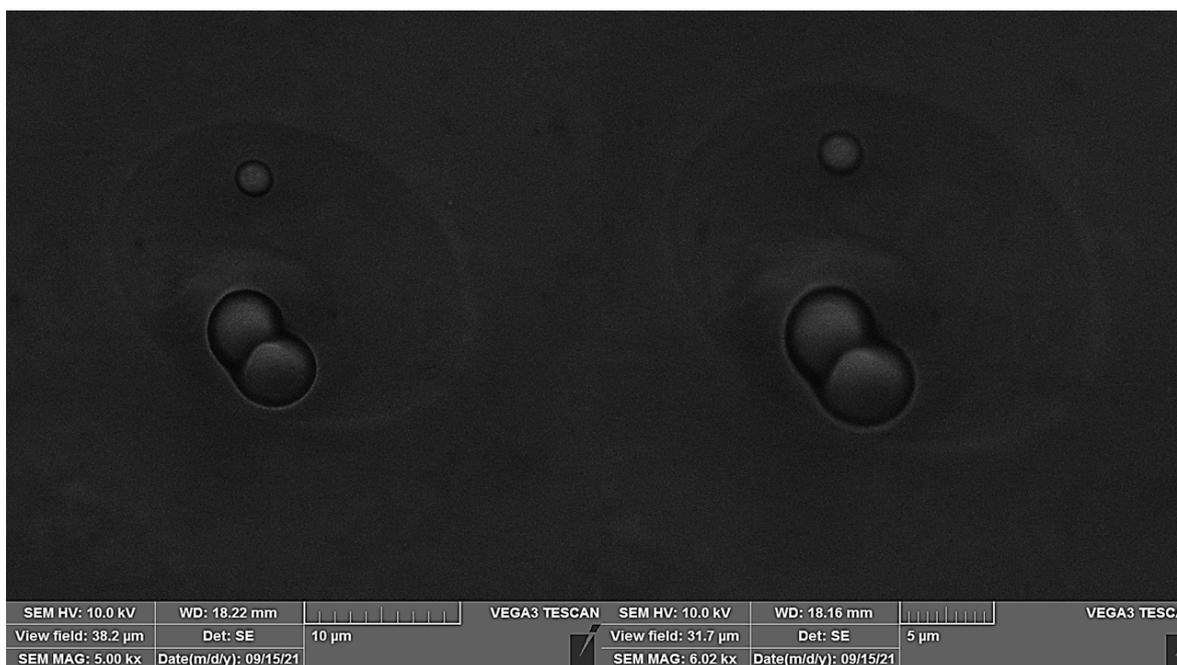
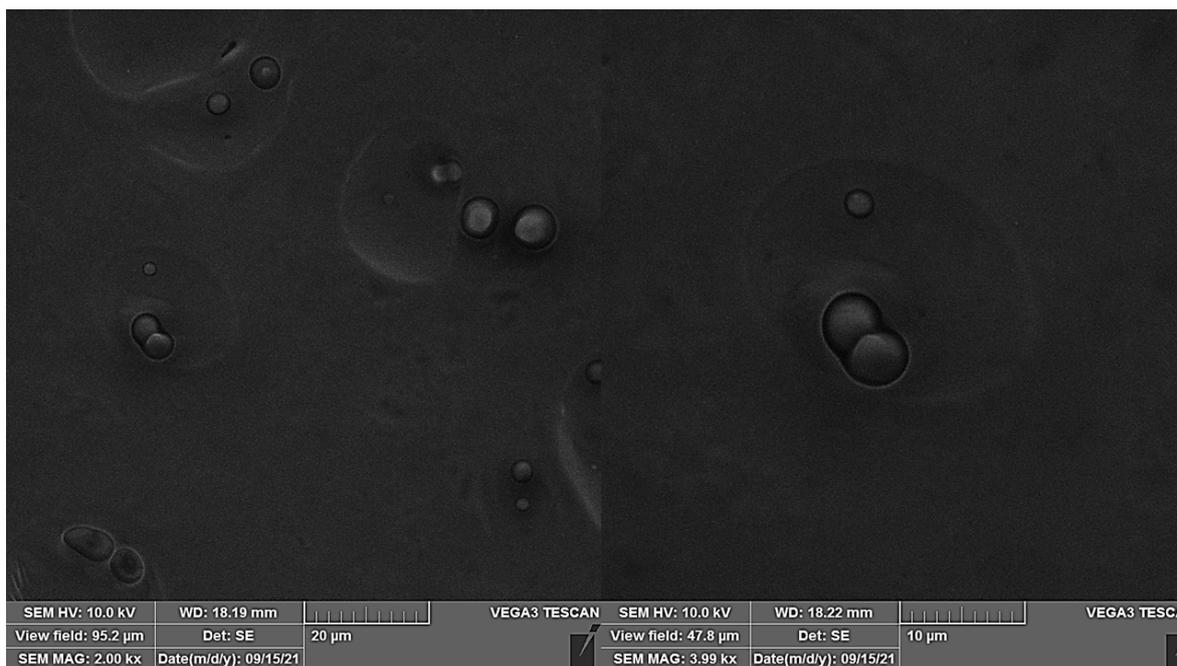
III



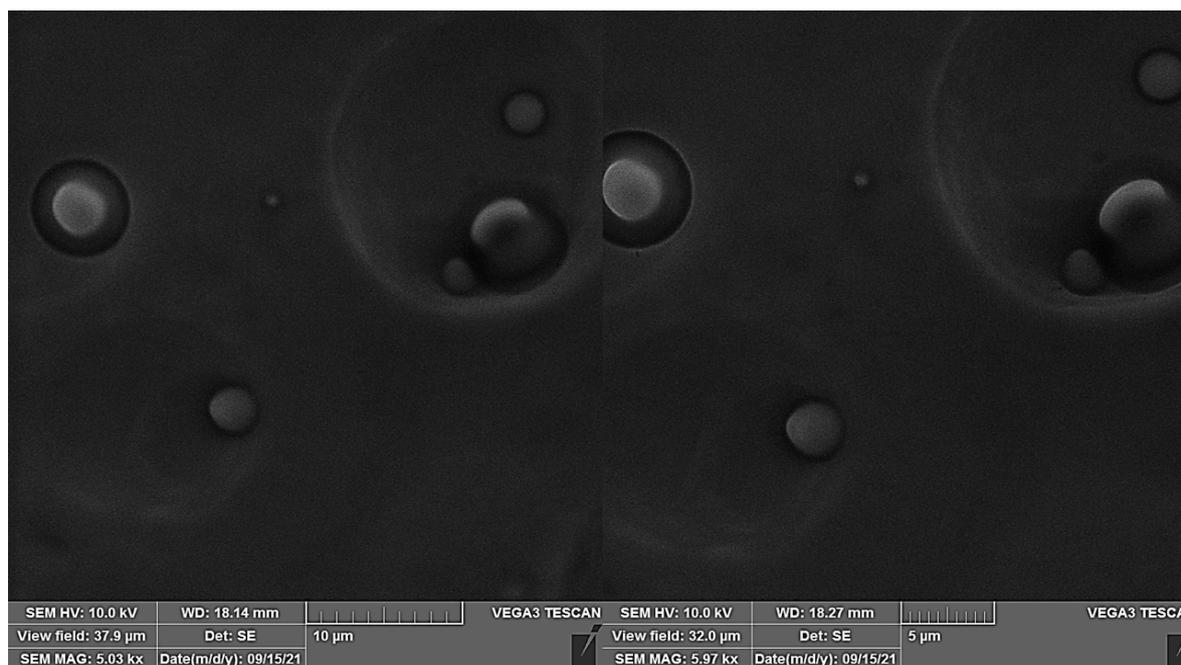
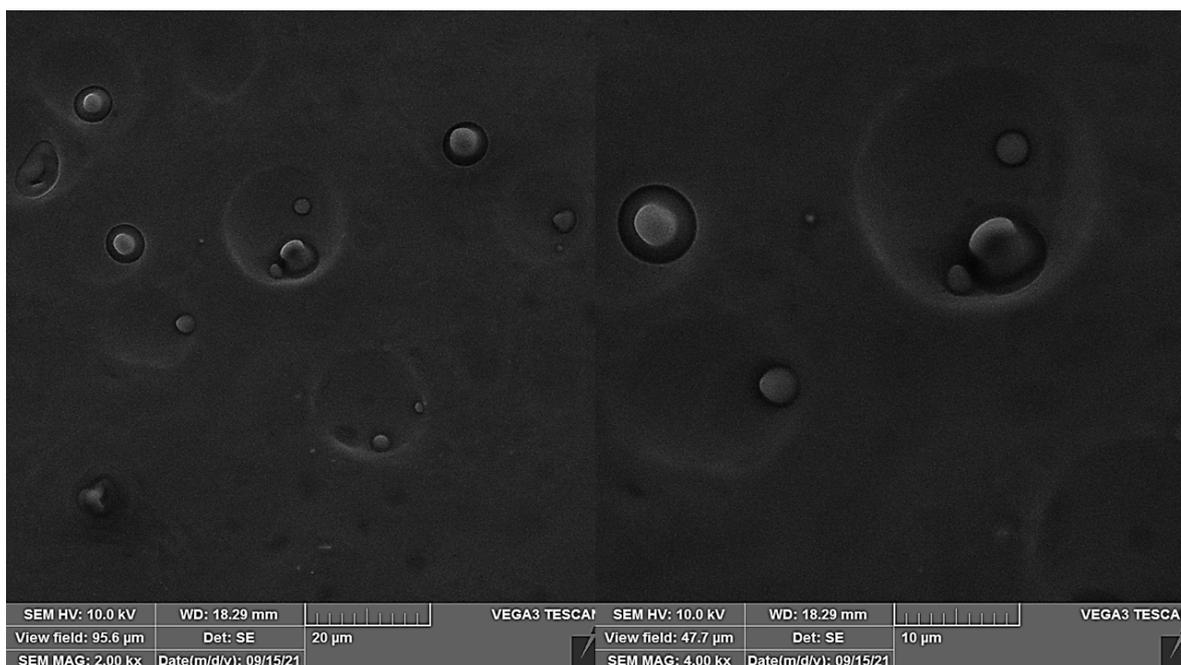
IV



V



VI



VII

Figure S1. The SEM images the active coatings (I-VII) in higher magnification.