



PERSONAL INFORMATION Prof. Debora Puglia



Date of birth

AFFILIATION University of Perugia - Civil and Environmental Engineering Department

ROLE Associate professor

EDUCATION AND TRAINING

2004 PhD in industrial Engineering

1999 Bachelor Degree in Materials Engineering

RESEARCH

Short Profile

Debora Puglia is responsible for the development/characterization of Polymeric, Composite and Nanocomposite Materials at the Material Science and Technology Lab of the University of Perugia. Her research interests are related to the study of biodegradable polymers and nanocomposites, thermosetting/thermoplastic matrix composites reinforced with vegetable micro and nano fillers (fibers/fillers). She has been technical responsible of 9 European research projects in the FP7 and Horizon 2020. Since 2009, she is collaborating with ECNP (European Center for Nanostructured Polymers) as part of the technical staff. She participated to 90 national and international Conferences and has co-directed 20 MSc degrees and 3 PhD thesis, author of 21 book chapters, 150 scientific papers (h index= 52, database Scopus) and reviewer for international peer reviewed journals. She currently has a position as Associate Professor at the University of Perugia.

Funded research projects

- BARBARA Biopolymers with advanced functionalities for building and automotive parts processed through additive manufacturing, H2020-BBI-2016-R07, Budget: 375000 €
- 4BIOLIVE, Production of Biostimulants, Biofertilizers, Biopolymers and Bioenergy from OL chain residues and by-products, PRIMA call 2020, Section 2 Call multi-topics, project Coordinator, Budget: 1022000 €;
- BIT3G - Third Generation Biorefinery, National Technology Cluster of Green Chemistry SPRING, Budget: 75000 €
- CARIT (Fondazione Cassa di Risparmio di Terni)- Engineering, characterization and functional properties of biodegradable stretch films for the food packaging sector". Budget: 25000 €
- CARIT (Fondazione Cassa di Risparmio di Terni) - Design and sustainable development of multifunctional biodegradable films for the food packaging sector with antibacterial and antifungal properties induced by natural bioactive molecules, Budget: 25000 €

BIBLIOGRAPHY AND BIBLIOMETRY

Best papers published in the last 10 years

Lizundia, E., Sipponen, M.H., Greca, L.G., Balakshin, M., Tardy, B.L., Rojas, O.J., Puglia, D. Multifunctional lignin-based nanocomposites and nanohybrids (2021) Green Chemistry, 23 (18), pp. 6698-6760. , DOI: 10.1039/d1gc01684a

Luzi, F., Tortorella, L., Di Michele, A., Dominici, F., Argentati, C., Morena, F., Torre, L., Puglia, D., Martino, S.

Novel nanocomposite PLA films with lignin/zinc oxide hybrid: Design, characterization, interaction with mesenchymal stem cells (2020) Nanomaterials, 10 (11), pp. 1-21, DOI: 10.3390/nano10112176

Lizundia, E., Armentano, L., Luzi, F., Bertoglio, F., Restivo, E., Visai, L., Torre, L., Puglia, D. Synergic Effect of Nanolignin and Metal Oxide Nanoparticles into Poly(l-lactide) Bionanocomposites: Material Properties, Antioxidant Activity, and Antibacterial Performance (2020) ACS Applied Biomaterials, 3 (8), pp. 5263-5274. DOI: 10.1021/acsabm.0c00637

Soccio, M., Dominici, F., Quattrosoldi, S., Luzi, F., Munari, A., Torre, L., Lotti, N., Puglia, D. PBS-Based Green Copolymer as an Efficient Compatibilizer in Thermoplastic Inedible Wheat Flour/Poly(butylene succinate) Blends (2020) Biomacromolecules, 21 (8), pp. 3254-3269 DOI: 10.1021/acs.biomac.0c00701

Lizundia, E., Puglia, D., Nguyen, T.-D., Armentano, L. Cellulose nanocrystal-based multifunctional nanohybrids (2020) Progress in Materials Science, 112, art. no. 100668 DOI: 10.1016/j.pmatsci.2020.100668

Imre, B., García, L., Puglia, D., Vilaplana, F. Reactive compatibilization of plant polysaccharides and biobased polymers: Review on current strategies, expectations and reality (2019) Carbohydrate Polymers, 209, pp. 20-37. DOI: 10.1016/j.carbpol.2018.12.082

Luzi, F., Torre, L., Kenny, J.M., Puglia, D. Bio- and fossil-based polymeric blends and nanocomposites for packaging: Structure-property relationship (2019) Materials, 12 (3), art. no. 471. DOI: 10.3390/ma12030471

Fortunati, E., Yang, W., Luzi, F., Kenny, J., Torre, L., Puglia, D. Lignocellulosic nanostructures as reinforcement in extruded and solvent casted polymeric nanocomposites: A review (2016) European Polymer Journal, 80, pp. 295-316. DOI: 10.1016/j.eurpolymj.2016.04.013

Peponi, L., Puglia, D., Torre, L., Valentini, L., Kenny, J.M. Processing of nanostructured polymers and advanced polymeric based nanocomposites (2014) Materials Science and Engineering Reports, 85 (1), pp. 1-46, DOI: 10.1016/j.mser.2014.08.002

Citation metrics

Citation metrics from Scopus

H-index: 52

Total number of citations: 8215

Number of publications in the last 10 years: 182

DECLARATION

According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV

Si autorizza il trattamento dei dati personali ai sensi del D.Lgs. n. 196 del 30 giugno 2003 e successive modifiche e integrazioni