

# Andrea Maio

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

2,289  
citations

136950

32  
h-index

214800

47  
g-index

52  
all docs

52  
docs citations

52  
times ranked

2205  
citing authors

| #  | ARTICLE   | IF   | CITATIONS |
|----|---|------|-----------|
| 1  | Degradation and Recycling of Films Based on Biodegradable Polymers: A Short Review. <i>Polymers</i> , 2019, 11, 651.  | 4.5  | 156       |
| 2  | Polysaccharide nanocrystals as fillers for PLA based nanocomposites. <i>Cellulose</i> , 2017, 24, 447-478.  | 4.9  | 122       |
| 3  | PLA graphene nanoplatelets nanocomposites: Physical properties and release kinetics of an antimicrobial agent. <i>Composites Part B: Engineering</i> , 2017, 109, 138-146.                              | 12.0 | 115       |
| 4  | Electrospun PCL/GO-g-PEG structures: Processing-morphology-properties relationships. <i>Composites Part A: Applied Science and Manufacturing</i> , 2017, 92, 97-107.                                    | 7.6  | 111       |
| 5  | Effect of adding wood flour to the physical properties of a biodegradable polymer. <i>Composites Part A: Applied Science and Manufacturing</i> , 2008, 39, 503-513.                                     | 7.6  | 98        |
| 6  | A green method to prepare nanosilica modified graphene oxide to inhibit nanoparticles re-aggregation during melt processing. <i>Chemical Engineering Journal</i> , 2017, 308, 1034-1047.                | 12.7 | 93        |
| 7  | A novel approach to prevent graphene oxide re-aggregation during the melt compounding with polymers. <i>Composites Science and Technology</i> , 2015, 119, 131-137.                                     | 7.8  | 79        |
| 8  | Advanced piezoresistive sensor achieved by amphiphilic nanointerfaces of graphene oxide and biodegradable polymer blends. <i>Composites Science and Technology</i> , 2018, 156, 166-176.                | 7.8  | 78        |
| 9  | Nanocarbons in Electrospun Polymeric Nanomats for Tissue Engineering: A Review. <i>Polymers</i> , 2017, 9, 76.  | 4.5  | 75        |
| 10 | Physical properties of green composites based on poly-lactic acid or Mater-Bi® filled with Posidonia Oceanica leaves. <i>Composites Part A: Applied Science and Manufacturing</i> , 2018, 112, 315-327. | 7.6  | 65        |
| 11 | Perfluorocarbons-graphene oxide nanoplateforms as biocompatible oxygen reservoirs. <i>Chemical Engineering Journal</i> , 2018, 334, 54-65.  | 12.7 | 60        |
| 12 | Structure-property relationship of PLA-Opuntia Ficus Indica biocomposites. <i>Composites Part B: Engineering</i> , 2019, 167, 199-206.  | 12.0 | 60        |
| 13 | Synthesis and self-assembly of a PEGylated-graphene aerogel. <i>Composites Science and Technology</i> , 2016, 128, 193-200.   | 7.8  | 59        |
| 14 | Plasma Functionalization of Multiwalled Carbon Nanotubes and Their Use in the Preparation of Nylon 6-Based Nanohybrids. <i>Plasma Processes and Polymers</i> , 2012, 9, 503-512.                        | 3.0  | 54        |
| 15 | Mechanical behavior of polylactic acid/polycaprolactone porous layered functional composites. <i>Composites Part B: Engineering</i> , 2016, 98, 70-77.  | 12.0 | 54        |
| 16 | Effect of Graphene Nanoplatelets on the Physical and Antimicrobial Properties of Biopolymer-Based Nanocomposites. <i>Materials</i> , 2016, 9, 351.  | 2.9  | 49        |
| 17 | Effect of graphene and fabrication technique on the release kinetics of carvacrol from polylactic acid. <i>Composites Science and Technology</i> , 2019, 169, 60-69.                                    | 7.8  | 46        |
| 18 | Statistical Study of the Influence of CNTs Purification and Plasma Functionalization on the Properties of Polycarbonate-CNTs Nanocomposites. <i>Plasma Processes and Polymers</i> , 2014, 11, 664-677.  | 3.0  | 45        |

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|----|--|------|-----------|
| 19 | Green Composites Based on PLA and Agricultural or Marine Waste Prepared by FDM. <i>Polymers</i> , 2021, 13, 1361.  | 4.5  | 45        |
| 20 | Integrated ternary bionanocomposites with superior mechanical performance via the synergistic role of graphene and plasma treated carbon nanotubes. <i>Composites Part B: Engineering</i> , 2019, 168, 550-559.  | 12.0 | 43        |
| 21 | Synthesis of a fluorinated graphene oxide-silica nanohybrid: improving oxygen affinity. <i>RSC Advances</i> , 2016, 6, 46037-46047.  | 3.6  | 41        |
| 22 | Mechanical behaviour of Mater-Bi®/wood flour composites: A statistical approach. <i>Composites Part A: Applied Science and Manufacturing</i> , 2008, 39, 1537-1546.  | 7.6  | 40        |
| 23 | Lignocellulosic fillers and graphene nanoplatelets as hybrid reinforcement for polylactic acid: Effect on mechanical properties and degradability. <i>Composites Science and Technology</i> , 2020, 190, 108008. | 7.8  | 40        |
| 24 | High performance PA6/CNTs nanohybrid fibers prepared in the melt. <i>Composites Science and Technology</i> , 2012, 72, 1918-1923.  | 7.8  | 39        |
| 25 | A rapid and eco-friendly route to synthesize graphene-doped silica nanohybrids. <i>Journal of Alloys and Compounds</i> , 2016, 664, 428-438.   | 5.5  | 39        |
| 26 | Optimization of two-step techniques engineered for the preparation of polyamide 6 graphene oxide nanocomposites. <i>Composites Part B: Engineering</i> , 2019, 165, 55-64.                                       | 12.0 | 39        |
| 27 | Ionic tactile sensors as promising biomaterials for artificial skin: Review of latest advances and future perspectives. <i>European Polymer Journal</i> , 2021, 151, 110421.                                     | 5.4  | 38        |
| 28 | Enhancing the mechanical performance of polymer based nanocomposites by plasma-modification of nanoparticles. <i>Polymer Testing</i> , 2012, 31, 889-894.  | 4.8  | 37        |
| 29 | Influence of Oxidation Level of Graphene Oxide on the Mechanical Performance and Photo-Oxidation Resistance of a Polyamide 6. <i>Polymers</i> , 2019, 11, 857.   | 4.5  | 37        |
| 30 | Rapid One-Step Fabrication of Graphene Oxide-Decorated Polycaprolactone Three-Dimensional Templates for Water Treatment. <i>ACS Applied Polymer Materials</i> , 2020, 2, 4993-5005.                              | 4.4  | 37        |
| 31 | Development of Polymeric Functionally Graded Scaffolds: A Brief Review. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2017, 15, 107-121.   | 1.6  | 36        |
| 32 | An Overview of Functionalized Graphene Nanomaterials for Advanced Applications. <i>Nanomaterials</i> , 2021, 11, 1717.   | 4.1  | 36        |
| 33 | The Effects of Nanoclay on the Mechanical Properties, Carvacrol Release and Degradation of a PLA/PBAT Blend. <i>Materials</i> , 2020, 13, 983.   | 2.9  | 33        |
| 34 | Structural and thermal stability of graphene oxide-silica nanoparticles nanocomposites. <i>Journal of Alloys and Compounds</i> , 2017, 695, 2054-2064.   | 5.5  | 32        |
| 35 | Tunable release of Chlorhexidine from Polycaprolactone-based filaments containing graphene nanoplatelets. <i>European Polymer Journal</i> , 2019, 110, 221-232.  | 5.4  | 30        |
| 36 | Processing-structure-property relationships of electrospun PLA-PEO membranes reinforced with enzymatic cellulose nanofibers. <i>Polymer Testing</i> , 2020, 81, 106182.  | 4.8  | 30        |

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|----|--|-----|-----------|
| 37 | PLA-based functionally graded laminates for tunable controlled release of carvacrol obtained by combining electrospinning with solvent casting. <i>Reactive and Functional Polymers</i> , 2020, 148, 104490.                                       | 4.1 | 24        |
| 38 | Poly(lactic acid)/carvacrol-based materials: preparation, physicochemical properties, and antimicrobial activity. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 1823-1835.  | 3.6 | 23        |
| 39 | Green Composites Based on Hedysarum coronarium with Outstanding FDM Printability and Mechanical Performance. <i>Polymers</i> , 2022, 14, 1198.   | 4.5 | 20        |
| 40 | Effect of an organoclay on the photochemical transformations of a PBAT/PLA blend and morpho-chemical features of crosslinked networks. <i>Polymer Degradation and Stability</i> , 2021, 187, 109549.   | 5.8 | 19        |
| 41 | An innovative route to prepare in situ graded crosslinked PVA graphene electrospun mats for drug release. <i>Composites Part A: Applied Science and Manufacturing</i> , 2022, 155, 106827.   | 7.6 | 19        |
| 42 | Hydrolytic degradation of PLA/Posidonia Oceanica green composites: A simple model based on starting morpho-chemical properties. <i>Composites Science and Technology</i> , 2021, 213, 108930.  | 7.8 | 18        |
| 43 | Bilayer biodegradable films prepared by co-extrusion film blowing: Mechanical performance, release kinetics of an antimicrobial agent and hydrolytic degradation. <i>Composites Part A: Applied Science and Manufacturing</i> , 2020, 132, 105836. | 7.6 | 17        |
| 44 | Wet electrospinning-aided self-assembly of multifunctional GO-CNT@PCL core-shell nanocomposites with spider leg bioinspired hierarchical architectures. <i>Composites Science and Technology</i> , 2022, 221, 109363.                              | 7.8 | 17        |
| 45 | Flexible mats as promising antimicrobial systems via integration of <i>Thymus capitatus</i> (L.) essential oil into PLA. <i>Future Microbiology</i> , 2020, 15, 1379-1392.   | 2.0 | 13        |
| 46 | A Facile and Eco-friendly Route to Fabricate Poly(Lactic Acid) Scaffolds with Graded Pore Size. <i>Journal of Visualized Experiments</i> , 2016, , .   | 0.3 | 7         |
| 47 | Modelling the structure-property relationships of high performance PBAT-based biocomposites with natural fibers obtained from <i>Chamaerops humilis</i> dwarf palm. <i>Composites Science and Technology</i> , 2022, 223, 109427.                  | 7.8 | 7         |
| 48 | Preparation and mechanical characterization of polycaprolactone/graphene oxide biocomposite nanofibers. <i>AIP Conference Proceedings</i> , 2016, , .  | 0.4 | 5         |
| 49 | Incorporation of an Antibiotic in Poly(Lactic Acid) and Polypropylene by Melt Processing. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2016, 14, e240-e247.   | 1.6 | 4         |
| 50 | Effect of alkyl derivatization of gellan gum during the fabrication of electrospun membranes. <i>Journal of Industrial Textiles</i> , 0, , 152808372110075.  | 2.4 | 3         |