Francesca Luzi

List of Publications by Year
in descending order

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85 papers	3,292 citations	147801 31 h-index	155660 55 g-index
85 all docs	85 docs citations	85 times ranked	3665 citing authors

#	Article	IF	Citations
1	Production and characterization of PLA_PBS biodegradable blends reinforced with cellulose nanocrystals extracted from hemp fibres. Industrial Crops and Products, 2016, 93, 276-289.	5.2	186
2	Binary PVA bio-nanocomposites containing cellulose nanocrystals extracted from different natural sources: Part I. Carbohydrate Polymers, 2013, 97, 825-836.	10.2	169
3	Processing and characterization of plasticized PLA/PHB blends for biodegradable multiphase systems. EXPRESS Polymer Letters, 2015, 9, 583-596.	2.1	168
4	Processing of PLA nanocomposites with cellulose nanocrystals extracted from Posidonia oceanica waste: Innovative reuse of coastal plant. Industrial Crops and Products, 2015, 67, 439-447.	5.2	165
5	Investigation of thermo-mechanical, chemical and degradative properties of PLA-limonene films reinforced with cellulose nanocrystals extracted from Phormium tenax leaves. European Polymer Journal, 2014, 56, 77-91.	5.4	159
6	Bio- and Fossil-Based Polymeric Blends and Nanocomposites for Packaging: Structureâ€“Property Relationship. Materials, 2019, 12, 471.	2.9	113
7	Thermal, antioxidant and swelling behaviour of transparent polyvinyl (alcohol) films in presence of hydrophobic citric acid-modified lignin nanoparticles. International Journal of Biological Macromolecules, 2019, 127, 665-676.	7.5	100
8	Study of disintegrability in compost and enzymatic degradation of PLA and PLA nanocomposites reinforced with cellulose nanocrystals extracted from Posidonia Oceanica. Polymer Degradation and Stability, 2015, 121, 105-115.	5.8	95
9	Revalorization of sunflower stalks as novel sources of cellulose nanofibrils and nanocrystals and their effect on wheat gluten bionanocomposite properties. Carbohydrate Polymers, 2016, 149, 357-368.	10.2	94
10	Optimized extraction of cellulose nanocrystals from pristine and carded hemp fibres. Industrial Crops and Products, 2014, 56, 175-186.	5.2	90
11	Bio-based PLA_PHB plasticized blend films: Processing and structural characterization. LWT - Food Science and Technology, 2015, 64, 980-988.	5.2	87
12	Nanocomposites Based on Biodegradable Polymers. Materials, 2018, 11, 795.	2.9	83
13	Lignocellulosic nanostructures as reinforcement in extruded and solvent casted polymeric nanocomposites: an overview. European Polymer Journal, 2016, 80, 295-316.	5.4	80
14	Revalorization of barley straw and husk as precursors for cellulose nanocrystals extraction and their effect on PVA_CH nanocomposites. Industrial Crops and Products, 2016, 92, 201-217.	5.2	79
15	Cellulose nanocrystals from Actinidia deliciosa pruning residues combined with carvacrol in PVA_CH films with antioxidant/antimicrobial properties for packaging applications. International Journal of Biological Macromolecules, 2017, 104, 43-55.	7.5	77
16	Valorization and extraction of cellulose nanocrystals from North African grass: Ampelodesmos mauritanicus (Diss). Carbohydrate Polymers, 2019, 209, 328-337.	10.2	77
17	Functional Properties of Plasticized Bio-Based Poly(Lactic Acid)_Poly(Hydroxybutyrate) (PLA_PHB) Films for Active Food Packaging. Food and Bioprocess Technology, 2017, 10, 770-780.	4.7	72
18	Citric Acid as Green Modifier for Tuned Hydrophilicity of Surface Modified Cellulose and Lignin Nanoparticles. ACS Sustainable Chemistry and Engineering, 2018, 6, 9966-9978.	6.7	72

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19	Gallic Acid and Quercetin as Intelligent and Active Ingredients in Poly(vinyl alcohol) Films for Food Packaging. Polymers, 2019, 11, 1999.	4.5	71
20	Nanostructured starch combined with hydroxytyrosol in poly(vinyl alcohol) based ternary films as active packaging system. Carbohydrate Polymers, 2018, 193, 239-248.	10.2	56
21	Ternary PVA nanocomposites containing cellulose nanocrystals from different sources and silver particles: Part II. Carbohydrate Polymers, 2013, 97, 837-848.	10.2	53
22	Synergic Effect of Nanolignin and Metal Oxide Nanoparticles into Poly(<scp>l</scp>-lactide) Bionanocomposites: Material Properties, Antioxidant Activity, and Antibacterial Performance. ACS Applied Bio Materials, 2020, 3, 5263-5274.	4.6	52
23	UV Protective, Antioxidant, Antibacterial and Compostable Polylactic Acid Composites Containing Pristine and Chemically Modified Lignin Nanoparticles. Molecules, 2021, 26, 126.	3.8	51
24	Recycling coffee silverskin in sustainable composites based on a poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 547 Td (adipate-co Products, 2018, 118, 311-320.	5.2	45
25	Cure Index for labeling curing potential of epoxy/LDH nanocomposites: A case study on nitrate anion intercalated Ni-Al-LDH. Progress in Organic Coatings, 2019, 136, 105228.	3.9	43
26	Thermomechanical, antioxidant and moisture behaviour of PVA films in presence of citric acid esterified cellulose nanocrystals. International Journal of Biological Macromolecules, 2020, 161, 617-626.	7.5	39
27	Design and Characterization of PLA Bilayer Films Containing Lignin and Cellulose Nanostructures in Combination With Umbelliferone as Active Ingredient. Frontiers in Chemistry, 2019, 7, 157.	3.6	38
28	Effect of Different Compatibilizers on Sustainable Composites Based on a PHBV/PBAT Matrix Filled with Coffee Silverskin. Polymers, 2018, 10, 1256.	4.5	36
29	Combined effect of cellulose nanocrystals, carvacrol and oligomeric lactic acid in PLA_PHB polymeric films. Carbohydrate Polymers, 2019, 223, 115131.	10.2	35
30	PLA Nanocomposites Reinforced with Cellulose Nanocrystals from Posidonia oceanica and ZnO Nanoparticles for Packaging Application. Journal of Renewable Materials, 2017, 5, 103-115.	2.2	34
31	Effect of gallic acid and umbelliferone on thermal, mechanical, antioxidant and antimicrobial properties of poly (vinyl alcohol-co-ethylene) films. Polymer Degradation and Stability, 2018, 152, 162-176.	5.8	34
32	Development of Mg-Zn-Al-CO3 ternary LDH and its curability in epoxy/amine system. Progress in Organic Coatings, 2019, 136, 105264.	3.9	34
33	Bio-Polyethylene-Based Composites Reinforced with Alkali and Palmitoyl Chloride-Treated Coffee Silverskin. Molecules, 2019, 24, 3113.	3.8	34
34	Lignin Nanoparticles: A Promising Tool to Improve Maize Physiological, Biochemical, and Chemical Traits. Nanomaterials, 2021, 11, 846.	4.1	32
35	Processing and characterization of nanocomposite based on poly(butylene/triethylene succinate) copolymers and cellulose nanocrystals. Carbohydrate Polymers, 2017, 165, 51-60.	10.2	30
36	Effective Postharvest Preservation of Kiwifruit and Romaine Lettuce with a Chitosan Hydrochloride Coating. Coatings, 2017, 7, 196.	2.6	28

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37	Revalorisation of Posidonia Oceanica as Reinforcement in Polyethylene/Maleic Anhydride Grafted Polyethylene Composites. Journal of Renewable Materials, 2014, 2, 66-76.	2.2	27
38	Effect of hydroxytyrosol methyl carbonate on the thermal, migration and antioxidant properties of ‹scp›PVA‹/scp›â€based films for active food packaging. Polymer International, 2016, 65, 872-882.	3.1	26
39	Antioxidant Packaging Films Based on Ethylene Vinyl Alcohol Copolymer (EVOH) and Caffeic Acid. Molecules, 2020, 25, 3953.	3.8	26
40	PBS-Based Green Copolymer as an Efficient Compatibilizer in Thermoplastic Inedible Wheat Flour/Poly(butylene succinate) Blends. Biomacromolecules, 2020, 21, 3254-3269.	5.4	25
41	Development and Characterization of Xanthan Gum and Alginate Based Bioadhesive Film for Pycnogenol Topical Use in Wound Treatment. Pharmaceutics, 2021, 13, 324.	4.5	25
42	Enhancement of paperboard performance as packaging material by layering with plasticized polyhydroxybutyrate/nanocellulose coatings. Journal of Applied Polymer Science, 2018, 135, 46872.	2.6	24
43	Novel Nanocomposite PLA Films with Lignin/Zinc Oxide Hybrids: Design, Characterization, Interaction with Mesenchymal Stem Cells. Nanomaterials, 2020, 10, 2176.	4.1	24
44	Evaluation of the Factors Affecting the Disintegration under a Composting Process of Poly(lactic) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4	4.5	22
45	Modulation of Acid Hydrolysis Reaction Time for the Extraction of Cellulose Nanocrystals from ‹i›Posidonia oceanica‹/i› Leaves. Journal of Renewable Materials, 2016, 4, 190-198.	2.2	21
46	Hydroxytyrosol and Oleuropein-Enriched Extracts Obtained from Olive Oil Wastes and By-Products as Active Antioxidant Ingredients for Poly (Vinyl Alcohol)-Based Films. Molecules, 2021, 26, 2104.	3.8	20
47	Bio-Based Nanocomposites in Food Packaging. , 2018, , 71-110.		19
48	Effect of Almond Shell Waste on Physicochemical Properties of Polyester-Based Biocomposites. Polymers, 2020, 12, 835.	4.5	18
49	Reinforcement effect of cellulose nanocrystals in thermoplastic polyurethane matrices characterized by different soft/hard segment ratio. Polymer Engineering and Science, 2017, 57, 521-530.	3.1	17
50	Hydroxytyrosol as Active Ingredient in Poly(vinyl alcohol) Films for Food Packaging Applications. Journal of Renewable Materials, 2017, 5, 81-95.	2.2	15
51	Thermomechanical and Morphological Properties of Poly(ethylene terephthalate)/Anhydrous Calcium Terephthalate Nanocomposites. Polymers, 2020, 12, 276.	4.5	15
52	Synthesis of a Lignin/Zinc Oxide Hybrid Nanoparticles System and Its Application by Nano-Priming in Maize. Nanomaterials, 2022, 12, 568.	4.1	14
53	Life Cycle Analysis of Extruded Films Based on Poly(lactic acid)/Cellulose Nanocrystal/Limonene: A Comparative Study with ATBC Plasticized PLA/OMMT Systems. Journal of Polymers and the Environment, 2018, 26, 1891-1902.	5.0	13
54	Improved Toughness in Lignin/Natural Fiber Composites Plasticized with Epoxidized and Maleinized Linseed Oils. Materials, 2020, 13, 600.	2.9	12

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55	Anthocyanin Hybrid Nanopigments from Pomegranate Waste: Colour, Thermomechanical Stability and Environmental Impact of Polyester-Based Bionanocomposites. Polymers, 2021, 13, 1966.	4.5	12
56	Wound Dressing: Combination of Acacia Gum/PVP/Cyclic Dextrin in Bioadhesive Patches Loaded with Grape Seed Extract. Pharmaceutics, 2022, 14, 485.	4.5	12
57	Extraction of nanostructured starch from purified granules of waxy and non-waxy barley cultivars. Industrial Crops and Products, 2019, 130, 520-527.	5.2	11
58	Durability and weatherability of a styrene-ethylene-butylene-styrene (SEBS) block copolymer-based sensing skin for civil infrastructure applications. Sensors and Actuators A: Physical, 2019, 293, 269-280.	4.1	11
59	Effect of Lemon Waste Natural Dye and Essential Oil Loaded into Laminar Nanoclays on Thermomechanical and Color Properties of Polyester Based Bionanocomposites. Polymers, 2020, 12, 1451.	4.5	11
60	Covalent Immobilization of Proteases on Polylactic Acid for Proteins Hydrolysis and Waste Biomass Protein Content Valorization. Catalysts, 2021, 11, 167.	3.5	11
61	Poly(butylene cyclohexanedicarboxylate/diglycolate) random copolymers reinforced with SWCNTs for multifunctional conductive biopolymer composites. EXPRESS Polymer Letters, 2016, 10, 111-124.	2.1	11
62	Extraction of Lignocellulosic Materials From Waste Products. , 2016, , 1-38.		10
63	Exploring curing potential of epoxy nanocomposites containing nitrate anion intercalated Mgâ€“Alâ€“LDH with Cure Index. Progress in Organic Coatings, 2020, 139, 105255.	3.9	10
64	Polymeric Bioadhesive Patch Based on Ketoprofen-Hydrotalcite Hybrid for Local Treatments. Pharmaceutics, 2020, 12, 733.	4.5	9
65	Unpatterned Bioactive Poly(Butylene 1,4-Cyclohexanedicarboxylate)-Based Film Fast Induced Neuronal-Like Differentiation of Human Bone Marrow-Mesenchymal Stem Cells. International Journal of Molecular Sciences, 2020, 21, 9274.	4.1	9
66	Effect of Chlorophyll Hybrid Nanopigments from Broccoli Waste on Thermomechanical and Colour Behaviour of Polyester-Based Bionanocomposites. Polymers, 2020, 12, 2508.	4.5	9
67	Effect of SWCNT introduction in random copolymers on material properties and fibroblast long term culture stability. Polymer Degradation and Stability, 2016, 132, 220-230.	5.8	8
68	Active Role of ZnO Nanorods in Thermomechanical and Barrier Performance of Poly(vinyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 222 Td (	4.5	8
69	Thermal and mechanical behavior of thermoplastic composites reinforced with fibers enzymatically extracted from Ampelodesmos mauritanicus. Polymer Engineering and Science, 2019, 59, 2418-2428.	3.1	8
70	Lignocellulosic Based Bionanocomposites for Different Industrial Applications. Current Organic Chemistry, 2018, 22, 1205-1221.	1.6	8
71	Effect of Pretreatment of Nanocomposite PESâ€Fe 3 O 4 Separator on Microbial Fuel Cells Performance. Polymer Engineering and Science, 2020, 60, 371-379.	3.1	7
72	Biocomposites Based on Plasticized Wheat Flours: Effect of Bran Content on Thermomechanical Behavior. Polymers, 2020, 12, 2248.	4.5	7

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73	Migration and Degradation in Composting Environment of Active Polylactic Acid Bilayer Nanocomposites Films: Combined Role of Umbelliferone, Lignin and Cellulose Nanostructures. Polymers, 2021, 13, 282.	4.5	7
74	A Novel Class of Cost Effective and High Performance Composites Based on Terephthalate Salts Reinforced Polyether Ether Ketone. Polymers, 2019, 11, 2097.	4.5	6
75	Effect of SWCNT Content and Water Vapor Adsorption on the Electrical Properties of Cellulose Nanocrystal-Based Nanohybrids. Journal of Physical Chemistry C, 2020, 124, 14901-14910.	3.1	6
76	Improving the flexibility and compostability of starch/poly(butylene cyclohexanedicarboxylate)-based blends. Carbohydrate Polymers, 2020, 246, 116631.	10.2	6
77	Lemna minor aqueous extract as a natural ingredient incorporated in poly (vinyl alcohol)-based films for active food packaging systems. Food Packaging and Shelf Life, 2022, 32, 100822.	7.5	6
78	Color Fixation Strategies on Sustainable Poly-Butylene Succinate Using Biobased Itaconic Acid. Polymers, 2021, 13, 79.	4.5	4
79	Lignin-based materials with antioxidant and antimicrobial properties. , 2021, , 291-326.		3
80	Study of paperboard material layered with plasticized polyhydroxybutyrate/nanocellulose coatings for packaging application. AIP Conference Proceedings, 2018, , .	0.4	2
81	Durability assessment of soft elastomeric capacitor skin for SHM of wind turbine blades. , 2018, , .		2
82	Polymeric composites and nanocomposites containing lignin. , 2022, , 293-324.		2
83	Influence of gallic acid and umbelliferone on structural and functional properties of poly(vinyl) Tj ETQq1 1 0.784314 rgBT /Overlock 1	0.4	1
84	Natural Fibre Based Biopolymer Formulations with Potential Applications in Biomedical and Packaging Sector. Mini-Reviews in Organic Chemistry, 2021, 18, 450-464.	1.3	1
85	PLA nanocomposites from Posidonia oceanica waste. , 2017, , 347-363.		0