Dimitrios G Papageorgiou

List of Publications by Year
in descending order

81 papers	6,301 citations	94415 37 h-index	66906 78 g-index
81 all docs	81 docs citations	81 times ranked	6921 citing authors

#	Article	IF	Citations
1	Mechanical properties of graphene and graphene-based nanocomposites. Progress in Materials Science, 2017, 90, 75-127.	32.8	1,682
2	Production of bio-based 2,5-furan dicarboxylate polyesters: Recent progress and critical aspects in their synthesis and thermal properties. European Polymer Journal, 2016, 83, 202-229.	5.4	359
3	Fabrication of alginateâ€“gelatin crosslinked hydrogel microcapsules and evaluation of the microstructure and physico-chemical properties. Journal of Materials Chemistry B, 2014, 2, 1470.	5.8	336
4	Graphene/elastomer nanocomposites. Carbon, 2015, 95, 460-484.	10.3	308
5	Electrical percolation in grapheneâ€“polymer composites. 2D Materials, 2018, 5, 032003.	4.4	266
6	Mechanisms of mechanical reinforcement by graphene and carbon nanotubes in polymer nanocomposites. Nanoscale, 2020, 12, 2228-2267.	5.6	222
7	The mechanics of reinforcement of polymers by graphene nanoplatelets. Composites Science and Technology, 2018, 154, 110-116.	7.8	221
8	Synthesis of the bio-based polyester poly(propylene 2,5-furan dicarboxylate). Comparison of thermal behavior and solid state structure with its terephthalate and naphthalate homologues. Polymer, 2015, 62, 28-38.	3.8	165
9	Evaluation of polyesters from renewable resources as alternatives to the current fossil-based polymers. Phase transitions of poly(butylene 2,5-furan-dicarboxylate). Polymer, 2014, 55, 3846-3858.	3.8	155
10	Furan-based polyesters from renewable resources: Crystallization and thermal degradation behavior of poly(hexamethylene 2,5-furan-dicarboxylate). European Polymer Journal, 2015, 67, 383-396.	5.4	127
11	Tuning the Properties of Furandicarboxylic Acid-Based Polyesters with Copolymerization: A Review. Polymers, 2020, 12, 1209.	4.5	99
12	Thermal degradation kinetics and decomposition mechanism of polyesters based on 2,5-furandicarboxylic acid and low molecular weight aliphatic diols. Journal of Analytical and Applied Pyrolysis, 2015, 112, 369-378.	5.5	94
13	Crystallization and Polymorphism of Poly(ethylene furanoate). Crystal Growth and Design, 2015, 15, 5505-5512.	3.0	94
14	Hybrid multifunctional graphene/glass-fibre polypropylene composites. Composites Science and Technology, 2016, 137, 44-51.	7.8	93
15	Î²-Nucleated Polypropylene: Processing, Properties and Nanocomposites. Polymer Reviews, 2015, 55, 596-629.	10.9	88
16	Multifunctional epoxy nanocomposites reinforced by two-dimensional materials: A review. Carbon, 2021, 185, 57-81.	10.3	88
17	Poly(ethylene furanoate- co -ethylene terephthalate) biobased copolymers: Synthesis, thermal properties and cocrystallization behavior. European Polymer Journal, 2017, 89, 349-366.	5.4	86
18	Fast Crystallization and Melting Behavior of a Long-Spaced Aliphatic Furandicarboxylate Biobased Polyester, Poly(dodecylene 2,5-furanoate). Industrial & Engineering Chemistry Research, 2016, 55, 5315-5326.	3.7	73

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19	Kinetics of nucleation and crystallization in poly(butylene succinate) nanocomposites. Polymer, 2014, 55, 6725-6734.	3.8	65
20	Biobased poly(ethylene furanoate-co-ethylene succinate) copolyesters: solid state structure, melting point depression and biodegradability. RSC Advances, 2016, 6, 84003-84015.	3.6	63
21	Hybrid hydrogels based on keratin and alginate for tissue engineering. Journal of Materials Chemistry B, 2014, 2, 5441-5451.	5.8	60
22	Sustainable, eco-friendly polyesters synthesized from renewable resources: preparation and thermal characteristics of poly(dimethyl-propylene furanoate). Polymer Chemistry, 2015, 6, 8284-8296.	3.9	60
23	Enhanced thermal and fire retardancy properties of polypropylene reinforced with a hybrid graphene/glass-fibre filler. Composites Science and Technology, 2018, 156, 95-102.	7.8	59
24	Synthesis, properties and thermal behavior of poly(decylene-2,5-furanoate): a biobased polyester from 2,5-furan dicarboxylic acid. RSC Advances, 2015, 5, 74592-74604.	3.6	57
25	PMMA-grafted graphene nanoplatelets to reinforce the mechanical and thermal properties of PMMA composites. Carbon, 2020, 157, 750-760.	10.3	56
26	Micromechanics of reinforcement of a graphene-based thermoplastic elastomer nanocomposite. Composites Part A: Applied Science and Manufacturing, 2018, 110, 84-92.	7.6	53
27	Hybrid poly(ether ether ketone) composites reinforced with a combination of carbon fibres and graphene nanoplatelets. Composites Science and Technology, 2019, 175, 60-68.	7.8	52
28	Sustainable Additive Manufacturing: Mechanical Response of Polypropylene over Multiple Recycling Processes. Sustainability, 2021, 13, 159.	3.2	51
29	Effect of crystalline structure of polypropylene random copolymers on mechanical properties and thermal degradation kinetics. Thermochimica Acta, 2012, 543, 288-294.	2.7	50
30	On the bio-based furanic polyesters: Synthesis and thermal behavior study of poly(octylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 307 T 2015, 68, 115-127.	5.4	49
31	Crystallization and melting of propyleneâ€"ethylene random copolymers. Homogeneous nucleation and Î²-nucleating agents. European Polymer Journal, 2013, 49, 1577-1590.	5.4	47
32	Î²-nucleated propyleneâ€"ethylene random copolymer filled with multi-walled carbon nanotubes: Mechanical, thermal and rheological properties. Polymer, 2014, 55, 3758-3769.	3.8	45
33	Hydrogel matrices based on elastin and alginate for tissue engineering applications. International Journal of Biological Macromolecules, 2018, 114, 614-625.	7.5	45
34	Multifunctional Biocomposites Based on Polyhydroxyalkanoate and Graphene/Carbon Nanofiber Hybrids for Electrical and Thermal Applications. ACS Applied Polymer Materials, 2020, 2, 3525-3534.	4.4	44
35	Sustainable Polymers from Renewable Resources: Polymer Blends of Furanâ€Based Polyesters. Macromolecular Materials and Engineering, 2018, 303, 1800153.	3.6	43
36	Effect of clay structure and type of organomodifier on the thermal properties of poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62	2.7	42

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37	Exploring Next-Generation Engineering Bioplastics: Poly(alkylene furanoate)/Poly(alkylene) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50	4.5	40
38	Mechanical properties of graphene. Applied Physics Reviews, 2021, 8, .	11.3	37
39	Soft-matrices based on silk fibroin and alginate for tissue engineering. International Journal of Biological Macromolecules, 2016, 93, 1420-1431.	7.5	35
40	Green polymeric materials: On the dynamic homogeneity and miscibility of furan-based polyester blends. Polymer, 2019, 174, 187-199.	3.8	34
41	Crystallization and Melting Behavior of Poly(Butylene Succinate) Nanocomposites Containing Silica-Nanotubes and Strontium Hydroxyapatite Nanorods. Industrial & Engineering Chemistry Research, 2014, 53, 678-692.	3.7	33
42	Synthesis and Characterization of In-Situ-Prepared Nanocomposites Based on Poly(Propylene 2,5-Furan) Tj ETQq0 0 0 rgBT /Overlock 10	4.5	33
43	Interfacial stress transfer in strain engineered wrinkled and folded graphene. 2D Materials, 2019, 6, 045026.	4.4	32
44	Isotactic Polypropylene/Multiâ€Walled Carbon Nanotube Nanocomposites: The Effect of Modification of MWCNTs on Mechanical Properties and Melt Crystallization. Macromolecular Chemistry and Physics, 2013, 214, 2415-2431.	2.2	31
45	Thermal degradation kinetics and decomposition mechanism of PBSu nanocomposites with silica-nanotubes and strontium hydroxyapatite nanorods. Physical Chemistry Chemical Physics, 2014, 16, 4830.	2.8	29
46	Competitive Crystallization of a Propylene/Ethylene Random Copolymer Filled with a Î²-Nucleating Agent and Multi-Walled Carbon Nanotubes. Conventional and Ultrafast DSC Study. Journal of Physical Chemistry B, 2013, 117, 14875-14884.	2.6	27
47	Modelling mechanical percolation in graphene-reinforced elastomer nanocomposites. Composites Part B: Engineering, 2019, 178, 107506.	12.0	27
48	An Electrically Conductive Oleogel Paste for Edible Electronics. Advanced Functional Materials, 2022, 32, .	14.9	26
49	Effect of nanofillerâ€™s size and shape on the solid state microstructure and thermal properties of poly(butylene succinate) nanocomposites. Thermochimica Acta, 2014, 590, 181-190.	2.7	25
50	Grapheneâ€"Polyurethane Coatings for Deformable Conductors and Electromagnetic Interference Shielding. Advanced Electronic Materials, 2020, 6, 2000429.	5.1	25
51	Enhanced interfacial properties of hierarchical MXene/CF composites via low content electrophoretic deposition. Composites Part B: Engineering, 2022, 237, 109871.	12.0	25
52	Effect of surface functionalization of halloysite nanotubes on synthesis and thermal properties of poly(Îµ-caprolactone). Journal of Materials Science, 2018, 53, 6519-6541.	3.7	23
53	Amino-Functionalized Multiwalled Carbon Nanotubes Lead to Successful Ring-Opening Polymerization of Poly(Îµ-caprolactone): Enhanced Interfacial Bonding and Optimized Mechanical Properties. ACS Applied Materials & Interfaces, 2015, 7, 11683-11694.	8.0	21
54	Self-powered ultrasensitive and highly stretchable temperatureâ€"strain sensing composite yarns. Materials Horizons, 2021, 8, 2513-2519.	12.2	21

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55	A Step Forward in Thermoplastic Polyesters: Understanding the Crystallization and Melting of Biobased Poly(ethylene 2,5-furandicarboxylate) (PEF). ACS Sustainable Chemistry and Engineering, 2022, 10, 7050-7064.	6.7	21
56	Synergistic Effect of Functionalized Silica Nanoparticles and a Î²â€«<scp>N</scp>ucleating Agent for the Improvement of the Mechanical Properties of a Propylene/<scp>E</scp>thylene Random Copolymer. Macromolecular Materials and Engineering, 2014, 299, 707-721.	3.6	18
57	The strength of mechanically-exfoliated monolayer graphene deformed on a rigid polymer substrate. Nanoscale, 2019, 11, 14339-14353.	5.6	18
58	Thermal Decomposition Kinetics and Mechanism of In-Situ Prepared Bio-Based Poly(propylene 2,5-furan) Tj ETQq0 0 0 rgBT /Overlock 10	3.8	18
59	High-performance fluoroelastomer-graphene nanocomposites for advanced sealing applications. Composites Science and Technology, 2021, 202, 108592.	7.8	18
60	Solid-state structure and thermal characteristics of a sustainable biobased copolymer: Poly(butylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	2.7	16
61	Effect of MWCNTs and their modification on crystallization and thermal degradation of poly(butylene naphthalate). Thermochimica Acta, 2017, 656, 59-69.	2.7	16
62	Lightâ€Driven Actuation in Synthetic Polymers: A Review from Fundamental Concepts to Applications. Advanced Optical Materials, 2022, 10, .	7.3	16
63	Polycaprolactone/multi-wall carbon nanotube nanocomposites prepared by in situ ring opening polymerization: Decomposition profiling using thermogravimetric analysis and analytical pyrolysisâ€"gas chromatography/mass spectrometry. Journal of Analytical and Applied Pyrolysis, 2015, 115, 125-131.	5.5	14
64	Highly stretchable and sensitive self-powered sensors based on the N-Type thermoelectric effect of polyurethane/Nax(Ni-ett)n/graphene oxide composites. Composites Communications, 2021, 28, 100952.	6.3	14
65	Sustainable thermoplastics from renewable resources: Thermal behavior of poly(1,4-cyclohexane) Tj ETQq1 1 0.784314 rgBT /Overlock 1	5.4	13
66	Towards increased sustainability for aromatic polyesters: Poly(butylene 2,5-furandicarboxylate) and its blends with poly(butylene terephthalate). Polymer, 2021, 212, 123157.	3.8	13
67	Decoration of SiO2 and Fe3O4 Nanoparticles onto the Surface of MWCNT-Grafted Glass Fibers: A Simple Approach for the Creation of Binary Nanoparticle Hierarchical and Multifunctional Composite Interphases. Nanomaterials, 2020, 10, 2500.	4.1	11
68	A New Era in Engineering Plastics: Compatibility and Perspectives of Sustainable Alipharomatic Poly(ethylene terephthalate)/Poly(ethylene 2,5-furandicarboxylate) Blends. Polymers, 2021, 13, 1070.	4.5	10
69	Graphene Nanoplatelets as a Replacement for Carbon Black in Rubber Compounds. Polymers, 2022, 14, 1204.	4.5	10
70	Effect of clay modification on structureâ€"property relationships and thermal degradation kinetics of Î²-polypropylene/clay composite materials. Journal of Thermal Analysis and Calorimetry, 2015, 122, 393-406.	3.6	8
71	Anisotropic swelling of elastomers filled with aligned 2D materials. 2D Materials, 2020, 7, 025031.	4.4	8
72	Best of Both Worlds: Synergistically Derived Material Properties via Additive Manufacturing of Nanocomposites. Advanced Functional Materials, 2021, 31, 2103334.	14.9	8

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73	Effect of Silica Nanoparticles Modification on the Thermal, Structural, and Decomposition Properties of a Î²â€Nucleated Poly(propyleneâ€<i>co</i>â€ethylene) Matrix. Macromolecular Chemistry and Physics, 2014, 215, 839-850.	2.2	7
74	Realising biaxial reinforcement <i>via</i> orientation-induced anisotropic swelling in graphene-based elastomers. Nanoscale, 2020, 12, 3377-3386.	5.6	7
75	Deformation and tearing of graphene-reinforced elastomer nanocomposites. Composites Communications, 2021, 25, 100764.	6.3	5
76	Controlling and Monitoring Crack Propagation in Monolayer Graphene Single Crystals. Advanced Functional Materials, 2022, 32, .	14.9	4
77	Synthesis and controlled crystallization of <i>in situ</i> prepared poly(butylene-2,6-naphthalate) nanocomposites. CrystEngComm, 2018, 20, 3590-3600.	2.6	3
78	Graphene nano-flakes on Cu low-index surfaces by density functional theory and molecular dynamics simulations. Frontiers of Nanoscience, 2020, 17, 141-159.	0.6	2
79	Utilising buckling modes for the determination of the anisotropic mechanical properties of As₂S₃ nanosheets. Nanoscale, 2022, 14, 7872-7880.	5.6	2
80	Best of Both Worlds: Synergistically Derived Material Properties via Additive Manufacturing of Nanocomposites (Adv. Funct. Mater. 46/2021). Advanced Functional Materials, 2021, 31, 2170343.	14.9	0
81	Significant interlayer coupling in bilayer graphene and double-walled carbon nanotubes: A refinement of obtaining strain in low-dimensional materials. Physical Review B, 2022, 105, .	3.2	0