Konstantinos Chrissafis

List of Publications by Citations

100 papers	3,986 citations	32 h-index	62 g-index
103 ext. papers	4,448 ext. citations	4.3 avg, IF	5.47 L-index

#	Paper	IF	Citations
100	ICTAC Kinetics Committee recommendations for collecting experimental thermal analysis data for kinetic computations. *Thermochimica Acta*, **2014**, 590, 1-23	2.9	713
99	Can nanoparticles really enhance thermal stability of polymers? Part I: An overview on thermal decomposition of addition polymers. *Thermochimica Acta*, **2011**, 523, 1-24	2.9	320
98	Fabrication of alginate-gelatin crosslinked hydrogel microcapsules and evaluation of the microstructure and physico-chemical properties. *Journal of Materials Chemistry B*, **2014**, 2, 1470-1482	7.3	250
97	Thermal degradation mechanism of poly(ethylene succinate) and poly(butylene succinate): Comparative study. *Thermochimica Acta*, **2005**, 435, 142-150	2.9	181
96	Comparative study of the effect of different nanoparticles on the mechanical properties and thermal degradation mechanism of in situ prepared poly(ε-caprolactone) nanocomposites. *Composites Science and Technology*, **2007**, 67, 2165-2174	8.6	166
95	Thermal and dynamic mechanical behavior of bionanocomposites: Fumed silica nanoparticles dispersed in poly(vinyl pyrrolidone), chitosan, and poly(vinyl alcohol). *Journal of Applied Polymer Science*, **2008**, 110, 1739-1749	2.9	129
94	Unique pore selectivity for Cs+ and exceptionally high NH4+ exchange capacity of the chalcogenide material K6Sn[Zn4Sn4S17]. *Journal of the American Chemical Society*, **2006**, 128, 8875-83	16.4	127
93	Thermal degradation mechanism of HDPE nanocomposites containing fumed silica nanoparticles. *Thermochimica Acta*, **2009**, 485, 65-71	2.9	113
92	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	5.2	97
91	Characterization and thermal degradation mechanism of isotactic polypropylene/carbon black nanocomposites. *Thermochimica Acta*, **2007**, 465, 6-17	2.9	87
90	Effect of molecular weight on thermal degradation mechanism of the biodegradable polyester poly(ethylene succinate). *Thermochimica Acta*, **2006**, 440, 166-175	2.9	84
89	Comparative study of the effect of different nanoparticles on the mechanical properties, permeability, and thermal degradation mechanism of HDPE. *Journal of Applied Polymer Science*, **2009**, 114, 1606-1618	2.9	81
88	Synthesis, characterization and thermal analysis of urea–formaldehyde/nanoSiO2 resins. *Thermochimica Acta*, **2012**, 527, 33-39	2.9	75
87	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	6	73
86	In situ prepared PET nanocomposites: Effect of organically modified montmorillonite and fumed silica nanoparticles on PET physical properties and thermal degradation kinetics. *Thermochimica Acta*, **2010**, 500, 21-29	2.9	67
85	β-Nucleated Polypropylene: Processing, Properties and Nanocomposites. *Polymer Reviews*, **2015**, 55, 596-629	14	61
84	Nanocomposites of isotactic polypropylene with carbon nanoparticles exhibiting enhanced stiffness, thermal stability and gas barrier properties. *Composites Science and Technology*, **2008**, 68, 933-943	8.6	57

83	Kinetics of nucleation and crystallization in poly(butylene succinate) nanocomposites. *Polymer*, **2014**, 55, 6725-6734	3.9	55
82	Hybrid hydrogels based on keratin and alginate for tissue engineering. *Journal of Materials Chemistry B*, **2014**, 2, 5441-5451	7.3	51
81	Multiresponsive polymer conetworks capable of responding to changes in pH, temperature, and magnetic field: synthesis, characterization, and evaluation of their ability for controlled uptake and release of solutes. *ACS Applied Materials & Interfaces*, **2012**, 4, 2139-47	9.5	48
80	Crystallization and melting of propylene□ethylene random copolymers. Homogeneous nucleation and □nucleating agents. *European Polymer Journal*, **2013**, 49, 1577-1590	5.2	43
79	Nonisothermal melt-crystallization kinetics for in situ prepared poly(ethylene terephthalate)/monmorilonite (PET/OMMT). *Thermochimica Acta*, **2011**, 521, 161-169	2.9	42
78	Effect of crystalline structure of polypropylene random copolymers on mechanical properties and thermal degradation kinetics. *Thermochimica Acta*, **2012**, 543, 288-294	2.9	41
77	Microstructural characterization and comparative evaluation of physical, mechanical and biological properties of three ceramics for metal-ceramic restorations. *Dental Materials*, **2008**, 24, 1362-73	5.7	38
76	□nucleated propylene□ethylene random copolymer filled with multi-walled carbon nanotubes: Mechanical, thermal and rheological properties. *Polymer*, **2014**, 55, 3758-3769	3.9	37
75	Effect of different nanoparticles on thermal decomposition of poly(propylene sebacate)/nanocomposites: Evaluation of mechanisms using TGA and TG□FTIR□GC/MS. *Journal of Analytical and Applied Pyrolysis*, **2012**, 96, 92-99	6	36
74	Thermal decomposition of poly(propylene sebacate) and poly(propylene azelate) biodegradable polyesters: Evaluation of mechanisms using TGA, FTIR and GC/MS. *Journal of Analytical and Applied Pyrolysis*, **2011**, 92, 123-130	6	36
73	Non-isothermal crystallization kinetic of poly(ethylene terephthalate)/fumed silica (PET/SiO2) prepared by in situ polymerization. *Thermochimica Acta*, **2010**, 510, 103-112	2.9	36
72	Hydrogel matrices based on elastin and alginate for tissue engineering applications. *International Journal of Biological Macromolecules*, **2018**, 114, 614-625	7.9	33
71	Microscopic observation and micromechanical modeling to predict the enhanced mechanical properties of multi-walled carbon nanotubes reinforced crosslinked high density polyethylene. *Carbon*, **2014**, 67, 475-487	10.4	33
70	Effect of maleic anhydride on the mechanical and thermal properties of hemp/high-density polyethylene green composites. *Journal of Thermal Analysis and Calorimetry*, **2015**, 121, 93-105	4.1	32
69	Factors controlling the enhanced mechanical and thermal properties of nanodiamond-reinforced cross-linked high density polyethylene. *Journal of Physical Chemistry B*, **2014**, 118, 11341-52	3.4	32
68	Isotactic Polypropylene/Multi-Walled Carbon Nanotube Nanocomposites: The Effect of Modification of MWCNTs on Mechanical Properties and Melt Crystallization. *Macromolecular Chemistry and Physics*, **2013**, 214, 2415-2431	2.6	29
67	Crystallization and Melting Behavior of Poly(Butylene Succinate) Nanocomposites Containing Silica-Nanotubes and Strontium Hydroxyapatite Nanorods. *Industrial & Engineering Chemistry Research*, **2014**, 53, 678-692	3.9	28
66	Kinetics study of cold-crystallization of poly(ethylene terephthalate) nanocomposites with multi-walled carbon nanotubes. *Thermochimica Acta*, **2009**, 493, 68-75	2.9	26

65	Oxidized multiwalled carbon nanotubes as effective reinforcement and thermal stability agents of poly(lactic acid) ligaments. *Journal of Applied Polymer Science*, **2010**, 118, 2712-2721	2.9	26
64	Soft-matrices based on silk fibroin and alginate for tissue engineering. *International Journal of Biological Macromolecules*, **2016**, 93, 1420-1431	7.9	26
63	Compatibility study between trandolapril and natural excipients used in solid dosage forms. *Journal of Thermal Analysis and Calorimetry*, **2013**, 111, 2109-2115	4.1	25
62	Effect of nanofiller size and shape on the solid state microstructure and thermal properties of poly(butylene succinate) nanocomposites. *Thermochimica Acta*, **2014**, 590, 181-190	2.9	24
61	Competitive crystallization of a propylene/ethylene random copolymer filled with a nucleating agent and multi-walled carbon nanotubes. Conventional and ultrafast DSC study. *Journal of Physical Chemistry B*, **2013**, 117, 14875-84	3.4	24
60	Synthesis, characterization, and thermal degradation mechanism of fast biodegradable PPSu/PCL copolymers. *Journal of Polymer Science Part A*, **2007**, 45, 5076-5090	2.5	24
59	Thermal degradation kinetics and decomposition mechanism of PBSu nanocomposites with silica-nanotubes and strontium hydroxyapatite nanorods. *Physical Chemistry Chemical Physics*, **2014**, 16, 4830-42	3.6	23
58	Sol-Gel Derived Mg-Based Ceramic Scaffolds Doped with Zinc or Copper Ions: Preliminary Results on Their Synthesis, Characterization, and Biocompatibility. *International Journal of Biomaterials*, **2016**, 2016, 3858301	3.2	23
57	Thermal degradation kinetics and decomposition mechanism of two new aliphatic biodegradable polyesters poly(propylene glutarate) and poly(propylene suberate). *Thermochimica Acta*, **2010**, 505, 59-68	2.9	22
56	Towards the synthesis of an Mg-containing silicate glass ceramic to be used as a scaffold for cementum/alveolar bone regeneration. *Ceramics International*, **2014**, 40, 16287-16298	5.1	21
55	Amino-Functionalized Multiwalled Carbon Nanotubes Lead to Successful Ring-Opening Polymerization of Poly(caprolactone): Enhanced Interfacial Bonding and Optimized Mechanical Properties. *ACS Applied Materials & Interfaces*, **2015**, 7, 11683-94	9.5	20
54	SEM observations and differential scanning calorimetric studies of new and sterilized nickel-titanium rotary endodontic instruments. *Journal of Endodontics*, **2006**, 32, 675-9	4.7	20
53	Melt-crystallization mechanism of poly(ethylene terephthalate)/multi-walled carbon nanotubes prepared by in situ polymerization. *Journal of Polymer Science, Part B: Polymer Physics*, **2009**, 47, 1452-1466	2.6	18
52	In situ prepared PBSu/SiO2 nanocomposites. Study of thermal degradation mechanism. *Thermochimica Acta*, **2009**, 495, 120-128	2.9	17
51	Synergistic Effect of Functionalized Silica Nanoparticles and a Nucleating Agent for the Improvement of the Mechanical Properties of a Propylene/Ethylene Random Copolymer. *Macromolecular Materials and Engineering*, **2014**, 299, 707-721	3.9	16
50	A different approach for the study of the crystallization kinetics in polymers. Key study: poly(ethylene terephthalate)/ SiO2 nanocomposites. *Polymer International*, **2010**, 59, 1630-1638	3.3	16
49	Effect of MWCNTs and their modification on crystallization and thermal degradation of poly(butylene naphthalate). *Thermochimica Acta*, **2017**, 656, 59-69	2.9	14
48	Thermal Decomposition Kinetics and Mechanism of In-Situ Prepared Bio-based Poly(propylene 2,5-furan dicarboxylate)/Graphene Nanocomposites. *Molecules*, **2019**, 24,	4.8	13

47	Synthesis, Thermal Properties and Decomposition Mechanism of Poly(Ethylene Vanillate) Polyester. *Polymers*, **2019**, 11,	4.5	13
46	Understanding the mechanical and thermal property reinforcement of crosslinked polyethylene by nanodiamonds and carbon nanotubes. *RSC Advances*, **2014**, 4, 45522-45534	3.7	13
45	Fibre length and loading impact on the properties of glass fibre reinforced polypropylene random composites. *Composite Structures*, **2021**, 263, 113678	5.3	13
44	Kinetics of Crystallization and Thermal Degradation of an Isotactic Polypropylene Matrix Reinforced with Graphene/Glass-Fiber Filler. *Molecules*, **2019**, 24,	4.8	12
43	Decomposition kinetic and mechanism of syndiotactic polystyrene nanocomposites with MWCNTs and nanodiamonds studied by TGA and Py-GC/MS. *Thermochimica Acta*, **2014**, 583, 15-24	2.9	12
42	Thermal analysis and in vitro bioactivity of bioactive glass□lumina composites. *Materials Characterization*, **2011**, 62, 118-129	3.9	12
41	Cold Crystallization Kinetics and Thermal Degradation of PLA Composites with Metal Oxide Nanofillers. *Applied Sciences (Switzerland)*, **2021**, 11, 3004	2.6	12
40	Effect of ethanol/TEOS ratios and amount of ammonia on the properties of copper-doped calcium silicate nanoceramics. *Journal of Materials Science: Materials in Medicine*, **2019**, 30, 98	4.5	11
39	Polycaprolactone/multi-wall carbon nanotube nanocomposites prepared by in situ ring opening polymerization: Decomposition profiling using thermogravimetric analysis and analytical pyrolysis□as chromatography/mass spectrometry. *Journal of Analytical and Applied Pyrolysis*, **2015**, 115, 125-131	6	10
38	Urea-formaldehyde (UF) resins prepared by means of the aqueous phase of the catalytic pyrolysis of European beech wood. COST Action FP1105. *Holzforschung*, **2016**, 70, 1139-1145	2	10
37	Effect of clay modification on structure□roperty relationships and thermal degradation kinetics of □polypropylene/clay composite materials. *Journal of Thermal Analysis and Calorimetry*, **2015**, 122, 393-406	4.1	8
36	Thermal Stability Study from Room Temperature to 1273 K (1000 °C) in Magnesium Silicide. *Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science*, **2016**, 47, 5146-5158	2.3	8
35	Substantial enhancement of PP random copolymer's thermal stability due to the addition of MWCNTs and nanodiamonds: Decomposition kinetics and mechanism study. *Journal of Analytical and Applied Pyrolysis*, **2014**, 106, 71-80	6	8
34	Thermoanalytical, magnetic and structural study of Co(II) complexes with substituted salicylaldehydes and neocuproine. *Journal of Thermal Analysis and Calorimetry*, **2012**, 109, 131-139	4.1	8
33	Thermal analysis and structural characterization of copper(II) complexes with salicyladehydes. *Journal of Thermal Analysis and Calorimetry*, **2015**, 120, 59-66	4.1	7
32	Unraveling the materials and techniques of post-Byzantine wall paintings: Is there a sole pictorial phase at the catholicon of Stomion, Central Greece?. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2019**, 206, 328-339	4.4	7
31	The effect of high tempered firing cycle on the bioactive behavior of sol□el derived dental porcelain modified by bioactive glass. *Journal of Sol-Gel Science and Technology*, **2012**, 63, 481-494	2.3	7
30	Multistates and Polyamorphism in Phase-Change KSbSe. *Journal of the American Chemical Society*, **2018**, 140, 9261-9268	16.4	6

29	Influence of Graphene Platelet Aspect Ratio on the Mechanical Properties of HDPE Nanocomposites: Microscopic Observation and Micromechanical Modeling. *Polymers*, **2020**, 12,	4.5	6
28	Physicochemical characterization and decomposition kinetics of trandolapril. *Thermochimica Acta*, **2012**, 539, 92-99	2.9	5
27	Effect of Silica Nanoparticles Modification on the Thermal, Structural, and Decomposition Properties of a β-Nucleated Poly(propylene-co-ethylene) Matrix. *Macromolecular Chemistry and Physics*, **2014**, 215, 839-850	2.6	5
26	Effect of Cu-nanofibers and Ag-nanoparticles on syndiotactic polystyrene thermal stability and on its decomposition mechanism. *Thermochimica Acta*, **2013**, 561, 26-35	2.9	5
25	Non-isothermal crystallization kinetics of graphite-reinforced crosslinked high-density polyethylene composites. *Journal of Thermal Analysis and Calorimetry*, **2020**, 142, 1849-1861	4.1	5
24	Bio-economy in Greece: Current trends and the road ahead. *The EuroBiotech Journal*, **2018**, 2, 137-145	1.5	5
23	Effect of end group content on photochromic behavior of spiropyran in polycaprolactone/poly(ethylene succinate) blends. *Journal of Applied Polymer Science*, **2007**, 105, 3623-3633	2.9	4
22	Super absorbent chitosan-based hydrogel sponges as carriers for caspofungin antifungal drug. *International Journal of Pharmaceutics*, **2021**, 606, 120925	6.5	4
21	Combined and Distinct Contributions of Different Carbon Nano-Forms in Polypropylene. *Macromolecular Materials and Engineering*, **2015**, 300, 611-626	3.9	3
20	Correlation between structure and thermal properties in 2-hydroxy-benzophenone Co(II) complexes. *Journal of Thermal Analysis and Calorimetry*, **2014**, 117, 1241-1252	4.1	3
19	Thermoanalytical, magnetic and structural investigation of Co(II) complexes with dipyridylamine and 2-hydroxyphenones. *Journal of Thermal Analysis and Calorimetry*, **2014**, 116, 249-258	4.1	3
18	Effect of molar ratio on thermal mass loss kinetics of poly(e-caprolactone-b-propylene adipate) copolymers. *Thermochimica Acta*, **2011**, 517, 45-52	2.9	3
17	Synthesis and Characterization of Unsaturated Succinic Acid Biobased Polyester Resins. *Applied Sciences (Switzerland)*, **2021**, 11, 896	2.6	3
16	High-temperature oxidation resistance and thermal stability of higher manganese silicide powder synthesized by pack cementation. *Journal of Alloys and Compounds*, **2021**, 873, 159842	5.7	3
15	Molecular mobility and crystallization of renewable poly(ethylene furanoate) filled with carbon nanotubes and graphene nanoparticles. *Soft Matter*, **2021**, 17, 5815-5828	3.6	3
14	Interface controlled active fracture modes in glass-ceramics. *Journal of Materials Science*, **2008**, 43, 3954-3959	1.9	2
13	Effect of ball milling on the mechanical properties and crystallization of graphene nanoplatelets reinforced short chain branched-polyethylene. *Journal of Applied Polymer Science*, **2021**, 138, 50874	2.9	2
12	Effect of the Deposition Time and Heating Temperature on the Structure of Chromium Silicides Synthesized by Pack Cementation Process. *Corrosion and Materials Degradation*, **2021**, 2, 210-226	2.6	2

11	Graphite reinforced silane crosslinked high density polyethylene: The effect of filler loading on the thermal and mechanical properties. *Polymer Composites*, **2021**, 42, 1181-1197	3	2
10	Effects of Expandable Graphite at Moderate and Heavy Loadings on the Thermal and Electrical Conductivity of Amorphous Polystyrene and Semicrystalline High-Density Polyethylene. *Applied Nano*, **2021**, 2, 31-45	1	2
9	Investigation of the Protection Performance of Mg and Al Coated Copper in High Temperature or Marine Environments. *Coatings*, **2021**, 11, 337	2.9	2
8	Chloramphenicol Loaded Sponges Based on PVA/Nanocellulose Nanocomposites for Topical Wound Delivery. *Journal of Composites Science*, **2021**, 5, 208	3	2
7	Thermal Stability and Decomposition Mechanism of PLA Nanocomposites with Kraft Lignin and Tannin. *Polymers*, **2021**, 13,	4.5	2
6	Thermal Analysis of Glass-Ceramics and Composites in Biomedical and Dental Sciences. *Series in Bioengineering*, **2019**, 245-295	0.7	1
5	Synthesis and Characterization of Novel Calcium-Silicate Nanobioceramics with Magnesium: Effect of Heat Treatment on Biological, Physical and Chemical Properties. *Ceramics*, **2021**, 4, 628-651	1.7	1
4	Unlocking the potential of furan-based poly(ester amide)s: an investigation of crystallization, molecular dynamics and degradation kinetics of novel poly(ester amide)s based on renewable poly(propylene furanoate). *Polymer Chemistry*,	4.9	1
3	Towards novel lignin-based aromatic polyesters: In-depth study of the thermal degradation and crystallization of poly(propylene vanillate). *Thermochimica Acta*, **2022**, 709, 179145	2.9	0
2	On the Improved Mechanical Properties of Ball-Milled GNPs Reinforced Short Chain Branched-Polyethylene Nanocomposite: Micromechanical Modeling and Fractography Study. *Applied Sciences (Switzerland)*, **2021**, 11, 9420	2.6	0
1	Modified Crystalline Structure of Silane-Crosslinked Polyethylene in the Proximity of Nanodiamonds. *Macromolecular Materials and Engineering*, **2016**, 301, 441-450	3.9	