

# Clement L Higginbotham

## List of Publications by Year in descending order

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87  
papers

3,105  
citations

136740

32  
h-index

174990

52  
g-index

87  
all docs

87  
docs citations

87  
times ranked

4316  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Effect of Cooling on the Degree of Crystallinity, Solid-State Properties, and Dissolution Rate of Multi-Component Hot-Melt Extruded Solid Dispersions. <i>Pharmaceutics</i> , 2020, 12, 212.	2.0	13
2	Evaluation of the materials properties, stability and cell response of a range of PEGDMA hydrogels for tissue engineering applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2019, 99, 1-10.	1.5	27
3	Micro-Injection Moulding of Poly(vinylpyrrolidone-vinyl acetate) Binary and Ternary Amorphous Solid Dispersions. <i>Pharmaceutics</i> , 2019, 11, 240.	2.0	3
4	An investigation of the inter-molecular interaction, solid-state properties and dissolution properties of mixed copovidone hot-melt extruded solid dispersions. <i>Journal of Drug Delivery Science and Technology</i> , 2019, 53, 101132.	1.4	14
5	Stability studies of hot-melt extruded ternary solid dispersions of poorly-water soluble indomethacin with poly(vinyl pyrrolidone-co-vinyl acetate) and polyethylene oxide. <i>Journal of Drug Delivery Science and Technology</i> , 2019, 52, 248-254.	1.4	13
6	Additive Manufacturing of Personalized Pharmaceutical Dosage Forms via Stereolithography. <i>Pharmaceutics</i> , 2019, 11, 645.	2.0	58
7	Investigation of Ethylene Oxide-co-propylene Oxide for Dissolution Enhancement of Hot-Melt Extruded Solid Dispersions. <i>Journal of Pharmaceutical Sciences</i> , 2018, 107, 1372-1382.	1.6	11
8	Investigation of miscibility estimation methods between indomethacin and poly(vinylpyrrolidone-co-vinyl acetate). <i>International Journal of Pharmaceutics</i> , 2018, 549, 50-57.	2.6	16
9	Halloysite nanotube reinforced polylactic acid composite. <i>Polymer Composites</i> , 2017, 38, 2166-2173.	2.3	32
10	Synthesis and characterization of high density polyethylene/peat ash composites. <i>Composites Part B: Engineering</i> , 2016, 94, 312-321.	5.9	19
11	Chemical surface modification of calcium carbonate particles with stearic acid using different treating methods. <i>Applied Surface Science</i> , 2016, 378, 320-329.	3.1	101
12	The effect of the mixing routes of biodegradable polylactic acid and polyhydroxybutyrate nanocomposites and compatibilised nanocomposites. <i>Journal of Thermoplastic Composite Materials</i> , 2016, 29, 538-557.	2.6	6
13	Melt Extruded Bioresorbable Polymer Composites for Potential Regenerative Medicine Applications. <i>Polymer-Plastics Technology and Engineering</i> , 2016, 55, 432-446.	1.9	10
14	Review of Multifarious Applications of Poly (Lactic Acid). <i>Polymer-Plastics Technology and Engineering</i> , 2016, 55, 1057-1075.	1.9	108
15	Development of chemically cross-linked hydrophilic-hydrophobic hydrogels for drug delivery applications. <i>European Polymer Journal</i> , 2016, 75, 25-35.	2.6	15
16	Effects of electron beam irradiation on the property behaviour of poly(ether-block-amide) blended with various stabilisers. <i>Radiation Physics and Chemistry</i> , 2015, 110, 24-37.	1.4	8
17	Compressive Strength and Bioactivity Properties of Photopolymerizable Hybrid Composite Hydrogels for Bone Tissue Engineering. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2014, 63, 641-650.	1.8	25
18	The Development of Hot Melt Extruded Biocompatible Controlled Release Drug Delivery Devices. <i>International Journal of Polymeric Materials and Polymeric Biomaterials</i> , 2014, 63, 476-485.	1.8	12

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19	Synthesis and Characterization of Polyethylene Glycol Dimethacrylate Hydrogels for Biomedical Application. Applied Mechanics and Materials, 2014, 679, 158-170.	0.2	2
20	Melt Processing of Bioplastic Composites via Twin Screw Extrusion and Injection Molding. Polymer-Plastics Technology and Engineering, 2014, 53, 379-386.	1.9	10
21	The Effect of Photoinitiator Concentration on the Physicochemical Properties of Hydrogel Contact Lenses. Applied Mechanics and Materials, 2014, 679, 118-127.	0.2	3
22	Effects of temperature, packaging and electron beam irradiation processing conditions on the property behaviour of Poly (ether-block-amide) blends. Materials Science and Engineering C, 2014, 39, 380-394.	3.8	6
23	The effect of processing conditions for polylactic acid based fibre composites via twin-screw extrusion. Journal of Reinforced Plastics and Composites, 2014, 33, 648-662.	1.6	14
24	Effect of Compatibilizer Content on the Mechanical Properties of Bioplastic Composites via Hot Melt Extrusion. Polymer-Plastics Technology and Engineering, 2014, 53, 1223-1235.	1.9	11
25	Fabrication and inÂvitro biological evaluation of photopolymerisable hydroxyapatite hydrogel composites for bone regeneration. Journal of Biomaterials Applications, 2014, 28, 1274-1283.	1.2	27
26	Synthesis and photopolymerisation of maleic polyvinyl alcohol based hydrogels for bone tissue engineering. Journal of Polymer Research, 2014, 21, 1.	1.2	4
27	Preparation and characterization of poly(ethylene glycol)-block-poly[Îu-(benzyloxycarbonyl)-l-lysine] thin films for biomedical applications. Polymer Bulletin, 2014, 71, 1691-1709.	1.7	1
28	Evaluation of Novel Antibiotic-Eluting Thermoresponsive Chitosan-PDEAAm Based Wound Dressings. International Journal of Polymeric Materials and Polymeric Biomaterials, 2014, 63, 873-883.	1.8	16
29	Improvement in mechanical properties of grafted polylactic acid composite fibers via hot melt extrusion. Polymer Composites, 2014, 35, 1792-1797.	2.3	13
30	The influence of electron beam irradiation on the mechanical and thermal properties of Poly (ether-block-amide) blends. Radiation Physics and Chemistry, 2014, 94, 26-30.	1.4	3
31	Development of novel chitosan-poly(N,N-diethylacrylamide) IPN films for potential wound dressing and biomedical applications. Journal of Polymer Research, 2013, 20, 1.	1.2	39
32	Hydrogel/bioactive glass composites for bone regeneration applications: Synthesis and characterisation. Materials Science and Engineering C, 2013, 33, 4203-4212.	3.8	94
33	Synthesis and characterization of physically crosslinked <i>N</i>â€vinylcaprolactam, acrylic acid, methacrylic acid, and <i>N,N</i>â€dimethylacrylamide hydrogels. Journal of Polymer Science, Part B: Polymer Physics, 2013, 51, 1555-1564.	2.4	22
34	The effects of high energy electron beam irradiation in air on accelerated aging and on the structure property relationships of low density polyethylene. Nuclear Instruments & Methods in Physics Research B, 2013, 297, 64-74.	0.6	54
35	Effects of gamma ray and electron beam irradiation on the mechanical, thermal, structural and physicochemical properties of poly (ether-block-amide) thermoplastic elastomers. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 17, 252-268.	1.5	40
36	Mechanical and biodegradation performance of short natural fibre polyhydroxybutyrate composites. Polymer Testing, 2013, 32, 1603-1611.	2.3	93

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37	The influence of electron beam irradiation conducted in air on the thermal, chemical, structural and surface properties of medical grade polyurethane. <i>European Polymer Journal</i> , 2013, 49, 1782-1795.	2.6	40
38	Conformational and thermal analyses of $\alpha$ -methoxy- $\omega$ -poly(ethylene Terephthalate) glycol-terminated polyurethane. <i>Polymer International</i> , 2013, 62, 1169-1178.	1.6	2
39	Morphology, rheology and mechanical properties of polypropylene/ethylene octene copolymer/clay nanocomposites: Effects of the compatibilizer. <i>Composites Science and Technology</i> , 2012, 72, 1697-1704.	3.8	78
40	The effects of high energy electron beam irradiation on the thermal and structural properties of low density polyethylene. <i>Radiation Physics and Chemistry</i> , 2012, 81, 962-966.	1.4	47
41	Effect of serum concentration on the cytotoxicity of clay particles. <i>Cell Biology International</i> , 2012, 36, 57-61.	1.4	28
42	Structure-property relationships of polymer blend/clay nanocomposites: Compatibilized and noncompatibilized polystyrene/propylene/clay. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2012, 50, 431-441.	2.4	14
43	Cell encapsulation and cryostorage in PVA-gelatin cryogels: incorporation of carboxylated $\beta$ -poly-L-lysine as cryoprotectant. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2012, 6, 280-290.	1.3	27
44	Modulating the mechanical properties of photopolymerised polyethylene glycol-polypropylene glycol hydrogels for bone regeneration. <i>Journal of Materials Science</i> , 2012, 47, 6577-6585.	1.7	18
45	Photopolymerised thermo-responsive poly(N,N-diethylacrylamide)-based copolymer hydrogels for potential drug delivery applications. <i>Journal of Polymer Research</i> , 2012, 19, 1.	1.2	29
46	Polymer Molecular Weight Analysis by $^1\text{H}$ NMR Spectroscopy. <i>Journal of Chemical Education</i> , 2011, 88, 1098-1104.	1.1	226
47	Mechanical properties and thermal behaviour of PEGDMA hydrogels for potential bone regeneration application. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2011, 4, 1219-1227.	1.5	91
48	Photopolymerisation and characterisation of negative temperature sensitive hydrogels based on N,N-diethylacrylamide. <i>Journal of Materials Science</i> , 2011, 46, 509-517.	1.7	13
49	Temperature-triggered gelation and controlled drug release via NIPAAm/NVP-based hydrogels. <i>Journal of Materials Science</i> , 2011, 46, 3233-3240.	1.7	8
50	Synthesis and characterisation of thermo-sensitive terpolymer hydrogels for drug delivery applications. <i>Journal of Polymer Research</i> , 2011, 18, 2307-2324.	1.2	25
51	Cytotoxic effects induced by unmodified and organically modified nanoclays in the human hepatic HepG2 cell line. <i>Journal of Applied Toxicology</i> , 2011, 31, 27-35.	1.4	108
52	Synthesis and characterisation of styrene butadiene styrene-g-N-vinyl-2-pyrrolidinone for use in biomedical applications. <i>Materials Science and Engineering C</i> , 2011, 31, 246-251.	3.8	9
53	Characterisation and controlled drug release from a novel two-phase hydrogel system. <i>International Journal of Biotechnology</i> , 2010, 11, 203.	1.2	0
54	Simulation of arteriosclerosis in a virtual artery. <i>International Journal of Medical Engineering and Informatics</i> , 2010, 2, 82.	0.2	0

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55	Cyto- and genotoxicological assessment and functional characterization of <i>N</i> -vinyl-2-pyrrolidone-acrylic acid-based copolymeric hydrogels with potential for future use in wound healing applications. <i>Biomedical Materials</i> (Bristol), 2010, 5, 035002.	1.7	10
56	Microstructure characterization and thermal analysis of hybrid block copolymer $\beta$ -methoxy-poly(ethylene glycol)-block-poly[ $\mu$ -(benzyloxycarbonyl)-l-lysine] for biomedical applications. <i>Journal of Molecular Structure</i> , 2010, 977, 153-164.	1.8	18
57	Synthesis and characterisation of styrene butadiene styrene-g-N-isopropylacrylamide via UV polymerisation for potential use in biomedical applications. <i>Journal of Materials Science</i> , 2010, 45, 599-606.	1.7	6
58	In vitro degradation and drug release from polymer blends based on poly(dl-lactide), poly(l-lactide-glycolide) and poly( $\mu$ -caprolactone). <i>Journal of Materials Science</i> , 2010, 45, 1284-1292.	1.7	55
59	Rheological and thermal characteristics of a two phase hydrogel system for potential wound healing applications. <i>Journal of Materials Science</i> , 2010, 45, 2884-2891.	1.7	19
60	Characterisation of the effects of a titanium micro particle filler on a polyether-block-amide host matrix. <i>Journal of Materials Science</i> , 2010, 45, 3204-3214.	1.7	10
61	Thermal behavior and mechanical properties of physically crosslinked PVA/Gelatin hydrogels. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2010, 3, 203-209.	1.5	169
62	Physical and Mechanical Properties of Blends Based on Poly (dl-lactide), Poly (l-lactide-glycolide) and Poly ( $\mu$ -caprolactone). <i>Polymer-Plastics Technology and Engineering</i> , 2010, 49, 678-687.	1.9	15
63	Synthesis of linear aliphatic polycarbonate macroglycols using dimethylcarbonate. <i>Journal of Applied Polymer Science</i> , 2009, 111, 217-227.	1.3	37
64	Development and characterisation of an agar-polyvinyl alcohol blend hydrogel. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2009, 2, 485-493.	1.5	74
65	The synthesis and characterisation of grafted random styrene butadiene for biomedical applications. <i>Journal of Materials Science</i> , 2009, 44, 889-896.	1.7	11
66	Development of a novel porous cryo-foam for potential wound healing applications. <i>Journal of Materials Science: Materials in Medicine</i> , 2009, 20, 1193-1199.	1.7	9
67	The synthesis of novel pH-sensitive poly(vinyl alcohol) composite hydrogels using a freeze/thaw process for biomedical applications. <i>International Journal of Pharmaceutics</i> , 2009, 372, 154-161.	2.6	101
68	Synthesis and characterisation of styrene butadiene styrene-g-acrylic acid for potential use in biomedical applications. <i>Materials Science and Engineering C</i> , 2009, 29, 1655-1661.	3.8	34
69	The rheological and thermal characteristics of freeze-thawed hydrogels containing hydrogen peroxide for potential wound healing applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2009, 2, 264-271.	1.5	31
70	The significance of variation in extrusion speeds and temperatures on a PEO/PCL blend based matrix for oral drug delivery. <i>International Journal of Pharmaceutics</i> , 2008, 351, 201-208.	2.6	45
71	Characterisation and controlled drug release from novel drug-loaded hydrogels. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2008, 69, 1147-1159.	2.0	76
72	Preparation of a novel freeze thawed poly(vinyl alcohol) composite hydrogel for drug delivery applications. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2007, 67, 377-386.	2.0	88

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73	Preparation of monolithic matrices for oral drug delivery using a supercritical fluid assisted hot melt extrusion process. <i>International Journal of Pharmaceutics</i> , 2007, 329, 62-71.	2.6	54
74	The incorporation of an organically modified layered silicate in monolithic polymeric matrices produced using hot melt extrusion. <i>Materials Chemistry and Physics</i> , 2007, 103, 419-426.	2.0	19
75	The synthesis, swelling behaviour and rheological properties of chemically crosslinked thermosensitive copolymers based on N-isopropylacrylamide. <i>Journal of Materials Science</i> , 2007, 42, 4136-4148.	1.7	34
76	The effect of salts and pH buffered solutions on the phase transition temperature and swelling of thermoresponsive pseudogels based on N-isopropylacrylamide. <i>Journal of Materials Science</i> , 2007, 42, 9845-9854.	1.7	32
77	The use of Agar as a novel filler for monolithic matrices produced using hot melt extrusion. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2006, 64, 75-81.	2.0	32
78	Lower critical solution temperature control and swelling behaviour of physically crosslinked thermosensitive copolymers based on N-isopropylacrylamide. <i>European Polymer Journal</i> , 2006, 42, 2540-2548.	2.6	72
79	The synthesis, characterisation, phase behaviour and swelling of temperature sensitive physically crosslinked poly(1-vinyl-2-pyrrolidinone)/poly(N-isopropylacrylamide) hydrogels. <i>European Polymer Journal</i> , 2006, 42, 69-80.	2.6	65
80	Multifunctional polyvinylpyrrolidinone-polyacrylic acid copolymer hydrogels for biomedical applications. <i>International Journal of Pharmaceutics</i> , 2006, 326, 50-59.	2.6	58
81	Synthesis and characterisation of chemically crosslinked N-vinyl pyrrolidinone (NVP) based hydrogels. <i>European Polymer Journal</i> , 2005, 41, 1272-1279.	2.6	71
82	Investigation of a novel freeze-thaw process for the production of drug delivery hydrogels. <i>Journal of Materials Science: Materials in Medicine</i> , 2005, 16, 1149-1158.	1.7	54
83	The synthesis of a physically crosslinked NVP based hydrogel. <i>Polymer</i> , 2003, 44, 7851-7860.	1.8	70
84	O-Heterocycles by the cyclization of side-chain bromomethoxylated 2'-acetoxychalcones. <i>Monatshefte für Chemie</i> , 1991, 122, 83-87.	0.9	6
85	Flavone formation in the wheeler aurone synthesis. <i>Tetrahedron</i> , 1990, 46, 7219-7226.	1.0	13
86	Melt Processed Polymer Blends for Potential Regenerative Medicine Applications. <i>Applied Mechanics and Materials</i> , 0, 679, 92-100.	0.2	0
87	Analysis of the Mechanical Properties of Solvent Cast Blends of PLA/PCL. <i>Applied Mechanics and Materials</i> , 0, 679, 50-56.	0.2	11