Vincenzo La Carrubba

List of Publications by Citations

86 papers	972 citations	18 h-index	26 g-index
96 ext. papers	1,193 ext. citations	3.7 avg, IF	4.4 L-index

#	Paper	IF	Citations
86	An experimental methodology to study polymer crystallization under processing conditions. The influence of high cooling rates. *Chemical Engineering Science*, **2002**, 57, 4129-4143	4.4	115
85	Polymeric scaffolds prepared via thermally induced phase separation: tuning of structure and morphology. *Journal of Biomedical Materials Research - Part A*, **2008**, 86, 459-66	5.4	76
84	PLLA scaffolds produced by thermally induced phase separation (TIPS) allow human chondrocyte growth and extracellular matrix formation dependent on pore size. *Materials Science and Engineering C*, **2017**, 80, 449-459	8.3	48
83	Preparation of polymeric foams with a pore size gradient via Thermally Induced Phase Separation (TIPS). *Materials Letters*, **2015**, 160, 31-33	3.3	39
82	Preparation, characterization and in vitro test of composites poly-lactic acid/hydroxyapatite scaffolds for bone tissue engineering. *International Journal of Biological Macromolecules*, **2018**, 119, 945-953	7.9	30
81	Effect of hydroxyapatite concentration and size on morpho-mechanical properties of PLA-based randomly oriented and aligned electrospun nanofibrous mats. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 101, 103449	4.1	30
80	PLLA/PLA scaffolds prepared via Thermally Induced Phase Separation (TIPS): tuning of properties and biodegradability. *International Journal of Material Forming*, **2008**, 1, 619-622	2	24
79	A Versatile Technique to Produce Porous Polymeric Scaffolds: The Thermally Induced Phase Separation (TIPS) Method **2017**, 01,		22
78	Isotactic polypropylene solidification under pressure and high cooling rates. A master curve approach. *Polymer Engineering and Science*, **2000**, 40, 2430-2441	2.3	22
77	Polylactide-based materials science strategies to improve tissue-material interface without the use of growth factors or other biological molecules. *Materials Science and Engineering C*, **2019**, 94, 1083-1101	8.3	22
76	Polylactic is a Sustainable, Low Absorption, Low Autofluorescence Alternative to Other Plastics for Microfluidic and Organ-on-Chip Applications. *Analytical Chemistry*, **2020**, 92, 6693-6701	7.8	20
75	Polymeric scaffolds based on blends of poly-l-lactic acid (PLLA) with poly-d-l-lactic acid (PLA) prepared via thermally induced phase separation (TIPS): demixing conditions and morphology. *Polymer Bulletin*, **2013**, 70, 563-578	2.4	20
74	Crystallization kinetics of iPP: Influence of operating conditions and molecular parameters. *Journal of Applied Polymer Science*, **2007**, 104, 1358-1367	2.9	20
73	In vitro degradation and bioactivity of composite poly-l-lactic (PLLA)/bioactive glass (BG) scaffolds: comparison of 45S5 and 1393BG compositions. *Journal of Materials Science*, **2018**, 53, 2362-2374	4.3	19
72	Peltier cells as temperature control elements: Experimental characterization and modeling. *Applied Thermal Engineering*, **2014**, 63, 234-245	5.8	19
71	Preparation and properties of poly(L-lactic acid) scaffolds by thermally induced phase separation from a ternary polymer–solvent system. *Polymer International*, **2004**, 53, 2079-2085	3.3	19
70	Phenomenological approach to compare the crystallization kinetics of isotactic polypropylene and polyamide-6 under pressure. *Journal of Polymer Science, Part B: Polymer Physics*, **2002**, 40, 153-175	2.6	19

69	Evidence of mechanisms occurring in thermally induced phase separation of polymeric systems. *Journal of Polymer Science, Part B: Polymer Physics*, **2014**, 52, 979-983	2.6	18
68	Tuning of biodegradation rate of PLLA scaffolds via blending with PLA. *International Journal of Material Forming*, **2009**, 2, 713-716	2	16
67	Synthesis, characterization and foaming of PHEA-PLLA, a new graft copolymer for biomedical engineering. *Materials Science and Engineering C*, **2014**, 41, 301-8	8.3	15
66	No-flow temperature in injection molding simulation. *Journal of Applied Polymer Science*, **2011**, 119, 3382-3392	2.9	15
65	Engineering approaches in siRNA delivery. *International Journal of Pharmaceutics*, **2017**, 525, 343-358	6.5	14
64	PLLA scaffolds with controlled architecture as potential microenvironment for in vitro tumor model. *Tissue and Cell*, **2019**, 58, 33-41	2.7	14
63	Morphology and thermal properties of foams prepared via thermally induced phase separation based on polylactic acid blends. *Journal of Cellular Plastics*, **2012**, 48, 399-407	1.5	14
62	Modulation of physical and biological properties of a composite PLLA and polyaspartamide derivative obtained via thermally induced phase separation (TIPS) technique. *Materials Science and Engineering C*, **2016**, 67, 561-569	8.3	13
61	Poly-left-lactic acid tubular scaffolds via diffusion induced phase separation: Control of morphology. *Polymer Engineering and Science*, **2013**, 53, 431-442	2.3	13
60	Measurement of cloud point temperature in polymer solutions. *Review of Scientific Instruments*, **2013**, 84, 075118	1.7	12
59	Improvement of osteogenic differentiation of human mesenchymal stem cells on composite poly l-lactic acid/nano-hydroxyapatite scaffolds for bone defect repair. *Journal of Bioscience and Bioengineering*, **2020**, 129, 250-257	3.3	12
58	Chitosan-Coating Deposition via Galvanic Coupling. *ACS Biomaterials Science and Engineering*, **2019**, 5, 1715-1724	5.5	11
57	Coagulation bath composition and desiccation environment as tuning parameters to prepare skinless membranes via diffusion induced phase separation. *Journal of Applied Polymer Science*, **2015**, 132, n/a-n/a	2.9	11
56	Physical and biological properties of electrospun poly(d,l-lactide)/nanoclay and poly(d,l-lactide)/nanosilica nanofibrous scaffold for bone tissue engineering. *Journal of Biomedical Materials Research - Part A*, **2021**, 109, 2120-2136	5.4	11
55	Influence of controlled processing conditions on the solidification of iPP, PET and PA6. *Macromolecular Symposia*, **2002**, 180, 43-60	0.8	10
54	Some features of polymeric membranes for water purification via membrane distillation. *Journal of Applied Polymer Science*, **2011**, 122, 3557-3563	2.9	9
53	Phase separation of polymer blends in solution: A case study. *European Polymer Journal*, **2016**, 79, 176-186	5.2	9
52	Development of injectable and durable kefiran hydro-alcoholic gels. *International Journal of Biological Macromolecules*, **2020**, 149, 309-319	7.9	8

51	The continuous cooling transformation (CCT) as a flexible tool to investigate polymer crystallization under processing conditions. *Advances in Polymer Technology*, **2009**, 28, 86-119	1.9	8
50	Porous poly (L-lactic acid) scaffolds are optimal substrates for internal colonization by A6 mesoangioblasts and immunocytochemical analyses. *Journal of Biosciences*, **2009**, 34, 873-9	2.3	8
49	Characterization of Hydrophobic Polymeric Membranes for Membrane Distillation Process. *International Journal of Material Forming*, **2010**, 3, 563-566	2	8
48	Polymer Solidification under Pressure and High Cooling Rates. *International Polymer Processing*, **2000**, 15, 103-110	1	8
47	Poly-l-Lactic Acid (PLLA)-Based Biomaterials for Regenerative Medicine: A Review on Processing and Applications.. *Polymers*, **2022**, 14,	4.5	8
46	Lattice fluid model generalized for specific interactions: An application to ternary polymer solutions. *Fluid Phase Equilibria*, **2011**, 312, 60-65	2.5	7
45	The use of master curves to describe the simultaneous effect of cooling rate and pressure on polymer crystallization. *Polymer International*, **2004**, 53, 61-68	3.3	7
44	Orientation and Crystallinity Measurements in Film Casting Products. *Polymer Bulletin*, **2003**, 50, 413-420	2.4	7
43	The Use of the Indentation Test for Studying the Solidification Behaviour of Different Semicrystalline Polymers during Injection Molding. *Macromolecular Materials and Engineering*, **2005**, 290, 1056-1062	3.9	7
42	Solution-Based Processing for Scaffold Fabrication in Tissue Engineering Applications: A Brief Review. *Polymers*, **2021**, 13,	4.5	7
41	Solidification of syndiotactic polystyrene by a continuous cooling transformation approach. *Journal of Polymer Science, Part B: Polymer Physics*, **2007**, 45, 2688-2699	2.6	6
40	Dependence of Coefficient of volumetric thermal expansion (CVTE) of glass fiber reinforced (GFR) polymers on the glass fiber content. *Polymer Bulletin*, **2008**, 59, 813-824	2.4	6
39	Core-shell PLA/Kef hybrid scaffolds for skin tissue engineering applications prepared by direct kefiran coating on PLA electrospun fibers optimized via air-plasma treatment. *Materials Science and Engineering C*, **2021**, 127, 112248	8.3	6
38	Porous Biomaterials and Scaffolds for Tissue Engineering **2019**, 188-202		5
37	Evaluation of vapor mass transfer in various membrane distillation configurations: an experimental study. *Heat and Mass Transfer*, **2012**, 48, 945-952	2.2	5
36	The solidification behavior of a PBT/PET blend over a wide range of cooling rate. *Journal of Polymer Science, Part B: Polymer Physics*, **2009**, 47, 799-810	2.6	5
35	Evaluation of mechanical and morphologic features of PLLA membranes as supports for perfusion cells culture systems. *Materials Science and Engineering C*, **2016**, 69, 841-9	8.3	5
34	Human nasoseptal chondrocytes maintain their differentiated phenotype on PLLA scaffolds produced by thermally induced phase separation and supplemented with bioactive glass 1393. *Connective Tissue Research*, **2019**, 60, 344-357	3.3	5

33	Calcium phosphate/polyvinyl acetate coatings on SS304 via galvanic co-deposition for orthopedic implant applications. *Surface and Coatings Technology*, **2021**, 408, 126771	4.4	5
32	Study on heat transfer coefficients during cooling of PET bottles for food beverages. *Heat and Mass Transfer*, **2016**, 52, 1479-1488	2.2	4
31	A poly-L-lactic acid/ collagen/glycosaminoglycan matrix for tissue engineering applications. *Journal of Cellular Plastics*, **2017**, 53, 537-549	1.5	4
30	A Composite PLLA Scaffold for Regeneration of Complex Tissues. *International Journal of Material Forming*, **2010**, 3, 571-574	2	4
29	PLLA/Fibrin Tubular Scaffold: A New Way for Reliable Endothelial Cell Seeding. *Conference Papers in Science*, **2014**, 2014, 1-5		4
28	Valorisation of Dairy Wastes Through Kefir Grain Production. *Waste and Biomass Valorization*, **2020**, 11, 3979-3985	3.2	4
27	Effect of pressure on the PVT behaviour of iPP as revealed by dilatometric measurements. *Polymer Bulletin*, **2002**, 49, 159-164	2.4	3
26	Indentation test as a tool for monitoring the solidification process during injection molding. *Journal of Applied Polymer Science*, **2003**, 89, 3713-3727	2.9	3
25	Double Flow Bioreactor for In Vitro Test of Drug Delivery. *Current Drug Delivery*, **2017**, 14, 239-245	3.2	3
24	Combining carvacrol and nisin in biodegradable films for antibacterial packaging applications. *International Journal of Biological Macromolecules*, **2021**, 193, 117-126	7.9	3
23	Establishment of a pulmonary epithelial barrier on biodegradable poly-L-lactic-acid membranes. *PLoS ONE*, **2019**, 14, e0210830	3.7	3
22	Characterization of PLLA scaffolds for biomedical applications. *International Journal of Polymeric Materials and Polymeric Biomaterials*, **2017**, 66, 469-477	3	2
21	Co-Deposition and Characterization of Hydroxyapatite-Chitosan and Hydroxyapatite-Polyvinylacetate Coatings on 304 SS for Biomedical Devices. *Key Engineering Materials*, **2019**, 813, 153-158	0.4	2
20	Demixing Time and Temperature Influence on Porosity and Interconnection of PLLA Scaffolds Prepared via TIPS. *Macromolecular Symposia*, **2009**, 286, 49-52	0.8	2
19	On the calculation of free energy of mixing for aqueous polymer solutions with group-contribution models. *Fluid Phase Equilibria*, **2010**, 299, 222-228	2.5	2
18	Tubular scaffold for vascular tissue engineering application. *International Journal of Material Forming*, **2010**, 3, 567-570	2	2
17	Engineered Membranes for Residual Cell Trapping on Microfluidic Blood Plasma Separation Systems: A Comparison between Porous and Nanofibrous Membranes. *Membranes*, **2021**, 11,	3.8	2
16	Biological evaluation of PLLA membranes, with different pore diameters, to stimulate cell adhesion and growth in vitro **2015**,		1

15	Water Fluxes in Polymeric Membranes for Desalination via Membrane Distillation **2010**,		1
14	Tailoring PLLA scaffolds for tissue engineering applications: Morphologies for 2D and 3D cell cultures. *International Journal of Material Forming*, **2009**, 2, 717-720	2	1
13	No-flow temperature and solidification in injection molding simulation **2011**,		1
12	PLLA biodegradable scaffolds for angiogenesis via Diffusion Induced Phase Separation (DIPS). *International Journal of Material Forming*, **2008**, 1, 623-626	2	1
11	Polylactic acid, a sustainable, biocompatible, transparent substrate material for Organ-On-Chip, and Microfluidic applications		1
10	Engineered membranes for residual cell trapping on microfluidic blood plasma separation systems. A comparison between porous and nanofibrous membranes		1
9	Composite Scaffolds with a Hydrohyapatite Spatial Gradient for Osteochondral Defect Repair **2018**,		1
8	Blend scaffolds with polyaspartamide/polyester structure fabricated via TIPS and their RGDC functionalization to promote osteoblast adhesion and proliferation. *Journal of Biomedical Materials Research - Part A*, **2019**, 107, 2726-2735	5.4	0
7	Mathematical and numerical modeling of an airlift perfusion bioreactor for tissue engineering applications. *Biochemical Engineering Journal*, **2022**, 178, 108298	4.2	0
6	3D polymeric supports promote the growth and progression of anaplastic thyroid carcinoma. *Biochemical and Biophysical Research Communications*, **2020**, 531, 223-227	3.4	0
5	Novel dual-flow perfusion bioreactor for in vitro pre-screening of nanoparticles delivery: design, characterization and testing. *Bioprocess and Biosystems Engineering*, **2021**, 44, 2361-2374	3.7	0
4	A High-Throughput Mechanical Activator for Cartilage Engineering Enables Rapid Screening of in vitro Response of Tissue Models to Physiological and Supra-Physiological Loads. *Cells Tissues Organs*, **2021**, 1-19	2.1	0
3	Integrated production of biopolymers with industrial wastewater treatment: Effects of OLR on process yields, biopolymers characteristics and mixed microbial community enrichment. *Journal of Water Process Engineering*, **2022**, 47, 102772	6.7	0
2	LIAC Meeting on Vascular Research 2013. *Conference Papers in Science*, **2015**, 2015, 1-2		
1	Heteroatom-Doping for Carbon Dots: An Efficient Strategy to Improve Their Optoelectronic Properties. *ECS Meeting Abstracts*, **2020**, MA2020-01, 1087-1087	0	