Salvatore Iannace

List of Publications by Year
in descending order

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113 papers	4,384 citations	94381 37 h-index	114418 63 g-index
120 all docs	120 docs citations	120 times ranked	4629 citing authors

#	Article	IF	Citations
1	Poly(lactic acid)/organoclay nanocomposites: Thermal, rheological properties and foam processing. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 689-698.	2.4	224
2	Reactively Modified Poly(lactic acid): Properties and Foam Processing. Macromolecular Materials and Engineering, 2005, 290, 1083-1090.	1.7	192
3	Nanocomposites by melt intercalation based on polycaprolactone and organoclay. Journal of Polymer Science, Part B: Polymer Physics, 2003, 41, 670-678.	2.4	185
4	Processing and shelf life issues of selected food packaging materials and structures from renewable resources. Trends in Food Science and Technology, 2011, 22, 72-80.	7.8	167
5	Marine Collagen from Alternative and Sustainable Sources: Extraction, Processing and Applications. Marine Drugs, 2020, 18, 214.	2.2	165
6	Effect of basalt fiber hybridization on the impact behavior under low impact velocity of glass/basalt woven fabric/epoxy resin composites. Composites Part A: Applied Science and Manufacturing, 2013, 47, 109-123.	3.8	158
7	Hybrid composites based on aramid and basalt woven fabrics: Impact damage modes and residual flexural properties. Materials & Design, 2013, 49, 290-302.	5.1	141
8	Isothermal crystallization in PCL/clay nanocomposites investigated with thermal and rheometric methods. Polymer, 2004, 45, 8893-8900.	1.8	139
9	Geopolymerization reaction to consolidate incoherent pozzolanic soil. Journal of Materials Science, 2008, 43, 865-873.	1.7	121
10	Design of porous polymeric scaffolds by gas foaming of heterogeneous blends. Journal of Materials Science: Materials in Medicine, 2009, 20, 2043-2051.	1.7	112
11	Structure optimization of polycaprolactone foams by using mixtures of CO2 and N2 as blowing agents. Polymer Engineering and Science, 2005, 45, 432-441.	1.5	110
12	Relationship between processing and properties of biodegradable composites based on PCL/starch matrix and sisal fibers. Polymer Composites, 2001, 22, 104-110.	2.3	91
13	Solid-state supercritical CO2 foaming of PCL and PCL-HA nano-composite: Effect of composition, thermal history and foaming process on foam pore structure. Journal of Supercritical Fluids, 2011, 58, 158-167.	1.6	88
14	Tailoring the pore structure of PCL scaffolds for tissue engineering prepared via gas foaming of multi-phase blends. Journal of Porous Materials, 2012, 19, 181-188.	1.3	86
15	Detailed analysis of dynamic mechanical properties of TPU nanocomposite: The role of the interfaces. European Polymer Journal, 2011, 47, 925-936.	2.6	83
16	Effect of processing conditions on dimensions of sisal fibers in thermoplastic biodegradable composites. Journal of Applied Polymer Science, 2001, 79, 1084-1091.	1.3	81
17	Novel 3D porous multi-phase composite scaffolds based on PCL, thermoplastic zein and ha prepared via supercritical CO2 foaming for bone regeneration. Composites Science and Technology, 2010, 70, 1838-1846.	3.8	75
18	Openâ€Pore Biodegradable Foams Prepared via Gas Foaming and Microparticulate Templating. Macromolecular Bioscience, 2008, 8, 655-664.	2.1	73

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19	Polyurethane-silica hybrid foam by solâ€“gel approach: Chemical and functional properties. Polymer, 2015, 56, 20-28.	1.8	71
20	Processing/structure/property relationship of multiâ€scaled PCL and PCLâ€“HA composite scaffolds prepared via gas foaming and NaCl reverse templating. Biotechnology and Bioengineering, 2011, 108, 963-976.	1.7	70
21	Design of Bimodal PCL and PCLâ€HA Nanocomposite Scaffolds by Two Step Depressurization During Solidâ€state Supercritical CO₂ Foaming. Macromolecular Rapid Communications, 2011, 32, 1150-1156.	2.0	68
22	Effect of molecular structure on film blowing ability of thermoplastic zein. Journal of Applied Polymer Science, 2010, 115, 277-287.	1.3	63
23	Synthesis and characterization of starch-based polyurethane foams. Journal of Applied Polymer Science, 1998, 68, 739-745.	1.3	61
24	Conventional and nanometric nucleating agents in poly(Ìµâ€caprolactone) foaming: Crystals vs. bubbles nucleation. Polymer Engineering and Science, 2008, 48, 336-344.	1.5	59
25	Effect of Supramolecular Structures on Thermoplastic Zeinâ€“Lignin Bionanocomposites. Journal of Agricultural and Food Chemistry, 2011, 59, 10062-10070.	2.4	56
26	Hydration-induced reinforcement of rigid polyurethaneâ€“cement foams: The effect of the co-continuous morphology on the thermal-oxidative stability. Polymer Degradation and Stability, 2013, 98, 64-72.	2.7	55
27	Poly(ethylene terephthalate) foams: Correlation between the polymer properties and the foaming process. Journal of Applied Polymer Science, 2010, 116, 27-35.	1.3	52
28	Influence of low velocity impact on fatigue behaviour of woven hemp fibre reinforced epoxy composites. Composites Part B: Engineering, 2014, 66, 46-57.	5.9	51
29	Engineered Î¼-bimodal poly(Ìµ-caprolactone) porous scaffold for enhanced hMSC colonization and proliferation. Acta Biomaterialia, 2009, 5, 1082-1093.	4.1	49
30	Synergistic effect of vegetable protein and silicon addition on geopolymeric foams properties. Journal of Materials Science, 2015, 50, 2459-2466.	1.7	48
31	Greener Nanocomposite Polyurethane Foam Based on Sustainable Polyol and Natural Fillers: Investigation of Chemico-Physical and Mechanical Properties. Materials, 2020, 13, 211.	1.3	48
32	Nanosheets of MoS₂â€oleylamine as hybrid filler for selfâ€lubricating polymer composites: Thermal, tribological, and mechanical properties. Polymer Composites, 2015, 36, 1124-1134.	2.3	45
33	Microcellular foams from high performance miscible blends based on PEEK and PEI. European Polymer Journal, 2016, 78, 116-128.	2.6	43
34	Dielectric Properties of Sustainable Nanocomposites Based on Zein Protein and Lignin for Biodegradable Insulators. Advanced Functional Materials, 2017, 27, 1605142.	7.8	41
35	Foaming of Synthetic and Natural Biodegradable Polymers. Journal of Cellular Plastics, 2007, 43, 123-133.	1.2	40
36	Architecture and properties of bi-modal porous scaffolds for bone regeneration prepared via supercritical CO2 foaming and porogen leaching combined process. Journal of Supercritical Fluids, 2012, 67, 114-122.	1.6	39

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37	Solubility, mutual diffusivity, specific volume and interfacial tension of molten PCL/CO2 solutions by a fully experimental procedure: effect of pressure and temperature. Journal of Supercritical Fluids, 2012, 67, 131-138.	1.6	38
38	Sorption Thermodynamics and Mutual Diffusivity of Carbon Dioxide in Molten Polycaprolactone. Industrial & Engineering Chemistry Research, 2003, 42, 4398-4405.	1.8	37
39	Thermoplastic Foams from Zein and Gelatin. International Polymer Processing, 2007, 22, 480-488.	0.3	37
40	Lightweight Poly(Îµ-Caprolactone) Composites with Surface Modified Hollow Glass Microspheres for Use in Rotational Molding: Thermal, Rheological and Mechanical Properties. Polymers, 2019, 11, 624.	2.0	34
41	Design and preparation of Î¼â€bimodal porous scaffold for tissue engineering. Journal of Applied Polymer Science, 2007, 106, 3335-3342.	1.3	33
42	Bioâ€based flexible polyurethane foams derived from succinic polyol: Mechanical and acoustic performances. Journal of Applied Polymer Science, 2017, 134, 45113.	1.3	32
43	Structure development during crystallization of polycaprolactone. Rheologica Acta, 2006, 45, 387-392.	1.1	31
44	Polystyrene Foaming at High Pressure Drop Rates. Industrial & Engineering Chemistry Research, 2016, 55, 5696-5701.	1.8	31
45	Design of novel three-phase PCL/TZâ€“HA biomaterials for use in bone regeneration applications. Journal of Materials Science: Materials in Medicine, 2010, 21, 2569-2581.	1.7	30
46	Polyurethane-Based Composites: Effects of Antibacterial Fillers on the Physical-Mechanical Behavior of Thermoplastic Polyurethanes. Polymers, 2020, 12, 362.	2.0	30
47	Microstructure, degradation and in vitro MG63 cells interactions of a new poly(Îµ-caprolactone), zein, and hydroxyapatite composite for bone tissue engineering. Journal of Bioactive and Compatible Polymers, 2012, 27, 210-226.	0.8	29
48	Hydration-induced reinforcement of rigid polyurethaneâ€“cement foams: mechanical and functional properties. Journal of Materials Science, 2012, 47, 6948-6957.	1.7	29
49	Functional Zeinâ€“Siloxane Bio-Hybrids. ACS Sustainable Chemistry and Engineering, 2014, 2, 254-263.	3.2	29
50	Simultaneous experimental evaluation of solubility, diffusivity, interfacial tension and specific volume of polymer/gas solutions. Polymer Testing, 2011, 30, 303-309.	2.3	28
51	Cycle stability and dielectric properties of a new biodegradable energy storage material. Nano Energy, 2015, 17, 348-355.	8.2	28
52	Isothermal crystallization kinetics of chain-extended PET. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 1966-1972.	2.4	27
53	A novel hybrid PU-alumina flexible foam with superior hydrophilicity and adsorption of carcinogenic compounds from tobacco smoke. Microporous and Mesoporous Materials, 2012, 151, 79-87.	2.2	27
54	Hybrid geopolymeric foams with diatomite addition: Effect on chemico-physical properties. Journal of Cellular Plastics, 2017, 53, 525-536.	1.2	27

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55	Engineering of Foamed Structures for Biomedical Application. Journal of Cellular Plastics, 2009, 45, 103-117.	1.2	26
56	Investigation of Thermoplasticity of Zein and Kafirin Proteins: Mixing Process and Mechanical Properties. Journal of Polymers and the Environment, 2010, 18, 626-633.	2.4	26
57	Vegetable Tannin as a Sustainable UV Stabilizer for Polyurethane Foams. Polymers, 2019, 11, 480.	2.0	25
58	Mechanical behavior of solid and foamed polyester/expanded graphite nanocomposites. Journal of Cellular Plastics, 2012, 48, 355-368.	1.2	24
59	The role of proteinâ€“plasticizerâ€“clay interactions on processing and properties of thermoplastic zein bionanocomposites. Journal of Applied Polymer Science, 2012, 125, E314.	1.3	24
60	Polyurethaneâ€“cementâ€based foams: Characterization and potential uses. Journal of Applied Polymer Science, 2008, 107, 1-8.	1.3	22
61	Hollow micro- and nano-particles by gas foaming. Nano Research, 2014, 7, 1018-1026.	5.8	22
62	Process-structure Relationships in PCL Foaming. Journal of Cellular Plastics, 2008, 44, 37-52.	1.2	21
63	â€œAerogel-likeâ€•polysiloxane-polyurethane hybrid foams with enhanced mechanical and thermal-insulating properties. Composites Science and Technology, 2021, 213, 108917.	3.8	21
64	Foaming behavior of bioâ€based blends based on thermoplastic gelatin and poly(butylene succinate). Journal of Applied Polymer Science, 2015, 132, .	1.3	20
65	A simple method to predict high strain rates mechanical behavior of low interconnected cell foams. Polymer Testing, 2007, 26, 878-885.	2.3	18
66	Strategies to Produce Thermoplastic Starchâ€“Zein Blends: Effect on Compatibilization. Journal of Polymers and the Environment, 2014, 22, 508-524.	2.4	18
67	Thermal behavior and morphological and rheological properties of polypropylene and novel elastomeric ethylene copolymer blends. Journal of Applied Polymer Science, 2002, 86, 3430-3439.	1.3	17
68	A predictive approach based on the Simhaâ€“Somcynsky free-volume theory for the effect of dissolved gas on viscosity and glass transition temperature of polymeric mixtures. Journal of Polymer Science, Part B: Polymer Physics, 2006, 44, 1863-1873.	2.4	16
69	Polyether polyol/CO2 solutions: Solubility, mutual diffusivity, specific volume and interfacial tension by coupled gravimetry-Axisymmetric Drop Shape Analysis. Fluid Phase Equilibria, 2016, 425, 342-350.	1.4	16
70	Preparation and Characterization of Polyurethane Porous Membranes by Particulate-leaching Method. Frontiers in Forests and Global Change, 2001, 20, 321-338.	0.6	15
71	Insight into bubble nucleation at high-pressure drop rate. Journal of Cellular Plastics, 2017, 53, 551-560.	1.2	15
72	Effect of two kinds of lignins, alkaline lignin and sodium lignosulfonate, on the foamability of thermoplastic zein-based bionanocomposites. Journal of Cellular Plastics, 2012, 48, 516-525.	1.2	14

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73	Recycling and recovery of PEâ€PPâ€PETâ€based fiber polymeric wastes as aggregate replacement in lightweight mortar: Evaluation of environmental friendly application. Environmental Progress and Sustainable Energy, 2014, 33, 1445-1451.	1.3	14
74	Control of microâ€•and nanocellular structures in CO₂ foamed PES/PEN blends. Polymer Engineering and Science, 2015, 55, 1281-1289.	1.5	14
75	Thermoplastic Processing of Blue Maize and White Sorghum Flours to Produce Bioplastics. Journal of Polymers and the Environment, 2015, 23, 72-82.	2.4	14
76	A pressure vessel for studying gas foaming of thermosetting polymers: sorption, synthesis and processing. Polymer Testing, 2017, 62, 137-142.	2.3	13
77	Mass transport and physical properties of polymeric methylene diphenyl diisocyanate/CO 2 solutions. Fluid Phase Equilibria, 2018, 456, 116-123.	1.4	12
78	Heterogeneous bubble nucleation in PCL/clay nanocomposite foams. Plastics, Rubber and Composites, 2003, 32, 313-317.	0.9	11
79	Polyurethane synthesis under high-pressure CO2, a FT-NIR study. European Polymer Journal, 2019, 115, 364-374.	2.6	11
80	Effect of Molecular Modification on PCL Foam Formation and Morphology of PCL. Macromolecular Symposia, 2005, 228, 219-228.	0.4	10
81	Modelling physical properties of highly crystallized polyester reinforced with multiwalled carbon nanotubes. European Polymer Journal, 2012, 48, 26-40.	2.6	10
82	Scaffolds with tubular/isotropic Bi-modal pore structures by gas foaming and fiber templating. Materials Letters, 2013, 93, 157-160.	1.3	10
83	Gelatin/graphene systems for low cost energy storage. AIP Conference Proceedings, 2014, , .	0.3	8
84	Thermoplastic composites based on poly(ethylene 2,6-naphthalate) and basalt woven fabrics: Static and dynamic mechanical properties. Polymer Composites, 2016, 37, 2549-2556.	2.3	8
85	Curing characteristics and mechanical properties of carbon fiberâ€interlayered fabric composites based on a polyurethane matrix. Advances in Polymer Technology, 2007, 26, 132-145.	0.8	7
86	Supercritical CO2 Foaming of Thermoplastic Materials Derived from Maize: Proof-of-Concept Use in Mammalian Cell Culture Applications. PLoS ONE, 2015, 10, e0122489.	1.1	6
87	Bio-hybrid foams by silsesquioxanes cross-linked thermoplastic zein films. Journal of Cellular Plastics, 2015, 51, 75-87.	1.2	6
88	Microcellular foaming of arabinoxylan and PEGylated arabinoxylan with supercritical CO2. Carbohydrate Polymers, 2018, 181, 442-449.	5.1	6
89	Preliminary investigation of polystyrene/MoS2-Oleylamine polymer composite for potential application as low-dielectric material in microelectronics. AIP Conference Proceedings, 2015, , .	0.3	5
90	Interface Dissipative Mechanisms in an Elastomeric Matrix Reinforced with MWCNTs. Macromolecular Theory and Simulations, 2013, 22, 198-206.	0.6	4

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91	Polystyrene/MoS2@oleylamine nanocomposites. , 2014, , .		4
92	Electrical Characterization and Modeling of a Gelatin/Graphene System. Advances in Condensed Matter Physics, 2015, 2015, 1-5.	0.4	4
93	Lightweight polyethyleneâ€hollow glass microspheres composites for rotational molding technology. Journal of Applied Polymer Science, 2021, 138, 49766.	1.3	4
94	Cellulose based hybrid hydroxylated adducts for polyurethane foams. AIP Conference Proceedings, 2012, , .	0.3	3
95	Foams and their applications. Supercritical Fluid Science and Technology, 2021, 9, 1-20.	0.5	3
96	Osteogenic differentiation of CD271(+) cells from rabbit bone marrow cultured on three phase PCL/TZ-HA bioactive scaffolds: comparative study with mesenchymal stem cells (MSCs). International Journal of Clinical and Experimental Medicine, 2015, 8, 13154-62.	1.3	3
97	SmartFoams with magneto-sensitive elastic behavior. AIP Conference Proceedings, 2014, , .	0.3	2
98	Light weight LDPE composites with surface modified hollow glass microspheres. AIP Conference Proceedings, 2018, , .	0.3	2
99	Gas foaming with physical blowing agents. Supercritical Fluid Science and Technology, 2021, 9, 33-54.	0.5	2
100	New Materials for Ecological Building Products. Advanced Structured Materials, 2013, , 203-215.	0.3	1
101	Characterization of poly(butylene succinate)/glycerol co-plasticized thermoplastic gelatin prepared by melt blending. AIP Conference Proceedings, 2015, , .	0.3	1
102	Morphology modulation of gasâ€foamed, micrometric, hollow polystyrene particles. Journal of Applied Polymer Science, 2016, 133, .	1.3	1
103	Reinforcing poly(Îµ-caprolactone) with hollow glass microspheres and hemp fibers â€“ Morphological, rheological and mechanical properties. AIP Conference Proceedings, 2018, , .	0.3	1
104	TIMESCALES IN BUBBLE NUCLEATION EVENTS FOR THE FORMATION OF MICROCELLULAR BIODEGRADABLE FOAMS. AIP Conference Proceedings, 2008, , .	0.3	0
105	Microcellular Foams Based on High Performance Thermoplastic Nanocomposites. , 2010, , .		0
106	PS foams at high pressure drop rates. , 2014, , .		0
107	Improving the cellular morphology in high performance thermoplastics foams through blending. , 2014, , .		0
108	Cellular morphology of organic-inorganic hybrid foams based on alkali alumino-silicate matrix. , 2014, , .		0

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109	Bio-Based and Bio-Inspired Cellular Materials. , 2015, , 1-37.		0
110	Lock-in termography for investigation of impact damage in hybrid polypropylene/glass composites: LT to hybrid thermoplastic composites. , 2015, , .		0
111	Sorption thermodynamics of low molecular weight compounds in polymers. Supercritical Fluid Science and Technology, 2021, 9, 69-177.	0.5	0
112	Rheological properties. Supercritical Fluid Science and Technology, 2021, 9, 263-283.	0.5	0
113	Batch processing. Supercritical Fluid Science and Technology, 2021, 9, 389-410.	0.5	0