Srikanth Pilla

List of Publications by Year in Descending Order

96 papers	3,964 citations	33 h-index	62 g-index
104 ext. papers	4,466 ext. citations	6 avg, IF	5.61 L-index

#	Paper	IF	Citations
96	Design and manufacturing of roller bearing polymeric cages and development of a theoretical model for predicting the roller push-out force.. *Scientific Reports*, **2022**, 12, 1017	4.9	1
95	Effect of silane-treated pine wood fiber (PWF) on thermal and mechanical properties of partially biobased composite foams. *Composites Part C: Open Access*, **2022**, 8, 100278	1.6	
94	Polydopamine coating improves electromagnetic interference shielding of delignified wood-derived carbon scaffold. *Journal of Materials Science*, **2021**, 56, 10915-10925	4.3	5
93	Polymer-Derived Nitrogen-Doped Carbon Nanosheet Cluster and Its Application for Water Purification. *Macromol*, **2021**, 1, 84-93		0
92	Environmental profile of thermoelectrics for applications with continuous waste heat generation via life cycle assessment. *Science of the Total Environment*, **2021**, 752, 141674	10.2	3
91	Green chemistry design in polymers derived from lignin: review and perspective. *Progress in Polymer Science*, **2021**, 113, 101344	29.6	26
90	Engineering of Electron Affinity and Interfacial Charge Transfer of Graphene for Self-Powered Nonenzymatic Biosensor Applications. *ACS Applied Materials & Interfaces*, **2021**, 13, 40731-40741	9.5	7
89	Grafting PEG on cellulose nanocrystals via polydopamine chemistry and the effects of PEG graft length on the mechanical performance of composite film. *Carbohydrate Polymers*, **2021**, 271, 118405	10.3	3
88	Porous effects on heat transfer and ions distribution in YSZ using molecular dynamics simulation. *Chemical Physics Letters*, **2020**, 747, 137339	2.5	1
87	Sorption behavior of real microplastics (MPs): Insights for organic micropollutants adsorption on a large set of well-characterized MPs. *Science of the Total Environment*, **2020**, 720, 137634	10.2	46
86	Melt Processing of Cellulose Nanocrystal-Filled Composites: Toward Reinforcement and Foam Nucleation. *Industrial & Engineering Chemistry Research*, **2020**, 59, 8511-8531	3.9	15
85	Integration Concept of Injection, Forming and Foaming: A Practical Approach to Manufacture Hybrid Structures **2020**, 205-218		1
84	Optimization of a mono-composite leaf spring using a hybrid fiber-layup approach. *International Journal on Interactive Design and Manufacturing*, **2020**, 14, 407-421	1.9	5
83	Analysis of a hybrid process for manufacturing sheet metal-polymer structures using a conceptual tool design and an analytical-numerical modelling. *Journal of Materials Processing Technology*, **2020**, 279, 116533	5.3	6
82	Comparative Study of Direct Compounding, Coupling Agent-Aided and Initiator-Aided Reactive Extrusion to Prepare Cellulose Nanocrystal/PHBV (CNC/PHBV) Nanocomposite. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 814-822	8.3	16
81	The effects of interface layer in LZ/YSZ coupled system during thermal transportation at elevated temperatures: A molecular dynamics simulation study. *Chemical Physics Letters*, **2020**, 755, 137788	2.5	0
80	Tailoring the Interfacial Interactions of van der Waals 1T-MoS/C Heterostructures for High-Performance Hydrogen Evolution Reaction Electrocatalysis. *Journal of the American Chemical Society*, **2020**, 142, 17923-17927	16.4	53

79	Materials for the biorefinery: high bio-content, shape memory Kraft lignin-derived non-isocyanate polyurethane foams using a non-toxic protocol. *Green Chemistry*, **2020**, 22, 6922-6935	10	11
78	In Situ Doping-Enabled Metal and Nonmetal Codoping in Graphene Quantum Dots: Synthesis and Application for Contaminant Sensing. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 16565-16576	8.3	9
77	Evaluation of in-mold sensors and machine data towards enhancing product quality and process monitoring via Industry 4.0. *International Journal of Advanced Manufacturing Technology*, **2019**, 105, 1371-1389	3.2	23
76	Feasibility Study for Manufacturing CF/Epoxy Thermoplastic Hybrid Structures in a Single Operation. *Procedia Manufacturing*, **2019**, 33, 232-239	1.5	10
75	Epoxidation Kinetics of High-Linolenic Triglyceride Catalyzed by Solid Acidic-Ion Exchange Resin. *Scientific Reports*, **2019**, 9, 8987	4.9	7
74	Biobased thermosetting cellular blends: Exploiting the ecological advantage of epoxidized soybean oil in structural foams. *Polymer*, **2019**, 177, 111-119	3.9	6
73	On the Inter-Laminar Shear Strength of Composites Manufactured via a Stepped-Concurrent UV Curing and Layering Process. *Journal of Composite Materials*, **2019**, 53, 4149-4159	2.7	2
72	Degree of cure, mechanical properties, and morphology of carbon fiber/epoxy- PP hybrids manufactured by a novel single shot method. *Materials Today Communications*, **2019**, 19, 441-449	2.5	12
71	Polymer-Derived Ceramics: A Novel Inorganic Thermoelectric Material System **2019**, 229-252		
70	Photopolymerization of Acrylated Epoxidized Soybean Oil: A Photocalorimetry-Based Kinetic Study. *ACS Omega*, **2019**, 4, 21799-21808	3.9	13
69	PHBV-graft-GMA via reactive extrusion and its use in PHBV/nanocellulose crystal composites. *Carbohydrate Polymers*, **2019**, 205, 27-34	10.3	30
68	Encapsulation of hydrophilic payload by PU-PMF capsule: Effect of melamine-formaldehyde pre-polymer content, pH and temperature on capsule morphology. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2018**, 542, 59-67	5.1	6
67	Encapsulating Hydrophilic Solution by PU-PMF Double-Component Capsule Based on Water-In-Oil-In-Oil Emulsion Template. *Macromolecular Chemistry and Physics*, **2018**, 219, 1700418	2.6	4
66	Polymer-Derived Silicon Oxycarbide Ceramics as Promising Next-Generation Sustainable Thermoelectrics. *ACS Applied Materials & Interfaces*, **2018**, 10, 2236-2241	9.5	22
65	Poly(lactic acid)/areca fiber laminate composites processed via film stacking technique. *Journal of Applied Polymer Science*, **2018**, 135, 45795	2.9	5
64	Porosity effects on oxygen ions diffusion in the yttria-stabilized zirconia (YSZ) by molecular dynamics simulation. *Journal of Molecular Liquids*, **2018**, 265, 31-35	6	3
63	Sustainable Animal Protein-Intermeshed Epoxy Hybrid Polymers: From Conquering Challenges to Engineering Properties. *ACS Omega*, **2018**, 3, 14361-14370	3.9	2
62	Delayed Addition Foaming of Bio-epoxy Blends: Balancing Performance Requirements and Sustainability. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 17051-17058	8.3	3

61	An Analytical Model for Nonhydrostatic Sheet Metal Bulging Process by Means of Polymer Melt Pressure. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2018**, 140,	3.3	9
60	Green epoxy synthesized from Perilla frutescens: A study on epoxidation and oxirane cleavage kinetics of high-linolenic oil. *Industrial Crops and Products*, **2018**, 123, 25-34	5.9	22
59	Model-Based Robust Optimal Control for Layer-By-Layer Ultraviolet Processing of Composite Laminates. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2017**, 139,	1.6	4
58	Investigation of Thermal and Thermomechanical Properties of Biodegradable PLA/PBSA Composites Processed via Supercritical Fluid-Assisted Foam Injection Molding. *Polymers*, **2017**, 9,	4.5	25
57	Design and Development of a Composite A-Pillar to Reduce Obstruction Angle in Passenger Cars. *SAE International Journal of Passenger Cars - Mechanical Systems*, **2017**, 10, 150-156	0.3	1
56	Investigation of thermal transport behavior in YSZ and LZ/YSZ coupled system between 1273 and 1473 K using molecular dynamics simulation. *Journal of Molecular Liquids*, **2017**, 244, 464-468	6	3
55	The influence of nanocellulosic fiber, extracted from Helicteres isora, on thermal, wetting and viscoelastic properties of poly(butylene succinate) composites. *Cellulose*, **2017**, 24, 4313-4323	5.5	25
54	Ascorbic acid tethered polymeric nanoparticles enable efficient brain delivery of galantamine: An in vitro-in vivo study. *Scientific Reports*, **2017**, 7, 11086	4.9	19
53	The Power of Processing: Creating High Strength Foams from Epoxidized Pine Oil. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 8641-8647	8.3	10
52	Automotive Applications of Plastics: Past, Present, and Future **2017**, 651-673		22
51	Mechanical and moisture sensitivity of fully bio-based dialdehyde carboxymethyl cellulose cross-linked soy protein isolate films. *Carbohydrate Polymers*, **2017**, 157, 1333-1340	10.3	50
50	IIoT-Enabled Production System for Composite Intensive Vehicle Manufacturing. *SAE International Journal of Engines*, **2017**, 10, 209-214	2.4	9
49	Understanding the effect of porosity on thermal properties of yttria-stabilized zirconia using molecular dynamics simulation. *Journal of Molecular Liquids*, **2016**, 222, 88-93	6	2
48	Preparation and Characterization of Poly(butylene succinate) Bionanocomposites Reinforced with Cellulose Nanofiber Extracted from Helicteres isora Plant. *Journal of Renewable Materials*, **2016**, 4, 351-364	2.4	24
47	Conceptual Development of a Multi-Material Composite Structure for an Urban Utility/Activity Vehicle. *SAE International Journal of Passenger Cars - Mechanical Systems*, **2016**, 9, 253-270	0.3	0
46	Impacts of Adding Photovoltaic Solar System On-Board to Internal Combustion Engine Vehicles Towards Meeting 2025 Fuel Economy CAFE Standards. *SAE International Journal of Alternative Powertrains*, **2016**, 5, 237-248	2	8
45	A comprehensive optimized model for on-board solar photovoltaic system for plug-in electric vehicles: energy and economic impacts. *International Journal of Energy Research*, **2016**, 40, 1489-1508	4.5	22
44	Effects of incremental depth and tool rotation on failure modes and microstructural properties in Single Point Incremental Forming of polymers. *Journal of Materials Processing Technology*, **2015**, 222, 287-300	5.3	55

43	Multifunctional drug nanocarriers formed by cRGD-conjugated CD-PAMAM-PEG for targeted cancer therapy. *Colloids and Surfaces B: Biointerfaces*, **2015**, 126, 590-597	6	32
42	Periadventitial application of rapamycin-loaded nanoparticles produces sustained inhibition of vascular restenosis. *PLoS ONE*, **2014**, 9, e89227	3.7	31
41	Octreotide-functionalized and resveratrol-loaded unimolecular micelles for targeted neuroendocrine cancer therapy. *Nanoscale*, **2013**, 5, 9924-33	7.7	39
40	Melt compounding of poly (3-hydroxybutyrate-co-3-hydroxyvalerate)/nanofibrillated cellulose nanocomposites. *Polymer Degradation and Stability*, **2013**, 98, 1439-1449	4.7	98
39	Aptamer-conjugated and doxorubicin-loaded unimolecular micelles for targeted therapy of prostate cancer. *Biomaterials*, **2013**, 34, 5244-53	15.6	174
38	Fabrication and characterization of injection molded poly (ε-caprolactone) and poly (ε-caprolactone)/hydroxyapatite scaffolds for tissue engineering. *Materials Science and Engineering C*, **2012**, 32, 1674-81	8.3	35
37	Mechanisms and impact of fiber–matrix compatibilization techniques on the material characterization of PHBV/oak wood flour engineered biobased composites. *Composites Science and Technology*, **2012**, 72, 708-715	8.6	93
36	Bioplastics and Vegetal Fiber Reinforced Bioplastics for Automotive Applications **2011**, 397-449		13
35	Biobased and Biodegradable PHBV-Based Polymer Blends and Biocomposites: Properties and Applications **2011**, 372-396		3
34	Polylactic Acid (PLA) Foams for Packaging Applications **2011**, 161-175		10
33	Long Biofibers and Engineered Pulps for High Performance Bioplastics and Biocomposites **2011**, 555-579		1
32	Processing and characterization of recycled poly(ethylene terephthalate) blends with chain extenders, thermoplastic elastomer, and/or poly(butylene adipate-co-terephthalate). *Polymer Engineering and Science*, **2011**, 51, 1023-1032	2.3	47
31	Microcellular poly(hydroxybutyrate-co-hydroxyvalerate)-hyperbranched polymer–nanoclay nanocomposites. *Polymer Engineering and Science*, **2011**, 51, 1815-1826	2.3	14
30	Processing and characterization of solid and microcellular PHBV/PBAT blend and its RWF/nanoclay composites. *Composites Part A: Applied Science and Manufacturing*, **2010**, 41, 982-990	8.4	78
29	Multifunctional polymeric vesicles for targeted drug delivery and imaging. *Biofabrication*, **2010**, 2, 025004	10.5	16
28	Tumor-targeting, pH-responsive, and stable unimolecular micelles as drug nanocarriers for targeted cancer therapy. *Bioconjugate Chemistry*, **2010**, 21, 496-504	6.3	183
27	Microcellular processing of polylactide–hyperbranched polyester–nanoclay composites. *Journal of Materials Science*, **2010**, 45, 2732-2746	4.3	69
26	Microcellular extrusion foaming of poly(lactide)/poly(butylene adipate-co-terephthalate) blends. *Materials Science and Engineering C*, **2010**, 30, 255-262	8.3	55

25	Processing and characterization of solid and microcellular PHBV/coir fiber composites. *Materials Science and Engineering C*, **2010**, 30, 749-757	8.3	65
24	Novel chitosan/gold-MPA nanocomposite for sequence-specific oligonucleotide detection. *Carbohydrate Polymers*, **2010**, 82, 189-194	10.3	29
23	Processing and characterization of microcellular PHBV/PBAT blends. *Polymer Engineering and Science*, **2010**, 50, 1440-1448	2.3	77
22	Multifunctional nano-micelles formed by amphiphilic gold-polycaprolactone-methoxy poly(ethylene glycol) (Au-PCL-MPEG) nanoparticles for potential drug delivery applications. *Journal of Nanoscience and Nanotechnology*, **2009**, 9, 5701-8	1.3	22
21	Amphiphilic multi-arm block copolymer based on hyperbranched polyester, poly(L-lactide) and poly(ethylene glycol) as a drug delivery carrier. *Macromolecular Bioscience*, **2009**, 9, 515-24	5.5	83
20	Polylactide-recycled wood fiber composites. *Journal of Applied Polymer Science*, **2009**, 111, 37-47	2.9	93
19	Biodegradable hydrogels based on novel photopolymerizable guar gum-methacrylate macromonomers for in situ fabrication of tissue engineering scaffolds. *Acta Biomaterialia*, **2009**, 5, 3441-52	10.8	60
18	Folate-conjugated amphiphilic hyperbranched block copolymers based on Boltorn H40, poly(L-lactide) and poly(ethylene glycol) for tumor-targeted drug delivery. *Biomaterials*, **2009**, 30, 3009-19	15.6	294
17	Fabrication of biodegradable poly(trimethylene carbonate) networks for potential tissue engineering scaffold applications. *Polymers for Advanced Technologies*, **2009**, 20, 742-747	3.2	14
16	Microcellular extrusion-foaming of polylactide with chain-extender. *Polymer Engineering and Science*, **2009**, 49, 1653-1660	2.3	125
15	Modulated molecular recognition by a temperature-sensitive molecularly-imprinted polymer. *Journal of Polymer Science Part A*, **2009**, 47, 2352-2360	2.5	35
14	Gold nanoparticles with a monolayer of doxorubicin-conjugated amphiphilic block copolymer for tumor-targeted drug delivery. *Biomaterials*, **2009**, 30, 6065-75	15.6	273
13	Microcellular injection-molding of polylactide with chain-extender. *Materials Science and Engineering C*, **2009**, 29, 1258-1265	8.3	93
12	Amphiphilic multi-arm-block copolymer conjugated with doxorubicin via pH-sensitive hydrazone bond for tumor-targeted drug delivery. *Biomaterials*, **2009**, 30, 5757-66	15.6	329
11	Electrical and Dielectric Properties of Hydroxylated Carbon Nanotube Elastomer Composites. *Journal of Physical Chemistry C*, **2009**, 113, 17626-17629	3.8	95
10	An amperometric urea biosensor based on covalently immobilized urease on an electrode made of hyperbranched polyester functionalized gold nanoparticles. *Talanta*, **2009**, 78, 1401-7	6.2	87
9	Biodegradable and biocompatible multi-arm star amphiphilic block copolymer as a carrier for hydrophobic drug delivery. *International Journal of Biological Macromolecules*, **2009**, 44, 346-52	7.9	86
8	Doxorubicin conjugated gold nanoparticles as water-soluble and pH-responsive anticancer drug nanocarriers. *Journal of Materials Chemistry*, **2009**, 19, 7879		166

7	Microcellular and Solid Polylactide Flax Fiber Composites. *Composite Interfaces*, **2009**, 16, 869-890	2.3	39
6	Tumor-targeting, superparamagnetic polymeric vesicles as highly efficient MRI contrast probes. *Journal of Materials Chemistry*, **2009**, 19, 5812		39
5	Polybenzoxazine-core shell rubber carbon nanotube nanocomposites. *Composites Part A: Applied Science and Manufacturing*, **2008**, 39, 1653-1659	8.4	61
4	Polylactide-pine wood flour composites. *Polymer Engineering and Science*, **2008**, 48, 578-587	2.3	136
3	A methodology for strength and reliability analysis of carbon nanotube/nanofibre and conventional composite plates. *International Journal of Reliability and Safety*, **2007**, 1, 290	0.9	
2	Experimental analysis on the bonding conditions of thermoset-thermoplastic composite parts manufactured by the hybrid single shot method. *Journal of Composite Materials*,002199832110507	2.7	1
1	A machine learning approach to quality monitoring of injection molding process using regression models. *International Journal of Computer Integrated Manufacturing*,1-14	4.3	1