Ranvijay Kumar

List of Publications by Year
in descending order

116	1,836	331259	301761
papers	citations	21 h-index	39 g-index

117	117	117	1133
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multi-Material Additive Manufacturing of Sustainable Innovative Materials and Structures. Polymers, 2019, 11, 62.	2.0	118
2	Graphene as biomedical sensing element: State of art review and potential engineering applications. Composites Part B: Engineering, 2018, 134, 193-206.	5.9	113
3	Friction welding of dissimilar plastic/polymer materials with metal powder reinforcement for engineering applications. Composites Part B: Engineering, 2016, 101, 77-86.	5.9	112
4	Weldability of thermoplastic materials for friction stir welding- A state of art review and future applications. Composites Part B: Engineering, 2018, 137, 1-15.	5.9	112
5	On the recyclability of polyamide for sustainable composite structures in civil engineering. Composite Structures, 2018, 184, 704-713.	3.1	95
6	On mechanical, thermal and morphological investigations of almond skin powder-reinforced polylactic acid feedstock filament. Journal of Thermoplastic Composite Materials, 2022, 35, 230-248.	2.6	85
7	On the 3D printing of recycled ABS, PLA and HIPS thermoplastics for structural applications. PSU Research Review, 2018, 2, 115-137.	1.3	81
8	Friction welding for the manufacturing of PA6 and ABS structures reinforced with Fe particles. Composites Part B: Engineering, 2018, 132, 244-257.	5.9	75
9	On the applicability of composite PA6-TiO2 filaments for the rapid prototyping of innovative materials and structures. Composites Part B: Engineering, 2018, 143, 132-140.	5.9	74
10	Characterization of threeâ€dimensional printed thermalâ€stimulus polylactic acidâ€hydroxyapatiteâ€based shape memory scaffolds. Polymer Composites, 2020, 41, 3871-3891.	2.3	64
11	Sustainability of Recycled ABS and PA6 by Banana Fiber Reinforcement: Thermal, Mechanical and Morphological Properties. Journal of the Institution of Engineers (India): Series C, 2019, 100, 351-360.	0.7	45
12	Characterization of Friction Stir-Welded Polylactic Acid/Aluminum Composite Primed through Fused Filament Fabrication. Journal of Materials Engineering and Performance, 2022, 31, 2391-2409.	1.2	44
13	3D printing of food materials: A state of art review and future applications. Materials Today: Proceedings, 2020, 33, 1463-1467.	0.9	42
14	Friction Welding for Functional Prototypes of PA6 and ABS with Al Powder Reinforcement. Proceedings of the National Academy of Sciences India Section A - Physical Sciences, 2021, 91, 351-359.	0.8	42
15	Investigations of mechanical, thermal and morphological properties of FDM fabricated parts for friction welding applications. Measurement: Journal of the International Measurement Confederation, 2018, 120, 11-20.	2.5	38
16	Friction stir welding of ABS-15Al sheets by introducing compatible semi-consumable shoulder-less pin of PA6-50Al. Measurement: Journal of the International Measurement Confederation, 2019, 131, 461-472.	2.5	38
17	On ZnO nano particle reinforced PVDF composite materials for 3D printing of biomedical sensors. Journal of Manufacturing Processes, 2020, 60, 268-282.	2.8	35
18	Correlation between structural, optical and magnetic properties of Mn-doped ZnO. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	31

#	Article	IF	Citations
19	Mechanical, thermal and micrographic investigations of friction stir welded: 3D printed melt flow compatible dissimilar thermoplastics. Journal of Manufacturing Processes, 2019, 38, 387-395.	2.8	30
20	On compressive and morphological features of 3D printed almond skin powder reinforced PLA matrix. Materials Research Express, 2020, 7, 025311.	0.8	30
21	ZnO nanoparticle-grafted PLA thermoplastic composites for 3D printing applications: Tuning of thermal, mechanical, morphological and shape memory effect. Journal of Thermoplastic Composite Materials, 2022, 35, 799-825.	2.6	30
22	Investigations for tensile, compressive and morphological properties of 3D printed functional prototypes of PLA-PEKK-HAp-CS. Journal of Thermoplastic Composite Materials, 2021, 34, 1408-1427.	2.6	23
23	Waste thermosetting polymer and ceramic as reinforcement in thermoplastic matrix for sustainability: Thermomechanical investigations. Journal of Thermoplastic Composite Materials, 2021, 34, 523-535.	2.6	22
24	On Mn doped ZnO nano particles reinforced in PVDF matrix for fused filament fabrication: Mechanical, thermal, morphological and 4D properties. Journal of Manufacturing Processes, 2021, 62, 817-832.	2.8	22
25	Investigations on 3D printed thermosetting and ceramic-reinforced recycled thermoplastic-based functional prototypes. Journal of Thermoplastic Composite Materials, 2021, 34, 1103-1122.	2.6	21
26	3D printed scaffolds for tissue engineering applications: Mechanical, morphological, thermal, in-vitro and in-vivo investigations. CIRP Journal of Manufacturing Science and Technology, 2021, 32, 205-216.	2.3	21
27	Lithium ion assisted luminescence and ferromagnetism in europium doped zinc oxide. Materials Chemistry and Physics, 2018, 214, 306-319.	2.0	20
28	Mechanical, thermal and melt flow of aluminum-reinforced PA6/ABS blend feedstock filament for fused deposition modeling. Rapid Prototyping Journal, 2018, 24, 1455-1468.	1.6	20
29	Mechanical and morphological investigations of 3D printed recycled ABS reinforced with bakeliteâ€“SiCâ€“Al₂O₃. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2019, 233, 5933-5944.	1.1	20
30	On secondary recycling of ZrO₂-reinforced HDPE filament prepared from domestic waste for possible 3-D printing of bearings. Journal of Thermoplastic Composite Materials, 2021, 34, 1254-1272.	2.6	18
31	On 3D-printed ZnO-reinforced PLA matrix composite: Tensile, thermal, morphological and shape memory characteristics. Journal of Thermoplastic Composite Materials, 2022, 35, 1510-1531.	2.6	18
32	Processing techniques of polymeric materials and their reinforced composites. Advances in Materials and Processing Technologies, 2020, 6, 591-607.	0.8	17
33	Thermo-mechanical investigations for the joining of thermoplastic composite structures via friction stir spot welding. Composite Structures, 2020, 253, 112772.	3.1	16
34	On the mechanical characteristics of friction stir welded dissimilar polymers: statistical analysis of the processing parameters and morphological investigations of the weld joint. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	16
35	On nano polypyrrole and carbon nano tube reinforced PVDF for 3D printing applications: Rheological, thermal, electrical, mechanical, morphological characterization. Journal of Composite Materials, 2020, 54, 4677-4689.	1.2	16
36	Tertiary and quaternary recycling of thermoplastics by additive manufacturing approach for thermal sustainability. Materials Today: Proceedings, 2021, 37, 2382-2386.	0.9	16

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37	On 3D printed scaffolds for orthopedic tissue engineering applications. SN Applied Sciences, 2020, 2, 1.	1.5	14
38	Development of Low-Cost Graphene-Polymer Blended In-House Filament for Fused Deposition Modeling. , 2017, , 1081-1090.		13
39	Melt processing for enhancing compatibility of aluminum-reinforced acrylonitrileâ€“butadieneâ€“styrene and polyamide 6 for friction welding applications. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	0.8	12
40	Hybrid fused filament fabrication for manufacturing of Al microfilm reinforced PLA structures. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2020, 42, 1.	0.8	11
41	Friction stir welding of 3D printed melt flow compatible dissimilar thermoplastic composites. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2021, 235, 1878-1890.	1.1	11
42	On polyvinyl chloride-polypropylene composite matrix for 4D applications: Flowability, mechanical, thermal and morphological characterizations. Journal of Thermoplastic Composite Materials, 2023, 36, 1401-1421.	2.6	11
43	Surface characterization of zirconia ceramics in ultrasonic vibration-assisted grinding. Journal of the Brazilian Society of Mechanical Sciences and Engineering, 2018, 40, 1.	0.8	10
44	PLA-PEKK-HAp-CS composite scaffold joining with friction stir spot welding. Journal of Thermoplastic Composite Materials, 2021, 34, 745-764.	2.6	10
45	On 3D printed biomedical sensors for non-enzymatic glucose sensing applications. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2022, 236, 1057-1069.	1.0	10
46	Thermal Analysis for Joining of Dissimilar Polymeric Materials Through Friction Stir Welding. , 2017, , .		8
47	Characterization of in-House-Developed Mn-ZnO-Reinforced Polyethylene: A Sustainable Approach for Developing Fused Filament Fabrication-Based Filament. Journal of Materials Engineering and Performance, 2021, 30, 5368-5382.	1.2	8
48	Metal spray layered hybrid additive manufacturing of PLA composite structures: Mechanical, thermal and morphological properties. Journal of Thermoplastic Composite Materials, 2022, 35, 1387-1407.	2.6	7
49	Prospect of Graphene for Use as Sensors in Miniaturized and Biomedical Sensing Devices. , 2018, , .		6
50	On printability of PLA-PEKK-HAp-CS based functional prototypes with FDM: thermo-mechanical investigations. Materials Research Express, 2019, 6, 115338.	0.8	6
51	Repair of automotive bumpers and bars with modified friction stir welding. Journal of Central South University, 2020, 27, 2239-2248.	1.2	6
52	Recycled HDPE reinforced Al2O3 and SiC three dimensional printed patterns for sandwich composite material. Engineering Research Express, 2019, 1, 015007.	0.8	5
53	Application of Nano Porous Materials for Energy Conservation and Storage. , 2020, , 42-50.		5
54	Processing of Melt Flow Compatible Thermoplastic Composites for Solid State Welding Applications. Materials Today: Proceedings, 2019, 18, 3167-3173.	0.9	4

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55	On shear resistance of almond skin reinforced PLA composite matrix-based scaffold using cancellous screw. Advances in Materials and Processing Technologies, 2022, 8, 2361-2384.	0.8	4
56	Prospect of 3D Printing for Recycling of Plastic Product to Minimize Environmental Pollution. , 2018, , 289-289.		3
57	Investigations for Development of Feed Stock Filament of Fused Deposition Modeling From Recycled Polyamide. , 2018, , .		3
58	Thermomechanical investigations of PEKK-HAp-CS composites. Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine, 2019, 233, 1196-1203.	1.0	3
59	Solid Polymer Waste Materials for Repairing of Heritage Composite Structure: An Additive Manufacturing Approach. , 2020, , 557-562.		3
60	Joining of 3D Printed Dissimilar Thermoplastics With Consumable Tool Through Friction Stir Spot Welding: A Case Study. , 2020, , 91-96.		3
61	Joining of 3D Printed Dissimilar Thermoplastics With Friction Welding: A Case Study. , 2020, , 97-108.		3
62	Friction-stir-spot welding of 3D printed ABS and PA6 composites: flexural, thermal and morphological investigations. Advances in Materials and Processing Technologies, 2022, 8, 909-916.	0.8	3
63	Investigations on modulus of elasticity of aluminium reinforced 3D printed structures. Materials Today: Proceedings, 2021, , .	0.9	3
64	Application of Thermoplastic Polymers in 4D Printing. , 2022, , 14-22.		3
65	Aluminum metal composites primed by fused deposition modeling-assisted investment casting: Hardness, surface, wear, and dimensional properties. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 0, , 146442072110541.	0.7	3
66	Mechanical and Experimental Study on the use of Sustainable Materials for Additive Manufacturing. IOP Conference Series: Materials Science and Engineering, 0, 473, 012010.	0.3	2
67	Prospect of Recycling of Plastic Product to Minimize Environmental Pollution. , 2020, , 695-703.		2
68	Polymer- Ceramic composites: A state of art review and future applications. Advances in Materials and Processing Technologies, 2020, , 1-14.	0.8	2
69	Secondary Recycling of HDPE Waste Thermoplastic by Mn Doped ZnO Nanoparticles Reinforcement. , 2020, , .		2
70	Process Capability Analysis for Frictionally Welded Dissimilar Polymeric Materials. Materials Today: Proceedings, 2018, 5, 18502-18509.	0.9	1
71	Application of Nano Porous Materials for Energy Conversion Process. , 2020, , 51-55.		1
72	Transition Metals Doped ZnO Nanoparticles for 3D Printing: A State of the Art Review and Prospective Applications. , 2020, , .		1

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73	Wear properties of rapid tooling prepared by reinforcement of SiC/Al2O3 in HDPE domestic waste. Materials Today: Proceedings, 2020, 33, 1468-1471.	0.9	1
74	Chemical sustainability issues in manufacturing of 3d printed parts: A state of art review. Materials Today: Proceedings, 2021, 37, 3251-3255.	0.9	1
75	On processing of PVC-PP-Hap Thermoplastic Composite Filaments For 3D Printing In Biomedical Applications. SSRG International Journal of Engineering Trends and Technology, 2021, 69, 160-164.	0.3	1
76	On flexural, wear and morphological properties of 3D printed almond skin powder reinforced PLA matrix. Advances in Materials and Processing Technologies, 0, , 1-25.	0.8	1
77	On process modelling of cold chamber die casting of Al alloy by using buckinghamâ€™s Î approach. Materials Today: Proceedings, 2021, 48, 1416-1416.	0.9	1
78	Thermoplastic Containers for Disposal of Radioactive Waste. , 2020, , .		1
79	Investigations on Rare Earth Activated ZnO Nanoparticles Reinforcement in Polymer Matrix for 3D Printing Application. , 2020, , .		1
80	Co-Doped ZnO Nanoparticles Reinforcement in PVDF for 3D Printing of Magnetic Structures. , 2020, , .		1
81	Influences of infill percentage, bed temperature and outer perimeters on elongation of 3D printed nylon 6. Materials Today: Proceedings, 2021, , .	0.9	1
82	Processing of Conducting Polymers for Sensors Applications: A State of Art Review and Future Applications. , 2020, , .		1
83	On PLAâ€“ZnO composite matrix for shape memory effect. , 2022, , 147-160.		1
84	On Development of Alternating Layer Acrylonitrile Butadiene Styrene-Al Composite Structures Using Additive Manufacturing. Journal of Materials Engineering and Performance, 2022, 31, 9349-9361.	1.2	1
85	Development and Applications of Composites of Polymeric and Biodegradable Materials Since 1990. , 2019, , .		0
86	Recycling of Thermosetting Waste as Reinforcement Along With Ceramic Particles in Thermoplastic Matrix for Machining Applications. , 2019, , .		0
87	Graphene Reinforced Composites as Sensing Elements. Key Engineering Materials, 2019, 826, 33-44.	0.4	0
88	Energy Storage Device From Polymeric Waste Based Nano-Composite by 3D Printing. , 2020, , 425-432.		0
89	Joining of 3D Printed Dissimilar Thermoplastics With Nonconsumable Tool Through Friction Stir Welding: A Case Study. , 2020, , 109-113.		0
90	Joining of Thermoplastics With Friction Stir Welding for Minor Repair. , 2020, , .		0

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91	Investigations for Improving Solid-State Weldability of Dissimilar Thermoplastic Composites Through Melt Processing. Lecture Notes in Mechanical Engineering, 2020, , 113-121.	0.3	0
92	Manufacturing of Conducting Polymer-Based Flexible Batteries. , 2021, , .		0
93	Matrix Co-Relation for PLA-HAp-CS Based Scaffold for Rapid Joining Using Friction Stir Spot Welding. , 2021, , .		0
94	Optimization of FDM for Fabrication of PLA-HAp-CS Based Functional Prototypes/Scaffolds Using Matrix Co-Relation. , 2021, , .		0
95	On Co-Relational Analysis for Properties of PLA Composite Reinforced With Mn Doped ZnO Nano Particles. , 2021, , .		0
96	On Establishing a Co-Relational Matrix for Recycling of HDPE by Mn Doped ZnO Nano Particles Reinforcement. , 2021, , .		0
97	Fabrication of PLA-HAp-CS Based Feed-Stock Filament by Twin-Screw Extrusion Using Matrix Co-Relation. , 2021, , .		0
98	Design and Analysis of Hybrid Fused Filament Fabrication Apparatus for Fabrication of Composites. Current Materials Science, 2021, 14, .	0.2	0
99	On shear fracture and morphological features of fused filament fabrication based almond skin reinforced PLA structures. Advances in Materials and Processing Technologies, 0, , 1-29.	0.8	0
100	Nanoparticles: Properties and its 3D printing applications. Materials Today: Proceedings, 2021, , .	0.9	0
101	Co-Relationship of Mechanical, Thermal and Morphological Properties of PVDF-ZnO Composite Materials. , 2021, , .		0
102	Nanomaterials For Manufacturing of Functional Prototypes By Additive Manufacturing: A State of The Art Review And Future Research Prospective. SSRG International Journal of Engineering Trends and Technology, 2021, 69, 104-110.	0.3	0
103	On Mechanical, Thermal, Morphological and Shape Memory Effect of Sol-Gel Prepared ZnO Nanoparticle Reinforced PLA Composites Materials. Proceedings of the National Academy of Sciences India Section A - Physical Sciences, 0, , 1.	0.8	0
104	Investigating the Polymeric Composites for Online Repair and Maintenance. Materials Horizons, 2018, , 165-179.	0.3	0
105	Joining of Dissimilar Thermoplastic with Friction Stir Welding Through Rapid Tooling. , 2018, , 211-240.		0
106	PEEK for Transportation of Hazards Chemicals. , 2020, , .		0
107	Li-doped ZnO Nanoparticles Reinforcement in PVDF Thermoplastic Matrix for 3D Printing of Charge Storage Devices. , 2020, , .		0
108	Chemical Assisted Thermoplastic Joining for Sustainability. , 2020, , .		0

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109	On Development of Thermoplastics Based Meta-structures by FFF Based 3D Printing. , 2021, , .		0
110	Secondary Recycling of HDPE Domestic Waste by Reinforcement of Cu Doped ZnO Nanoparticles for 3D Printing Applications. , 2021, , .		0
111	On Process Capability Analysis for Commercial Fabrication of ABS Based Multi-Structured Products Using 3D Printing. , 2021, , .		0
112	Twin Screw Extrusion for Recycling of LDPE Domestic Waste by Cu Doped ZnO Nanoparticles Reinforcement. , 2022, , .		0
113	On dual/multimaterial composite matrix for smart structures: a case study of ABS-PLA, HIPS-PLA-ABS. , 2022, , 89-101.		0
114	On Development of Cu Doped ZnO Nanoparticles Reinforced With ABS as Feedstock Filament for 3D Printing Applications. , 2022, , .		0
115	On Process Capability of PVC-PP Composite Feedstock Filament for 3D Printing Applications. , 2022, , .		0
116	3D Printing of ABS-Cu-ZnO Based Composite Structures: Mechanical and Morphological Investigations. , 2022, , .		0