Ranvijay Kumar

List of Publications by Year
in descending order

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116	1,836	331538	302012
papers	citations	21 h-index	39 g-index

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

#	Article	IF	Citations
1	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
2	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
3	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
4	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
5	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
6	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
7	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
8	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
9	Application of Thermoplastic Polymers in 4D Printing. , 2022, , 14-22.		3
10	Twin Screw Extrusion for Recycling of LDPE Domestic Waste by Cu Doped ZnO Nanoparticles Reinforcement. , 2022, , .		0
11	On dual/multimaterial composite matrix for smart structures: a case study of ABS-PLA, HIPS-PLA-ABS. , 2022, , 89-101.		0
12	On Development of Cu Doped ZnO Nanoparticles Reinforced With ABS as Feedstock Filament for 3D Printing Applications. , 2022, , .		0
13	On PLAâ€“ZnO composite matrix for shape memory effect. , 2022, , 147-160.		1
14	On Process Capability of PVC-PP Composite Feedstock Filament for 3D Printing Applications. , 2022, , .		0
15	3D Printing of ABS-Cu-ZnO Based Composite Structures: Mechanical and Morphological Investigations. , 2022, , .		0
16	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
17	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
18	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

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19	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
20	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
21	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
22	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
23	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
24	PLA-PEKK-HAp-CS composite scaffold joining with friction stir spot welding. Journal of Thermoplastic Composite Materials, 2021, 34, 745-764.	2.6	10
25	Tertiary and quaternary recycling of thermoplastics by additive manufacturing approach for thermal sustainability. Materials Today: Proceedings, 2021, 37, 2382-2386.	0.9	16
26	Chemical sustainability issues in manufacturing of 3d printed parts: A state of art review. Materials Today: Proceedings, 2021, 37, 3251-3255.	0.9	1
27	Manufacturing of Conducting Polymer-Based Flexible Batteries. , 2021, , .		0
28	Matrix Co-Relation for PLA-HAp-CS Based Scaffold for Rapid Joining Using Friction Stir Spot Welding. , 2021, , .		0
29	Optimization of FDM for Fabrication of PLA-HAp-CS Based Functional Prototypes/Scaffolds Using Matrix Co-Relation. , 2021, , .		0
30	On Co-Relational Analysis for Properties of PLA Composite Reinforced With Mn Doped ZnO Nano Particles. , 2021, , .		0
31	On Establishing a Co-Relational Matrix for Recycling of HDPE by Mn Doped ZnO Nano Particles Reinforcement. , 2021, , .		0
32	Fabrication of PLA-HAp-CS Based Feed-Stock Filament by Twin-Screw Extrusion Using Matrix Co-Relation. , 2021, , .		0
33	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
34	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
35	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
36	Design and Analysis of Hybrid Fused Filament Fabrication Apparatus for Fabrication of Composites. Current Materials Science, 2021, 14, .	0.2	0

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37	Investigations on modulus of elasticity of aluminium reinforced 3D printed structures. Materials Today: Proceedings, 2021, , .	0.9	3
38	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
39	Nanoparticles: Properties and its 3D printing applications. Materials Today: Proceedings, 2021, , .	0.9	0
40	Co-Relationship of Mechanical, Thermal and Morphological Properties of PVDF-ZnO Composite Materials. , 2021, , .		0
41	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
42	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
43	Influences of infill percentage, bed temperature and outer perimeters on elongation of 3D printed nylon 6. Materials Today: Proceedings, 2021, , .	0.9	1
44	On Development of Thermoplastics Based Meta-structures by FFF Based 3D Printing. , 2021, , .		0
45	Secondary Recycling of HDPE Domestic Waste by Reinforcement of Cu Doped ZnO Nanoparticles for 3D Printing Applications. , 2021, , .		0
46	On Process Capability Analysis for Commercial Fabrication of ABS Based Multi-Structured Products Using 3D Printing. , 2021, , .		0
47	Solid Polymer Waste Materials for Repairing of Heritage Composite Structure: An Additive Manufacturing Approach. , 2020, , 557-562.		3
48	Energy Storage Device From Polymeric Waste Based Nano-Composite by 3D Printing. , 2020, , 425-432.		0
49	Application of Nano Porous Materials for Energy Conservation and Storage. , 2020, , 42-50.		5
50	Joining of 3D Printed Dissimilar Thermoplastics With Consumable Tool Through Friction Stir Spot Welding: A Case Study. , 2020, , 91-96.		3
51	Joining of 3D Printed Dissimilar Thermoplastics With Nonconsumable Tool Through Friction Stir Welding: A Case Study. , 2020, , 109-113.		0
52	Application of Nano Porous Materials for Energy Conversion Process. , 2020, , 51-55.		1
53	Joining of 3D Printed Dissimilar Thermoplastics With Friction Welding: A Case Study. , 2020, , 97-108.		3
54	Prospect of Recycling of Plastic Product to Minimize Environmental Pollution. , 2020, , 695-703.		2

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55	On compressive and morphological features of 3D printed almond skin powder reinforced PLA matrix. Materials Research Express, 2020, 7, 025311.	0.8	30
56	Joining of Thermoplastics With Friction Stir Welding for Minor Repair. , 2020, , .		0
57	Transition Metals Doped ZnO Nanoparticles for 3D Printing: A State of the Art Review and Prospective Applications. , 2020, , .		1
58	Thermo-mechanical investigations for the joining of thermoplastic composite structures via friction stir spot welding. Composite Structures, 2020, 253, 112772.	3.1	16
59	Polymer- Ceramic composites: A state of art review and future applications. Advances in Materials and Processing Technologies, 2020, , 1-14.	0.8	2
60	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
61	Repair of automotive bumpers and bars with modified friction stir welding. Journal of Central South University, 2020, 27, 2239-2248.	1.2	6
62	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
63	Investigations for Improving Solid-State Weldability of Dissimilar Thermoplastic Composites Through Melt Processing. Lecture Notes in Mechanical Engineering, 2020, , 113-121.	0.3	0
64	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
65	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
66	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
67	Characterization of threeâ€dimensional printed thermalâ€stimulus polylactic acidâ€hydroxyapatiteâ€based shape memory scaffolds. Polymer Composites, 2020, 41, 3871-3891.	2.3	64
68	3D printing of food materials: A state of art review and future applications. Materials Today: Proceedings, 2020, 33, 1463-1467.	0.9	42
69	Processing techniques of polymeric materials and their reinforced composites. Advances in Materials and Processing Technologies, 2020, 6, 591-607.	0.8	17
70	On 3D printed scaffolds for orthopedic tissue engineering applications. SN Applied Sciences, 2020, 2, 1.	1.5	14
71	Thermoplastic Containers for Disposal of Radioactive Waste. , 2020, , .		1
72	Investigations on Rare Earth Activated ZnO Nanoparticles Reinforcement in Polymer Matrix for 3D Printing Application. , 2020, , .		1

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73	Co-Doped ZnO Nanoparticles Reinforcement in PVDF for 3D Printing of Magnetic Structures. , 2020, , .		1
74	Secondary Recycling of HDPE Waste Thermoplastic by Mn Doped ZnO Nanoparticles Reinforcement. , 2020, , .		2
75	Processing of Conducting Polymers for Sensors Applications: A State of Art Review and Future Applications. , 2020, , .		1
76	PEEK for Transportation of Hazards Chemicals. , 2020, , .		0
77	Li-doped ZnO Nanoparticles Reinforcement in PVDF Thermoplastic Matrix for 3D Printing of Charge Storage Devices. , 2020, , .		0
78	Chemical Assisted Thermoplastic Joining for Sustainability. , 2020, , .		0
79	Recycled HDPE reinforced Al2O3 and SiC three dimensional printed patterns for sandwich composite material. Engineering Research Express, 2019, 1, 015007.	0.8	5
80	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
81	On printability of PLA-PEKK-HAp-CS based functional prototypes with FDM: thermo-mechanical investigations. Materials Research Express, 2019, 6, 115338.	0.8	6
82	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
83	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
84	Development and Applications of Composites of Polymeric and Biodegradable Materials Since 1990. , 2019, , .		0
85	Recycling of Thermosetting Waste as Reinforcement Along With Ceramic Particles in Thermoplastic Matrix for Machining Applications. , 2019, , .		0
86	Processing of Melt Flow Compatible Thermoplastic Composites for Solid State Welding Applications. Materials Today: Proceedings, 2019, 18, 3167-3173.	0.9	4
87	Graphene Reinforced Composites as Sensing Elements. Key Engineering Materials, 2019, 826, 33-44.	0.4	0
88	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
89	Multi-Material Additive Manufacturing of Sustainable Innovative Materials and Structures. Polymers, 2019, 11, 62.	2.0	118
90	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

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91	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
92	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
93	Lithium ion assisted luminescence and ferromagnetism in europium doped zinc oxide. Materials Chemistry and Physics, 2018, 214, 306-319.	2.0	20
94	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
95	On the recyclability of polyamide for sustainable composite structures in civil engineering. Composite Structures, 2018, 184, 704-713.	3.1	95
96	Graphene as biomedical sensing element: State of art review and potential engineering applications. Composites Part B: Engineering, 2018, 134, 193-206.	5.9	113
97	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
98	Process Capability Analysis for Frictionally Welded Dissimilar Polymeric Materials. Materials Today: Proceedings, 2018, 5, 18502-18509.	0.9	1
99	On the 3D printing of recycled ABS, PLA and HIPS thermoplastics for structural applications. PSU Research Review, 2018, 2, 115-137.	1.3	81
100	Prospect of 3D Printing for Recycling of Plastic Product to Minimize Environmental Pollution. , 2018, , 289-289.		3
101	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
102	Investigations for Development of Feed Stock Filament of Fused Deposition Modeling From Recycled Polyamide. , 2018, , .		3
103	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
104	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
105	Prospect of Graphene for Use as Sensors in Miniaturized and Biomedical Sensing Devices. , 2018, , .		6
106	Investigating the Polymeric Composites for Online Repair and Maintenance. Materials Horizons, 2018, , 165-179.	0.3	0
107	Joining of Dissimilar Thermoplastic with Friction Stir Welding Through Rapid Tooling. , 2018, , 211-240.		0
108	Thermal Analysis for Joining of Dissimilar Polymeric Materials Through Friction Stir Welding. , 2017, , .		8

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109	Development of Low-Cost Graphene-Polymer Blended In-House Filament for Fused Deposition Modeling. , 2017, , 1081-1090.		13
110	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
111	Correlation between structural, optical and magnetic properties of Mn-doped ZnO. Applied Physics A: Materials Science and Processing, 2016, 122, 1.	1.1	31
112	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
113	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
114	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
115	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
116	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