

Sunil C. Joshi

List of Publications by Year in descending order

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133
papers

2,924
citations

172457

29
h-index

197818

49
g-index

135
all docs

135
docs citations

135
times ranked

2700
citing authors

#	ARTICLE	IF	CITATIONS
1	Quasi-static indentation characteristics of sandwich composites with hybrid facesheets: Experimental and numerical approach. <i>Journal of Sandwich Structures and Materials</i> , 2022, 24, 294-320.	3.5	5
2	Enhancement in Interply Toughness of BMI Composites Using Micro-Thin Films. <i>Journal of Composites Science</i> , 2021, 5, 49.	3.0	1
3	Manufacturing Optimization and Experimental Investigation of Ex-situ Core-shell Particles Toughened Carbon/ElumA® Thermoplastic Composites. <i>Fibers and Polymers</i> , 2021, 22, 1693.	2.1	7
4	Review: Filament Winding and Automated Fiber Placement with In Situ Consolidation for Fiber Reinforced Thermoplastic Polymer Composites. <i>Polymers</i> , 2021, 13, 1951.	4.5	58
5	Impact and Post-impact Analysis on Engineered Composites. <i>Composites Science and Technology</i> , 2021, , 87-106.	0.6	0
6	Tension-Compression Fatigue Induced Stress Concentrations in Woven Composite Laminate. <i>Journal of Composites Science</i> , 2021, 5, 297.	3.0	0
7	Optimizing Bladder Resin Transfer Molding Process to Manufacture Complex, Thin-Ply Thermoplastic Tubular Composite Structures: An Experimental Case Study. <i>Polymers</i> , 2021, 13, 4093.	4.5	6
8	Thermal Conductivity Enhancement and Shape Stabilization of Phase-Change Materials Using Three-Dimensional Graphene and Graphene Powder. <i>Energy & Fuels</i> , 2020, 34, 2435-2444.	5.1	25
9	A review of methods for improving interlaminar interfaces and fracture toughness of laminated composites. <i>Materials Today Communications</i> , 2020, 22, 100830.	1.9	43
10	Vibration damping and dynamic mechanical attributes of core-shell particles modified glass epoxy prepregs cured using microwave irradiations. <i>Composites Communications</i> , 2020, 21, 100412.	6.3	2
11	Boosting Inter-ply Fracture Toughness Data on Carbon Nanotube-Engineered Carbon Composites for Prognostics. <i>Journal of Composites Science</i> , 2020, 4, 170.	3.0	2
12	Damping, impact and flexural performance of novel carbon/ElumA® thermoplastic tubular composites. <i>Composites Part B: Engineering</i> , 2020, 203, 108480.	12.0	41
13	Knowledge based data boosting exposition on CNT-engineered carbon composites for machine learning. <i>Advanced Composites and Hybrid Materials</i> , 2020, 3, 354-364.	21.1	15
14	Quasi-static indentation response of core-shell particle reinforced novel NCCF/ElumA® composites at different feed rates. <i>Composites Communications</i> , 2020, 21, 100383.	6.3	19
15	Recent Advances on the Design Automation for Performance-Optimized Fiber Reinforced Polymer Composite Components. <i>Journal of Composites Science</i> , 2020, 4, 61.	3.0	16
16	Modeling fiber bridging and matrix strengthening effect in multiscale-woven composites. , 2020, , 69-89.		0
17	Manufacturing of multiscale interlaminar interface composites and quantitative analysis of interlaminar fracture toughness. , 2020, , 261-278.		2
18	Interlaminar fracture morphology of multiscale interlaminar interface composites. , 2020, , 301-319.		0

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19	Energy Characteristics and Failure Mechanisms for Textile Spread Tow Thin Ply Thermoplastic Composites under Low-velocity Impact. <i>Fibers and Polymers</i> , 2019, 20, 1716-1725.	2.1	21
20	Optimal segmented rotor design for the embedded electrical machine for the more electric aircraft. <i>Journal of Engineering</i> , 2019, 2019, 4321-4324.	1.1	6
21	Experimental and Microscopic Investigation on Mechanical Performance of Textile Spread-tow Thin Ply Composites. <i>Fibers and Polymers</i> , 2019, 20, 1036-1045.	2.1	30
22	Flexural characteristics of novel carbon methylmethacrylate composites. <i>Composites Communications</i> , 2019, 13, 129-133.	6.3	41
23	Bimodulus-plastic model for pre-failure analysis of fiber reinforced polymer composites. <i>Mechanics of Materials</i> , 2019, 134, 18-29.	3.2	3
24	OPTIMAL LAYUP SCHEMES WITH SELECTIVE DISPERSION OF CORE/SHELL MICROPARTICLES IN PLY INTERFACES OF GLASS/EPOXY COMPOSITE LAMINATES FOR LOW VELOCITY IMPACT. <i>Journal of Physics: Conference Series</i> , 2019, 1355, 012042.	0.4	0
25	Effect of fixation stitches on out-of-plane response of textile non-crimp fabric composites. <i>Journal of Industrial Textiles</i> , 2019, 48, 1151-1166.	2.4	17
26	Interfacial bonding between CFRP and mechanically-treated aluminum liner surfaces for risers. <i>Composite Structures</i> , 2018, 188, 374-386.	5.8	10
27	Damage advancement behavior in braided composite structures for mini aerial vehicles. <i>Mechanics of Advanced Materials and Structures</i> , 2018, 25, 889-900.	2.6	6
28	Mechanical and vibration response of insulated hybrid composites. <i>Journal of Industrial Textiles</i> , 2018, 47, 1887-1907.	2.4	25
29	Mode I fracture toughness and fractographic investigation of carbon fibre composites with liquid Methylmethacrylate thermoplastic matrix. <i>Composites Part B: Engineering</i> , 2018, 134, 246-253.	12.0	94
30	Enhancement Studies on Manufacturing and Properties of Novel Silica Aerogel Composites. <i>Gels</i> , 2018, 4, 5.	4.5	5
31	Low-velocity impact response of carbon fibre composites with novel liquid Methylmethacrylate thermoplastic matrix. <i>Composite Structures</i> , 2018, 203, 696-708.	5.8	72
32	Effects of Mechanical Surface Treatment on Bonding between Aluminum and Carbon/Epoxy Composites. <i>Procedia Engineering</i> , 2017, 184, 552-559.	1.2	7
33	Experimental and numerical investigation of process-induced deformations of glass/epoxy wind turbine blade spar cap. <i>Journal of Composite Materials</i> , 2017, 51, 3791-3806.	2.4	1
34	Process Development for Vacuum Brazed Niobium-316L Stainless Steel Transition Joints for Superconducting Cavities. <i>Journal of Manufacturing Science and Engineering, Transactions of the ASME</i> , 2017, 139, .	2.2	5
35	Enhanced vibration damping and dynamic mechanical characteristics of composites with novel pseudo-thermoset matrix system. <i>Composite Structures</i> , 2017, 179, 502-513.	5.8	68
36	Progressive failure analysis of 2D woven composites at the meso-micro scale. <i>Composite Structures</i> , 2017, 178, 395-405.	5.8	69

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37	Thermo-Mechanical Instability Characteristics of Laminated Composite Cylindrical Shells. Procedia Engineering, 2017, 214, 76-85.	1.2	1
38	Optimizing Polymer Infusion Process for Thin Ply Textile Composites with Novel Matrix System. Materials, 2017, 10, 293.	2.9	75
39	Multiscale Polymer Composites: A Review of the Interlaminar Fracture Toughness Improvement. Fibers, 2017, 5, 38.	4.0	66
40	Palliatives for Low Velocity Impact Damage in Composite Laminates. Advances in Materials Science and Engineering, 2017, 2017, 1-16.	1.8	13
41	Effect of Granule Sizes on Acoustic Properties of Protein-Based Silica Aerogel Composites via Novel Inferential Transmission Loss Method. Gels, 2016, 2, 11.	4.5	13
42	In-situ measurement and numerical simulation of resin pressure during Glass/Epoxy prepreg composite manufacturing. Measurement: Journal of the International Measurement Confederation, 2016, 94, 505-514.	5.0	6
43	Effects of Nanoporosity on the Mechanical Properties and Applications of Aerogels in Composite Structures. , 2016, , 97-126.		0
44	Experimental investigation on suitability of carbon fibre thin plies for racquets. Proceedings of the Institution of Mechanical Engineers, Part P: Journal of Sports Engineering and Technology, 2016, 230, 64-72.	0.7	10
45	Acoustic Performance of Silica Aerogel Composites. Engineering Materials, 2016, , 109-132.	0.6	2
46	Silica Aerogel Composites. Engineering Materials, 2016, , .	0.6	16
47	Flow-compacted deformations coupled with thermo-chemically induced distortions in manufacturing of thick unidirectional carbon fiber reinforced plastics composites. Journal of Composite Materials, 2016, 50, 3325-3343.	2.4	4
48	Tailoring of bonded composite scarf joint interface for impact damage mitigation and stiffness compatibility. Plastics, Rubber and Composites, 2016, 45, 43-49.	2.0	5
49	Magnetic Loading of Soft Magnetic Material Selection Implications for Embedded Machines in More Electric Engines. IEEE Transactions on Magnetics, 2016, 52, 1-6.	2.1	18
50	Initiation of structural defects in carbon fiber reinforced polymer composites under hygrothermal environments. Journal of Composite Materials, 2016, 50, 1085-1097.	2.4	12
51	Aerogels Today. Engineering Materials, 2016, , 5-14.	0.6	0
52	Constituent materials micro-damage modeling in predicting progressive failure of braided fiber composites. Composite Structures, 2016, 145, 194-202.	5.8	34
53	Environmental durability of glass fiber epoxy composites filled with core-shell polymer particles. Materials and Design, 2016, 92, 866-879.	7.0	14
54	Influence of cure kinetic, rheological and thermo-mechanical behavior on micro-level curing strain of an epoxy prepreg. Journal of Thermal Analysis and Calorimetry, 2016, 124, 305-316.	3.6	9

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55	Improved impact response of hygrothermally conditioned carbon/epoxy woven composites. Science and Engineering of Composite Materials, 2016, 23, 699-710.	1.4	3
56	Fabrication Methods. Engineering Materials, 2016, , 15-35.	0.6	2
57	Development and evaluation of aerogel-filled BMI sandwich panels for thermal barrier applications. AIMS Materials Science, 2016, 3, 938-953.	1.4	3
58	Microstructural Analysis. Engineering Materials, 2016, , 37-50.	0.6	0
59	A New Phenomenonâ€”Brittle to Ductile Transition. Engineering Materials, 2016, , 51-80.	0.6	0
60	Superhydrophobic and Ultralow Thermal Insulation. Engineering Materials, 2016, , 81-108.	0.6	1
61	Thermal conductivity variations with composition of gelatin-silica aerogel-sodium dodecyl sulfate with functionalized multi-walled carbon nanotube doping in their composites. International Journal of Heat and Mass Transfer, 2015, 87, 606-615.	4.8	28
62	3D printing in aerospace and its long-term sustainability. Virtual and Physical Prototyping, 2015, 10, 175-185.	10.4	398
63	Upper and lower bound buckling load of perfect and delaminated fiber-reinforced composite columns. Composite Structures, 2015, 122, 376-389.	5.8	2
64	Impact resistance of hygrothermally conditioned composite laminates with different lay-ups. Journal of Composite Materials, 2015, 49, 829-841.	2.4	18
65	Mechanical and Interfacial Properties Characterisation of Single Carbon Fibres for Composite Applications. Experimental Mechanics, 2015, 55, 1057-1065.	2.0	22
66	Fibre Bragg grating sensors for in-situ measurement of resin pressure in curing composites. , 2015, , .		0
67	Response of hygrothermally aged GLARE 4A laminates under static and cyclic loadings. Materials and Design, 2015, 87, 138-148.	7.0	40
68	Impact behavior and damage characteristics of hygrothermally conditioned carbon epoxy composite laminates. Materials & Design, 2015, 65, 254-264.	5.1	49
69	Microwaveâ€”thermal technique for energy and time efficient curing of carbon fiber reinforced polymer prepreg composites. Journal of Composite Materials, 2014, 48, 3035-3048.	2.4	52
70	Multi-scale simulation and finite-element-assisted computation of elastic properties of braided textile reinforced composites. Journal of Composite Materials, 2014, 48, 931-949.	2.4	41
71	High strain recovery with improved mechanical properties of gelatinâ€”silica aerogel composites post-binding treatment. Journal of Materials Science, 2014, 49, 163-179.	3.7	28
72	A New Phenomenon of Compressive Strain Recovery in Gelatin-silica Aerogel Composites with SDS. Procedia Engineering, 2014, 75, 51-55.	1.2	10

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73	Damage evolution in glass/epoxy composites engineered using core-shell microparticles under impact loading. Journal of Materials Science, 2013, 48, 8354-8367.	3.7	16
74	Simulation of bleeder flow and curing of thick composites with pressure and temperature dependent properties. Simulation Modelling Practice and Theory, 2013, 32, 64-82.	3.8	8
75	Heat Transfer Efficiency of Aluminum Substrates With Embedded Semi-Active Thermal Control Device. Heat Transfer Engineering, 2013, 34, 985-993.	1.9	1
76	Adaptive centroid-finding algorithm for freeform surface measurements. Applied Optics, 2013, 52, D75.	1.8	14
77	Energy Absorption Characteristics of Interface Modified GFRP Laminates under Low Velocity Impact. Advanced Materials Research, 2012, 626, 589-593.	0.3	2
78	Enhancing interlaminar fracture characteristics of woven CFRP prepreg composites through CNT dispersion. Journal of Composite Materials, 2012, 46, 665-675.	2.4	115
79	The pultrusion process for polymer matrix composites. , 2012, , 381-413.		18
80	Impact Damage Resistance of CFRP Prepreg Laminates with Dispersed CSP Particles into Ply Interfaces. International Journal of Damage Mechanics, 2012, 21, 1106-1127.	4.2	18
81	Sol-Gel Behavior of Hydroxypropyl Methylcellulose (HPMC) in Ionic Media Including Drug Release. Materials, 2011, 4, 1861-1905.	2.9	162
82	Outgassing studies on thermal control coatings for micro-satellites. Aircraft Engineering and Aerospace Technology, 2011, 83, 69-74.	0.8	0
83	Time-Variant Simulation of Multi-Material Thermal Pultrusion. Applied Composite Materials, 2011, 18, 283-296.	2.5	11
84	Optimizing functionally graded nickel-zirconia coating profiles for thermal stress relaxation. Simulation Modelling Practice and Theory, 2011, 19, 586-598.	3.8	21
85	ELASTIC PROPERTIES OF CNT-ENGINEERED POLYMER COMPOSITES USING MULTI-LEVEL MECHANICS APPROACH. Journal of Multiscale Modeling, 2011, 03, 271-289.	1.1	8
86	Reducing loss of resin flowing in porous fibrous media in simulation of composites fabrication. Polymer Composites, 2010, 31, 226-235.	4.6	0
87	Determination of pressure drop for concentrated suspension in a capillary flow. Polymer Composites, 2010, 31, 792-798.	4.6	1
88	Viscosity corrections for concentrated suspension in capillary flow with wall slip. AIChE Journal, 2010, 56, 1447-1455.	3.6	7
89	Data Analysis and Correlation for Thermal Balance Test on a Micro-Satellite Model. Heat Transfer Engineering, 2010, 31, 222-233.	1.9	3
90	Fabrication and Thermal Performance of Aerogel-filled Carbon Composite Sandwich Structures. , 2010, , .		2

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91	Heat Transfer Efficiency of Aluminium Substrates with Embedded Semi-active Thermal Control Device. , 2010, , .		0
92	Influence of surfactant properties on thermal behavior and sol-gel transitions in surfactant-HPMC mixtures. Journal of Applied Polymer Science, 2009, 113, 2887-2893.	2.6	10
93	End pressure corrections in capillary rheometry of concentrated suspensions. Journal of Applied Polymer Science, 2009, 114, 1738-1745.	2.6	2
94	Numerical analyses of peel demolding for UV embossing of high aspect ratio micro-patterning. Microsystem Technologies, 2009, 15, 581-593.	2.0	14
95	Pragmatism in semi-steady modular finite-grid simulation methodology for aerospace composites manufacturing. Simulation Modelling Practice and Theory, 2009, 17, 839-849.	3.8	3
96	Bio-fluid uptake and release of Indomethacin of direct-compressed HPMC tablets. Carbohydrate Polymers, 2009, 75, 282-286.	10.2	8
97	Swelling, Dissolution and Disintegration of HPMC in Aqueous Media. IFMBE Proceedings, 2009, , 1244-1247.	0.3	3
98	Effect of SDS on the gelation of hydroxypropylmethylcellulose hydrogels. Journal of Thermal Analysis and Calorimetry, 2008, 93, 495-501.	3.6	22
99	Gelation of methylcellulose hydrogels under isothermal conditions. Journal of Applied Polymer Science, 2008, 107, 2101-2108.	2.6	8
100	Effects of salts in the Hofmeister series and solvent isotopes on the gelation mechanisms for hydroxypropylmethylcellulose hydrogels. Journal of Applied Polymer Science, 2008, 109, 363-372.	2.6	53
101	Thermoreversible gelation of hydroxypropylmethylcellulose in simulated body fluids. Carbohydrate Polymers, 2008, 72, 133-143.	10.2	33
102	Effect of solvent state and isothermal conditions on gelation of methylcellulose hydrogels. Journal of Biomaterials Science, Polymer Edition, 2008, 19, 1611-1623.	3.5	11
103	Design and development of thermal test model of a micro-satellite for thermal balance test. Aircraft Engineering and Aerospace Technology, 2008, 80, 51-58.	0.8	1
104	Modelling leading to water entrapment point in thermally driven hydrogelation of methyl cellulose. E-Polymers, 2008, 8, .	3.0	2
105	Wall slip of concentrated suspension melts in capillary flows. Powder Technology, 2007, 177, 162-169.	4.2	33
106	Thermodynamic characteristics of gelation for methyl-cellulose hydrogels. Journal of Thermal Analysis and Calorimetry, 2007, 87, 475-482.	3.6	28
107	Cure Characterization Of TECHNOVIT 3040 For Micro Level Surface Replication. Materials Research Innovations, 2006, 10, 268-274.	2.3	0
108	Integrated approach for modelling cure and crystallization kinetics of different polymers in 3D pultrusion simulation. Journal of Materials Processing Technology, 2006, 174, 178-182.	6.3	38

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109	Radiation properties modeling for plasma-sprayed-alumina-coated rough surfaces for spacecrafts. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2006, 132, 209-214.	3.5	2
110	Modeling heat and degree of gelation for methyl cellulose hydrogels with NaCl additives. <i>Journal of Applied Polymer Science</i> , 2006, 101, 1620-1629.	2.6	27
111	Thermal Control Schemes for a Micro-Satellite with All-Active and Selectively Active Solar String Designs. <i>Heat Transfer Engineering</i> , 2006, 27, 80-89.	1.9	29
112	Development of reaction wheels housing for micro-satellites. <i>Aircraft Engineering and Aerospace Technology</i> , 2005, 77, 114-121.	0.8	1
113	Characterization of plasma-sprayed alumina as thermal control coating for micro-satellite applications. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2005, 219, 111-119.	1.1	1
114	DEMOLDING OF HIGH ASPECT RATIO POLYMERIC MICRO-PATTERNING. <i>International Journal of Nanoscience</i> , 2005, 04, 543-549.	0.7	6
115	Simulation and Investigation of Factors Affecting High Aspect Ratio UV Embossing. <i>Langmuir</i> , 2005, 21, 2000-2007.	3.5	31
116	Three-Dimensional FEA-NCV Modeling of Thermoplastic Composites Pultrusion. <i>Journal of Thermoplastic Composite Materials</i> , 2004, 17, 447-462.	4.2	12
117	Factors governing in situ fibre formation in LCP/PC blends. <i>Composites Part A: Applied Science and Manufacturing</i> , 2004, 35, 1033-1038.	7.6	3
118	Energy-based predictive criterion for LCP fibrillation in LCP/thermoplastic polymer blends under shear. <i>Journal of Applied Polymer Science</i> , 2003, 90, 3314-3324.	2.6	3
119	Simultaneous optimization of die-heating and pull-speed in pultrusion of thermosetting composites. <i>Polymer Composites</i> , 2003, 24, 199-209.	4.6	26
120	Effect of shear heating during injection molding on the morphology of PC/LCP blends. <i>Acta Materialia</i> , 2003, 51, 6269-6276.	7.9	24
121	Improved cure optimization in pultrusion with pre-heating and die-cooler temperature. <i>Composites Part A: Applied Science and Manufacturing</i> , 2003, 34, 1151-1159.	7.6	43
122	Power law fluids and Bingham plastics flow models for ceramic tape casting. <i>Journal of Materials Processing Technology</i> , 2002, 120, 215-225.	6.3	30
123	Curing optimization for pultruded composite sections. <i>Composites Science and Technology</i> , 2002, 62, 457-467.	7.8	49
124	Three-dimensional finite-element/nodal-control-volume simulation of the pultrusion process with temperature-dependent material properties including resin shrinkage. <i>Composites Science and Technology</i> , 2001, 61, 1539-1547.	7.8	52
125	Numerical simulation of the mould-filling process in resin-transfer moulding. <i>Composites Science and Technology</i> , 2000, 60, 845-855.	7.8	51
126	Modelling the Effects of Resin Shrinkage in Pultrusion of Composites Sections. <i>Advanced Composites Letters</i> , 2000, 9, 096369350000900.	1.3	4

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127	Mass conservation in numerical simulation of resin flow. Composites Part A: Applied Science and Manufacturing, 2000, 31, 1061-1068.	7.6	36
128	Simulation of Resin Film Infusion Process using Finite Element/Nodal Control Volume Approach. Advanced Composites Letters, 1999, 8, 096369359900800.	1.3	4
129	A numerical approach to the modeling of polymer curing in fibre-reinforced composites. Composites Science and Technology, 1999, 59, 1003-1013.	7.8	70
130	Diffusion Characteristics of Moisture in Polymer Composites under Different Hygrothermal Conditions. Advanced Materials Research, 0, 849, 69-74.	0.3	0
131	Bleeder Thickness Optimization for Controlling Resin Content in Thick Laminated Composites. Advanced Materials Research, 0, 740, 698-703.	0.3	3
132	Fractography of Particle Strengthening Mechanisms at Interfaces in Prepreg Composites. Advanced Materials Research, 0, 816-817, 196-200.	0.3	3
133	Design, Manufacturing and Testing of Filament Wound Composite Risers for Marine and Offshore Applications. Materials Science Forum, 0, 813, 337-343.	0.3	20