Suresh G Advani

List of Publications by Year
in descending order

362 papers	16,546 citations	13099 68 h-index	24258 110 g-index
373 all docs	373 docs citations	373 times ranked	8855 citing authors

#	Article	IF	Citations
1	The Use of Tensors to Describe and Predict Fiber Orientation in Short Fiber Composites. Journal of Rheology, 1987, 31, 751-784.	2.6	1,474
2	Melt processing and mechanical property characterization of multi-walled carbon nanotube/high density polyethylene (MWNT/HDPE) composite films. Carbon, 2003, 41, 2779-2785.	10.3	388
3	A finite element/control volume approach to mold filling in anisotropic porous media. Polymer Composites, 1990, 11, 398-405.	4.6	360
4	Closure approximations for threeâ€dimensional structure tensors. Journal of Rheology, 1990, 34, 367-386.	2.6	333
5	Interlaminar shear strength of glass fiber reinforced epoxy composites enhanced with multi-walled carbon nanotubes. Composites Part A: Applied Science and Manufacturing, 2008, 39, 540-554.	7.6	322
6	Experimental investigation of liquid water formation and transport in a transparent single-serpentine PEM fuel cell. Journal of Power Sources, 2007, 170, 334-344.	7.8	276
7	Use of epoxy/multiwalled carbon nanotubes as adhesives to join graphite fibre reinforced polymer composites. Nanotechnology, 2003, 14, 791-793.	2.6	214
8	Experimental determination of the permeability of engineering textiles: Benchmark II. Composites Part A: Applied Science and Manufacturing, 2014, 61, 172-184.	7.6	202
9	Experimental characterization of in-plane permeability of gas diffusion layers. Journal of Power Sources, 2006, 162, 1226-1231.	7.8	187
10	Rheology of multiwall carbon nanotube suspensions. Journal of Rheology, 2007, 51, 585-604.	2.6	177
11	Experimental study of an air-cooled thermal management system for high capacity lithiumâ€"titanate batteries. Journal of Power Sources, 2012, 216, 345-352.	7.8	170
12	Diffusion-induced growth of a gas bubble in a viscoelastic fluid. Rheologica Acta, 1991, 30, 274-283.	2.4	166
13	Analysis of the vacuum infusion moulding process: I. Analytical formulation. Composites Part A: Applied Science and Manufacturing, 2005, 36, 1645-1656.	7.6	165
14	On Flow through Aligned Fiber Beds and Its Application to Composites Processing. Journal of Composite Materials, 1992, 26, 1351-1373.	2.4	150
15	Permeability characterization. Part 1: A proposed standard reference fabric for permeability. Polymer Composites, 1995, 16, 429-445.	4.6	149
16	Properties of polyethylene-layered silicate nanocomposites prepared by melt intercalation with a PP-g-MA compatibilizer. Composites Science and Technology, 2005, 65, 1996-2002.	7.8	149
17	Desirable features in mold filling simulations for Liquid Composite Molding processes. Polymer Composites, 2004, 25, 355-367.	4.6	147
18	A numerical approach to model non-isothermal viscous flow through fibrous media with free surfaces. International Journal for Numerical Methods in Fluids, 1994, 19, 575-603.	1.6	146

#	Article	IF	Citations
19	Analysis of a femoral hip prosthesis designed to reduce stress shielding. Journal of Biomechanics, 2000, 33, 1655-1662.	2.1	142
20	Preparation and characterization of layered silicate/glass fiber/epoxy hybrid nanocomposites via vacuum-assisted resin transfer molding (VARTM). Composites Science and Technology, 2006, 66, 2116-2125.	7.8	139
21	Characterization of orientation state of carbon nanotubes in shear flow. Polymer, 2005, 46, 5232-5240.	3.8	133
22	Modelling and simulation of resin transfer moulding (RTM)â€"gate control, venting and dry spot prediction. Composites Part A: Applied Science and Manufacturing, 1996, 27, 135-141.	7.6	127
23	Experimental investigation of transverse flow through aligned cylinders. International Journal of Multiphase Flow, 1995, 21, 755-774.	3.4	125
24	Experimental investigation of dispersion during flow of multi-walled carbon nanotube/polymer suspension in fibrous porous media. Carbon, 2004, 42, 871-876.	10.3	123
25	The implications of fiber compaction and saturation on fully coupled VARTM simulation. Composites Part A: Applied Science and Manufacturing, 2004, 35, 159-169.	7.6	122
26	In situ comparison of water content and dynamics in parallel, single-serpentine, and interdigitated flow fields of polymer electrolyte membrane fuel cells. Journal of Power Sources, 2010, 195, 3553-3568.	7.8	120
27	Cobalt oxides as Co2B catalyst precursors for the hydrolysis of sodium borohydride solutions to generate hydrogen for PEM fuel cells. International Journal of Hydrogen Energy, 2008, 33, 7095-7102.	7.1	115
28	Power management system for a fuel cell/battery hybrid vehicle incorporating fuel cell and battery degradation. International Journal of Hydrogen Energy, 2019, 44, 8479-8492.	7.1	110
29	The interaction between micro- and macro-scopic flow in RTM preforms. Composite Structures, 1994, 27, 93-107.	5.8	108
30	High durability sulfonated poly (ether etherÂketone)-ceria nanocomposite membranes for proton exchange membrane fuel cell applications. Journal of Membrane Science, 2018, 556, 12-22.	8.2	108
31	Characterization and modeling of race-tracking in liquidcomposite molding processes. Composites Science and Technology, 1999, 59, 2215-2229.	7.8	105
32	A numerical model to predict fiber tow saturation during liquid composite molding. Composites Science and Technology, 2003, 63, 1725-1736.	7.8	104
33	A numerical simulation of short fiber orientation in compression molding. Polymer Composites, 1990, 11, 164-173.	4.6	100
34	Predicting the Orientation of Short Fibers in Thin Compression Moldings. Journal of Composite Materials, 1986, 20, 539-557.	2.4	99
35	Investigation of draping and its effects on the mold filling process during manufacturing of a compound curved composite part. Composites Part A: Applied Science and Manufacturing, 1997, 28, 801-816.	7.6	99
36	A numerical study of bubble growth during low pressure structural foam molding process. Polymer Engineering and Science, 1990, 30, 1330-1337.	3.1	98

#	Article	IF	Citations
37	Correlation of void distribution to VARTM manufacturing techniques. Composites Part A: Applied Science and Manufacturing, 2007, 38, 802-813.	7.6	98
38	Thin-film CoB catalyst templates for the hydrolysis of NaBH4 solution for hydrogen generation. Applied Catalysis B: Environmental, 2009, 86, 137-144.	20.2	98
39	Design and characterization of an electronically controlled variable flow rate ejector for fuel cell applications. International Journal of Hydrogen Energy, 2012, 37, 4457-4466.	7.1	98
40	The consolidation of commingled thermoplastic fabrics. Polymer Composites, 1991, 12, 417-427.	4.6	97
41	Permeability characterization of dual scale fibrous porous media. Composites Part A: Applied Science and Manufacturing, 2006, 37, 2057-2068.	7.6	96
42	Metal foams as flow field and gas diffusion layer in direct methanol fuel cells. Journal of Power Sources, 2007, 165, 49-57.	7.8	96
43	Role of processing on interlaminar shear strength enhancement of epoxy/glass fiber/multi-walled carbon nanotube hybrid composites. Carbon, 2010, 48, 3692-3699.	10.3	96
44	On the relative influence of convection in serpentine flow fields of PEM fuel cells. Journal of Power Sources, 2006, 161, 404-412.	7.8	93
45	Experimental investigation of in-line and staggered blockages in parallel flowfield channels of PEM fuel cells. International Journal of Hydrogen Energy, 2016, 41, 6885-6893.	7.1	93
46	Permeability model for a woven fabric. Polymer Composites, 1996, 17, 887-899.	4.6	92
47	Flow front measurements and model validation in the vacuum assisted resin transfer molding process. Polymer Composites, 2001, 22, 477-490.	4.6	92
48	Thermal analysis and management of lithiumâ€“titanate batteries. Journal of Power Sources, 2011, 196, 6517-6524.	7.8	92
49	An accurate numerical solution for mass diffusion-induced bubble growth in viscous liquids containing limited dissolved gas. International Journal of Heat and Mass Transfer, 1992, 35, 1711-1722.	4.8	91
50	A Model for Unsaturated Flow in Woven Fiber Preforms during Mold Filling in Resin Transfer Molding. Journal of Composite Materials, 1998, 32, 1753-1783.	2.4	91
51	Performance of a metallic gas diffusion layer for PEM fuel cells. Journal of Power Sources, 2008, 176, 293-298.	7.8	88
52	Numerical modelling of in-line and staggered blockages in parallel flowfield channels of PEM fuel cells. International Journal of Hydrogen Energy, 2017, 42, 2265-2277.	7.1	84
53	A generalized model for the transverse fluid permeability in unidirectional fibrous media. Polymer Composites, 1996, 17, 222-230.	4.6	80
54	Analytic characterization of the permeability of dual-scale fibrous porous media. Composites Science and Technology, 2006, 66, 2795-2803.	7.8	80

#	Article	IF	Citations
55	Manufacturing techniques for polymer matrix composites (PMCs). , 2012, , .		80
56	A Method to Determine 3D Permeability of Fibrous Reinforcements. Journal of Composite Materials, 2002, 36, 241-254.	2.4	79
57	Quantitative characterization of catalyst layer degradation in PEM fuel cells by X-ray photoelectron spectroscopy. Electrochimica Acta, 2009, 54, 4025-4030.	5.2	79
58	Transverse squeeze flow of concentrated aligned fibers in viscous fluids. Journal of Non-Newtonian Fluid Mechanics, 1996, 65, 47-74.	2.4	77
59	Use of genetic algorithms to optimize gate and vent locations for the resin transfer molding process. Polymer Composites, 1999, 20, 167-178.	4.6	77
60	A Closed Form Solution for Flow During the Vacuum Assisted Resin Transfer Molding Process. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2000, 122, 463-475.	2.2	77
61	Ultraviolet, water, and thermal aging studies of a waterborne polyurethane elastomer-based high reflectivity coating. Progress in Organic Coatings, 2015, 79, 75-82.	3.9	77
62	An approach to couple mold design and on-line control to manufacture complex composite parts by resin transfer molding. Composites Part A: Applied Science and Manufacturing, 2002, 33, 981-990.	7.6	76
63	A novel beam-down, gravity-fed, solar thermochemical receiver/reactor for direct solid particle decomposition: Design, modeling, and experimentation. International Journal of Hydrogen Energy, 2012, 37, 16871-16887.	7.1	76
64	Cerium Migration during PEM Fuel Cell Accelerated Stress Testing. Journal of the Electrochemical Society, 2016, 163, F1023-F1031.	2.9	76
65	In-plane permeability characterization of engineering textiles based on radial flow experiments: A benchmark exercise. Composites Part A: Applied Science and Manufacturing, 2019, 121, 100-114.	7.6	75
66	Nafion Membranes Reinforced with Ceria-Coated Multiwall Carbon Nanotubes for Improved Mechanical and Chemical Durability in Polymer Electrolyte Membrane Fuel Cells. Journal of Physical Chemistry C, 2014, 118, 26796-26802.	3.1	74
67	Investigation of fiber motion near solid boundaries in simple shear flow. Rheologica Acta, 2001, 40, 296-306.	2.4	71
68	Numerical simulation of unsaturated flow in woven fiber preforms during the resin transfer molding process. Polymer Composites, 1998, 19, 71-80.	4.6	70
69	Permeability characterization. Part 2: Flow behavior in multiple-layer preforms. Polymer Composites, 1995, 16, 446-458.	4.6	69
70	Modeling the impact of capillary pressure and air entrapment on fiber tow saturation during resin infusion in LCM. Composites Part A: Applied Science and Manufacturing, 2009, 40, 1053-1064.	7.6	69
71	Process analysis of compression resin transfer molding. Composites Part A: Applied Science and Manufacturing, 2009, 40, 431-441.	7.6	68
72	Effect of ceria loading on performance and durability of sulfonated poly (ether etherÂketone) nanocomposite membranes for proton exchange membrane fuel cell applications. Journal of Membrane Science, 2018, 565, 342-357.	8.2	68

#	Article	IF	Citations
73	Wear behavior of Carbon Nanotube/High Density Polyethylene composites. Mechanics of Materials, 2009, 41, 1108-1115.	3.2	67
74	Analysis, operation and maintenance of a fuel cell/battery series-hybrid bus for urban transit applications. Journal of Power Sources, 2010, 195, 3939-3949.	7.8	67
75	Rotating ring-disc electrode (RRDE) investigation of borohydride electro-oxidation. Journal of Power Sources, 2008, 182, 106-111.	7.8	66
76	A model to characterize acoustic softening during ultrasonic consolidation. Journal of Materials Processing Technology, 2013, 213, 1835-1845.	6.3	65
77	Flow near the permeable boundary of a porous medium: An experimental investigation using LDA. Experiments in Fluids, 1997, 22, 408-422.	2.4	64
78	Numerical computation of the fiber preform permeability tensor by the homogenization method. Polymer Composites, 2002, 23, 758-770.	4.6	63
79	A FAST NUMERICAL METHOD FOR ISOTHERMAL RESIN TRANSFER MOLD FILLING. International Journal for Numerical Methods in Engineering, 1996, 39, 1405-1417.	2.8	61
80	Fabric structure and mold curvature effects on preform permeability and mold filling in the RTM process. Part I. Experiments. Composites Part A: Applied Science and Manufacturing, 2000, 31, 423-438.	7.6	61
81	Performance simulation and analysis of a fuel cell/battery hybrid forklift truck. International Journal of Hydrogen Energy, 2013, 38, 4241-4249.	7.1	61
82	Nonisothermal bubble growth in polymeric foams. Polymer Engineering and Science, 1995, 35, 252-260.	3.1	60
83	Effective average permeability of multi-layer preforms in resin transfer molding. Composites Science and Technology, 1996, 56, 519-531.	7.8	60
84	Branch and bound search to optimize injection gate locations in liquid composite molding processes. Composites Part A: Applied Science and Manufacturing, 2002, 33, 1263-1272.	7.6	60
85	Effects of oxidative conditions on properties of multi-walled carbon nanotubes in polymer nanocomposites. Composites Science and Technology, 2007, 67, 1027-1034.	7.8	60
86	A Non-Isothermal Process Model for Consolidation and Void Reduction during In-Situ Tow Placement of Thermoplastic Composites. Journal of Composite Materials, 1995, 29, 1040-1062.	2.4	59
87	Numerical simulations of Stokesâ€"Brinkman equations for permeability prediction of dual scale fibrous porous media. Physics of Fluids, 2010, 22, .	4.0	58
88	Wicking across a Fiber-Bank. Journal of Colloid and Interface Science, 1996, 183, 100-110.	9.4	57
89	On-line strategic control of liquid composite mould filling process. Composites Part A: Applied Science and Manufacturing, 2000, 31, 1383-1394.	7.6	57
90	Flow sensing and control strategies to address race-tracking disturbances in resin transfer molding. Part I: design and algorithm development. Composites Part A: Applied Science and Manufacturing, 2004, 35, 1149-1159.	7.6	56

#	Article	IF	Citations
91	Hydrogen storage systems based on hydride materials with enhanced thermal conductivity. International Journal of Hydrogen Energy, 2012, 37, 290-298.	7.1	56
92	A methodology to reduce thermal gradients due to the exothermic reactions in composites processing. International Journal of Heat and Mass Transfer, 2002, 45, 1675-1684.	4.8	55
93	Modeling Flow in Compression Resin Transfer Molding for Manufacturing of Complex Lightweight High-Performance Automotive Parts. Journal of Composite Materials, 2008, 42, 2523-2545.	2.4	55
94	Fiber optic flow and cure sensing for liquid composite molding. Optics and Lasers in Engineering, 2001, 35, 91-104.	3.8	54
95	Investigation of unsaturated flow in woven, braided and stitched fiber mats during mold-filling in resin transfer molding. Polymer Composites, 2001, 22, 491-505.	4.6	54
96	Post-filling flow in vacuum assisted resin transfer molding processes: Theoretical analysis. Composites Part A: Applied Science and Manufacturing, 2009, 40, 913-924.	7.6	54
97	Integration of batteries with ultracapacitors for a fuel cell hybrid transit bus. Journal of Power Sources, 2012, 199, 360-366.	7.8	54
98	A simultaneous solution for flow and fiber orientation in axisymmetric diverging radial flow. Journal of Non-Newtonian Fluid Mechanics, 1993, 47, 107-136.	2.4	53
99	Numerical and analytical study to estimate the effect of two length scales upon the permeability of a fibrous porous medium. Transport in Porous Media, 1995, 21, 1-17.	2.6	53
100	Prediction-based optimal power management in a fuel cell/battery plug-in hybrid vehicle. Journal of Power Sources, 2010, 195, 6699-6708.	7.8	53
101	Resin flow analysis with fiber preform deformation in through thickness direction during Compression Resin Transfer Molding. Composites Part A: Applied Science and Manufacturing, 2010, 41, 881-887.	7.6	53
102	Influence of resin properties on interlaminar shear strength of glass/epoxy/MWNT hybrid composites. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1007-1016.	7.6	51
103	Degradation reduction of polymer electrolyte membranes using CeO2 as a free-radical scavenger in catalyst layer. Electrochimica Acta, 2013, 109, 775-780.	5.2	51
104	Fabric structure and mold curvature effects on preform permeability and mold filling in the RTM process. Part II. Predictions and comparisons with experiments. Composites Part A: Applied Science and Manufacturing, 2000, 31, 439-458.	7.6	50
105	Optimization of powerplant component size on board a fuel cell/battery hybrid bus for fuel economy and system durability. International Journal of Hydrogen Energy, 2019, 44, 18283-18292.	7.1	50
106	On the variability of permeability induced by reinforcement distortions and dual scale flow in liquid composite moulding: A review. Composites Part A: Applied Science and Manufacturing, 2019, 120, 188-210.	7.6	50
107	Hydrogen storage system based on hydride materials incorporating a helical-coil heat exchanger. International Journal of Hydrogen Energy, 2012, 37, 14292-14299.	7.1	49
108	Stochastic modeling of through the thickness permeability variation in a fabric and its effect on void formation during Vacuum Assisted Resin Transfer Molding. Composites Science and Technology, 2017, 149, 100-107.	7.8	49

#	Article	IF	Citations
109	Flow sensing and control strategies to address race-tracking disturbances in resin transfer moldingâ€"part II: automation and validation. Composites Part A: Applied Science and Manufacturing, 2005, 36, 1581-1589.	7.6	48
110	A model for thermoplastic melt impregnation of fiber bundles during consolidation of powder-impregnated continuous fiber composites. Composites Part A: Applied Science and Manufacturing, 2010, 41, 93-100.	7.6	48
111	Experimental validation of post-filling flow in vacuum assisted resin transfer molding processes. Composites Part A: Applied Science and Manufacturing, 2012, 43, 370-380.	7.6	48
112	The draping and consolidation of commingled fabrics. Composites Manufacturing, 1991, 2, 10-22.	0.2	47
113	Design and application of actively controlled injection schemes for resin-transfer molding. Composites Science and Technology, 2001, 61, 1625-1637.	7.8	47
114	A Modified Agglomerate Model with Discrete Catalyst Particles for the PEM Fuel Cell Catalyst Layer. Journal of the Electrochemical Society, 2013, 160, F750-F756.	2.9	47
115	Zr-doped ceria additives for enhanced PEM fuel cell durability and radical scavenger stability. Journal of Materials Chemistry A, 2017, 5, 15073-15079.	10.3	47
116	Composite Membrane Based on Graphene Oxide Sheets and Nafion for Polymer Electrolyte Membrane Fuel Cells. ECS Electrochemistry Letters, 2014, 4, F1-F4.	1.9	46
117	Experimental investigation and flow visualization of the resin-transfer mold-filling process in a non-planar geometry. Composites Science and Technology, 1997, 57, 23-33.	7.8	45
118	Experimental analysis and numerical modeling of flow channel effects in resin transfer molding. Polymer Composites, 2000, 21, 134-153.	4.6	45
119	In Situ Characterization of the Catalyst Layer in a Polymer Electrolyte Membrane Fuel Cell. Journal of the Electrochemical Society, 2007, 154, B1152.	2.9	45
120	Characterization of preform permeability in the presence of race tracking. Composites Part A: Applied Science and Manufacturing, 2004, 35, 1393-1405.	7.6	44
121	Infusion design methodology for thick-section, low-permeability preforms using inter-laminar flow media. Composites Part A: Applied Science and Manufacturing, 2007, 38, 525-534.	7.6	44
122	Three dimensional proton exchange membrane fuel cell cathode model using a modified agglomerate approach based on discrete catalyst particles. Journal of Power Sources, 2014, 250, 110-119.	7.8	43
123	Experimental investigation of flow through multi-layered preforms. Polymer Composites, 1997, 18, 649-655.	4.6	42
124	Durable and self-hydrating tungsten carbide-based composite polymer electrolyte membrane fuel cells. Nature Communications, 2017, 8, 418.	12.8	42
125	Simultaneous Neutron and Optical Imaging in PEM Fuel Cells. Journal of the Electrochemical Society, 2009, 156, B109.	2.9	41
126	Simulation based flow distribution network optimization for vacuum assisted resin transfer moulding process. Modelling and Simulation in Materials Science and Engineering, 2004, 12, S175-S190.	2.0	40

#	Article	IF	Citations
127	Characterization of 3D fiber preform permeability tensor in radial flow using an inverse algorithm based on sensors and simulation. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1283-1292.	7.6	40
128	Resin film impregnation in fabric prepregs with dual length scale permeability. Composites Part A: Applied Science and Manufacturing, 2013, 53, 118-128.	7.6	39
129	A closed form solution to describe infusion of resin under vacuum in deformable fibrous porous media. Modelling and Simulation in Materials Science and Engineering, 2004, 12, S191-S204.	2.0	38
130	Modeling of filtration through multiple layers of dual scale fibrous porous media. Polymer Composites, 2006, 27, 570-581.	4.6	38
131	The effect of fabric and fiber tow shear on dual scale flow and fiber bundle saturation during liquid molding of textile composites. International Journal of Material Forming, 2012, 5, 83-97.	2.0	38
132	A methodology to reduce variability during vacuum infusion with optimized design of distribution media. Composites Part A: Applied Science and Manufacturing, 2015, 78, 223-233.	7.6	38
133	Experimental Investigation of the Carbothermal Reduction of ZnO Using a Beam-Down, Gravity-Fed Solar Reactor. Industrial & Engineering Chemistry Research, 2015, 54, 8319-8332.	3.7	38
134	Experimental Characterization of the Influence of Tackifier Material on Preform Permeability. Journal of Composite Materials, 2002, 36, 2297-2310.	2.4	37
135	Permeability estimation algorithm to simultaneously characterize the distribution media and the fabric preform in vacuum assisted resin transfer molding process. Composites Science and Technology, 2005, 65, 2129-2139.	7.8	37
136	Modeling resin flow and fiber tow saturation induced by distribution media collapse in VARTM. Composites Science and Technology, 2007, 67, 2757-2769.	7.8	37
137	A closed form solution for flow in dual scale fibrous porous media under constant injection pressure conditions. Composites Science and Technology, 2008, 68, 699-708.	7.8	37
138	Role of heat pipes in improving the hydrogen charging rate in a metal hydride storage tank. International Journal of Hydrogen Energy, 2014, 39, 10552-10563.	7.1	37
139	Role of friction on the thermal development in ultrasonically consolidated aluminum foils and composites. Journal of Materials Processing Technology, 2011, 211, 1864-1877.	6.3	36
140	Simulation and experimental validation of flow flooding chamber method of resin delivery in liquid composite molding. Composites Part A: Applied Science and Manufacturing, 2007, 38, 2131-2141.	7.6	35
141	Investigation of a polymer electrolyte membrane fuel cell catalyst layer with bidirectionally-graded composition. Journal of Power Sources, 2014, 270, 594-602.	7.8	35
142	Characterization of orientation clustering in short-fiber composites. Journal of Polymer Science, Part B: Polymer Physics, 1990, 28, 2651-2672.	2.1	33
143	Role of micro-convection due to non-affine motion of particles in a mono-disperse suspension. International Journal of Heat and Mass Transfer, 1995, 38, 2945-2958.	4.8	32
144	Investigation of a copper etching technique to fabricate metallic gas diffusion media. Journal of Micromechanics and Microengineering, 2006, 16, N23-N27.	2.6	32

#	Article	IF	Citations
145	Liquid Composite Molding control methodologies using Vacuum Induced Preform Relaxation. Composites Part A: Applied Science and Manufacturing, 2011, 42, 57-65.	7.6	32
146	A 3D microstructure based resistor network model for the electrical resistivity of unidirectional carbon composites. Composite Structures, 2015, 134, 740-749.	5.8	32
147	Influence of Void Shape, Void Volume and Matrix Anisotropy on Effective Thermal Conductivity of a Three-Phase Composite. Journal of Composite Materials, 1996, 30, 933-946.	2.4	31
148	Simultaneous gate and vent location optimization in liquid composite molding processes. Composites Part A: Applied Science and Manufacturing, 2004, 35, 1419-1432.	7.6	31
149	High Through-thickness Thermal Conductivity Composites Based on Three-Dimensional Woven Fiber Architectures. AIAA Journal, 2008, 46, 2944-2954.	2.6	31
150	Energy and bond strength development during ultrasonic consolidation. Journal of Materials Processing Technology, 2014, 214, 1665-1672.	6.3	31
151	A comparison of rule-based and model predictive controller-based power management strategies for fuel cell/battery hybrid vehicles considering degradation. International Journal of Hydrogen Energy, 2020, 45, 33948-33956.	7.1	31
152	A methodology for using long-period gratings and mold-filling simulations to minimize the intrusiveness of flow sensors in liquid composite molding. Composites Science and Technology, 2002, 62, 311-327.	7.8	30
153	A robust cell voltage monitoring system for analysis and diagnosis of fuel cell or battery systems. Journal of Power Sources, 2010, 195, 8006-8012.	7.8	30
154	A non-local void filling model to describe its dynamics during processing thermoplastic composites. Composites Part A: Applied Science and Manufacturing, 2013, 46, 154-165.	7.6	30
155	A model of two-phase resin and void flow during composites processing. International Journal of Multiphase Flow, 2014, 65, 51-60.	3.4	30
156	Optimization of polymer electrolyte membrane fuel cell flow channels using a genetic algorithm. Journal of Power Sources, 2011, 196, 9407-9418.	7.8	29
157	Prediction of effective through-thickness thermal conductivity of woven fabric reinforced composites with embedded particles. Composite Structures, 2015, 127, 132-140.	5.8	29
158	3D modeling of squeeze flow of multiaxial laminates. Journal of Non-Newtonian Fluid Mechanics, 2016, 234, 188-200.	2.4	29
159	Determination of the Transverse Permeability of a Fiber Preform. Journal of Reinforced Plastics and Composites, 1999, 18, 1450-1464.	3.1	28
160	Nafion membranes reinforced with magnetically controlled Fe3O4â€"MWCNTs for PEMFCs. Journal of Materials Chemistry, 2012, 22, 14008.	6.7	28
161	Mechanical Stability of H3PO4-Doped PBI/Hydrophilic-Pretreated PTFE Membranes for High Temperature PEMFCs. Electrochimica Acta, 2014, 120, 30-38.	5.2	28
162	Cerium Ion Mobility and Diffusivity Rates in Perfluorosulfonic Acid Membranes Measured via Hydrogen Pump Operation. Journal of the Electrochemical Society, 2017, 164, F1272-F1278.	2.9	28

#	Article	IF	Citations
163	Use of Centroidal Voronoi Diagram to find optimal gate locations to minimize mold filling time in resin transfer molding. Composites Part A: Applied Science and Manufacturing, 2016, 87, 243-255.	7.6	27
164	PBI/Nafion/SiO2 hybrid membrane for high-temperature low-humidity fuel cell applications. Electrochimica Acta, 2013, 105, 530-534.	5.2	26
165	Second-order boundary element method calculations of hydrodynamic interactions between particles in close proximity. International Journal for Numerical Methods in Fluids, 1992, 14, 1063-1086.	1.6	25
166	Energy equation and the crystallization kinetics of semi-crystalline polymers: regimes of coupling. International Journal of Heat and Mass Transfer, 1995, 38, 819-832.	4.8	25
167	Stochastic modeling of preform heterogeneity to address dry spots formation in the VARTM Process. Composites Part A: Applied Science and Manufacturing, 2005, 36, 851-858.	7.6	25
168	Automated manufacturing environment to address bulk permeability variations and race tracking in resin transfer molding by redirecting flow with auxiliary gates. Composites Part A: Applied Science and Manufacturing, 2005, 36, 1128-1141.	7.6	25
169	Flow analysis during compression of partially impregnated fiber preform under controlled force. Composites Science and Technology, 2010, 70, 725-733.	7.8	25
170	A phenomenological model for fiber tow saturation of dual scale fabrics in liquid composite molding. Polymer Composites, 2010, 31, 1881-1889.	4.6	25
171	Direct simulations of particle deposition and filtration in dual-scale porous media. Composites Part A: Applied Science and Manufacturing, 2011, 42, 1344-1352.	7.6	25
172	Synthesis and evaluation of polythiocyanogen (SCN) as a rechargeable lithium-ion battery electrode material. Journal of Power Sources, 2011, 196, 7755-7759.	7.8	25
173	Magneli phase Ti n O2n â˜ 1 as corrosion-resistant PEM fuel cell catalyst support. Journal of Solid State Electrochemistry, 2012, 16, 2515-2521.	2.5	25
174	Membrane Electrode Assembly with Enhanced Membrane/Electrode Interface for Proton Exchange Membrane Fuel Cells. Journal of Physical Chemistry C, 2013, 117, 945-948.	3.1	25
175	Spontaneous radial capillary impregnation across a bank of aligned micro-cylinders â€“ Part I: Theory and model development. International Journal of Multiphase Flow, 2006, 32, 661-676.	3.4	24
176	An Improved Agglomerate Model for the PEM Catalyst Layer with Accurate Effective Surface Area Calculation Based on the Sphere-Packing Approach. Journal of the Electrochemical Society, 2014, 161, F803-F813.	2.9	24
177	An approach to enhance through-thickness thermal conductivity of polymeric fiber composites. International Journal of Heat and Mass Transfer, 2013, 59, 20-28.	4.8	23
178	Double-layer gas diffusion media for improved water management in polymer electrolyte membrane fuel cells. Journal of Power Sources, 2015, 292, 39-48.	7.8	23
179	Fiber suspension in 2D nonhomogeneous flow: The effects of flow/fiber coupling for Newtonian and power-law suspending fluids. Journal of Rheology, 2019, 63, 405-418.	2.6	23
180	A nonlinear control method for resin transfer molding. Polymer Composites, 1997, 18, 412-417.	4.6	22

#	Article	IF	Citations
181	Analysis and Characterization of Relative Permeability and Capillary Pressure for Free Surface Flow of a Viscous Fluid across an Array of Aligned Cylindrical Fibers. Journal of Colloid and Interface Science, 2002, 245, 325-337.	9.4	22
182	Transmission electron microscopy of an ultrasonically consolidated copperâ€"aluminum interface. Journal of Materials Research, 2014, 29, 1970-1977.	2.6	22
183	Effect of relative ply orientation on the through-thickness permeability of unidirectional fabrics. Composites Science and Technology, 2014, 96, 116-121.	7.8	22
184	Experimental Investigation of Heat Dispersion Due to Impregnation of Viscous Fluids in Heated Fibrous Porous During Composites Processing. Journal of Heat Transfer, 2001, 123, 178-187.	2.1	21
185	Ionic Liquid-Based Composite Membrane for PEMFCs Operating under Low Relative Humidity Conditions. Electrochemical and Solid-State Letters, 2012, 15, B44.	2.2	21
186	A process model for the compaction and saturation of partially impregnated thermoset prepreg tapes. Composites Part A: Applied Science and Manufacturing, 2014, 64, 234-244.	7.6	21
187	Cerium Migration during PEM Fuel Cell Assembly and Operation. ECS Transactions, 2015, 69, 1009-1015.	0.5	21
188	Role of vacuum pressure and port locations on flow front control for liquid composite molding process. Polymer Composites, 2001, 22, 660-667.	4.6	20
189	Mechanical properties of composite structures fabricated with the vacuum induced preform relaxation process. Composite Structures, 2010, 92, 2811-2816.	5.8	20
190	Characterization of bubble mobility in channel flow with fibrous porous media walls. International Journal of Multiphase Flow, 2014, 60, 76-86.	3.4	20
191	Flow near the permeable boundary of an aligned fiber preform: An experimental investigation using laser doppler anemometry. Polymer Composites, 1997, 18, 114-124.	4.6	19
192	Drag on a nanotube in uniform liquid argon flow. Journal of Chemical Physics, 2006, 125, 174706.	3.0	19
193	Use of magnetic resonance imaging to visualize impregnation across aligned cylinders due to capillary forces. Experiments in Fluids, 2007, 42, 425-440.	2.4	19
194	Regulating methanol feed concentration in direct methanol fuel cells using feedback from voltage measurements. Journal of Power Sources, 2009, 187, 415-421.	7.8	19
195	Optimization of polymer electrolyte membrane fuel cell catalyst layer with bidirectionally-graded composition. Electrochimica Acta, 2015, 174, 787-798.	5.2	19
196	Use of medial axis to find optimal channel designs to reduce mold filling time in resin transfer molding. Composites Part A: Applied Science and Manufacturing, 2017, 95, 161-172.	7.6	19
197	Investigation of the role of transverse flow in co-injection resin transfer molding. Polymer Composites, 1998, 19, 738-746.	4.6	18
198	Combinatorial Search to Optimize Vent Locations in the Presence of Disturbances in Liquid Composite Molding Processes. Materials and Manufacturing Processes, 2003, 18, 261-285.	4.7	18

#	Article	IF	Citations
199	Determination of the Thermal Dispersion Coefficient During Radial Filling of a Porous Medium. Journal of Heat Transfer, 2003, 125, 875-880.	2.1	18
200	Mesolevel analysis of the transition region formation and evolution during the liquid composite molding process. Computers and Structures, 2004, 82, 1333-1347.	4.4	18
201	Characterization of 3D fabric permeability with skew terms. Composites Part A: Applied Science and Manufacturing, 2017, 97, 51-59.	7.6	18
202	Entrapment and venting of bubbles during vacuum bag prepreg processing. Journal of Composite Materials, 2017, 51, 2757-2768.	2.4	18
203	Permeability Estimation with the Method of Cells. Journal of Composite Materials, 2001, 35, 713-728.	2.4	17
204	Drive-train simulator for a fuel cell hybrid vehicle. Journal of Power Sources, 2008, 183, 275-281.	7.8	17
205	Durability Analysis of Nafion/Hydrophilic Pretreated PTFE Membranes for PEMFCs. Journal of the Electrochemical Society, 2012, 159, F864-F870.	2.9	17
206	Simulating tape resin infiltration during thermoset pultrusion process. Composites Part A: Applied Science and Manufacturing, 2015, 72, 115-126.	7.6	17
207	Porosity predictions during co-cure of honeycomb core prepreg sandwich structures. Composites Part A: Applied Science and Manufacturing, 2020, 132, 105824.	7.6	17
208	A model long-discontinuous-fiber filled thermoplastic melt in extensional flow. Journal of Non-Newtonian Fluid Mechanics, 1997, 73, 261-278.	2.4	16
209	Modified effective thermal conductivity due to heat dispersion in fibrous porous media. International Journal of Heat and Mass Transfer, 1999, 42, 1237-1254.	4.8	16
210	Influence of injection gate definition on the flow-front approximation in numerical simulations of mold-filling processes. International Journal for Numerical Methods in Fluids, 2003, 42, 1237-1248.	1.6	16
211	Slow drag in granular materials under high pressure. Physical Review E, 2004, 69, 061306.	2.1	16
212	Simulation and validation of resin flow during manufacturing of composite panels containing embedded impermeable inserts with the VARTM process. Polymer Composites, 2007, 28, 442-450.	4.6	16
213	Self-Hydrating Pt/CeO2-Nafion Composite Membrane for Improved Durability and Performance. ECS Electrochemistry Letters, 2014, 3, F30-F32.	1.9	16
214	Gas Evacuation from Partially Saturated Woven Fiber Laminates. Transport in Porous Media, 2016, 115, 541-562.	2.6	16
215	Role of fiber distribution and air evacuation time on capillary driven flow into fiber tows. Composites Part A: Applied Science and Manufacturing, 2017, 93, 144-152.	7.6	16
216	Effective permeability averaging scheme to address in-plane anisotropy effects in multi-layered preforms. Composites Part A: Applied Science and Manufacturing, 2018, 113, 359-369.	7.6	16

#	Article	IF	Citations
217	Influence of material and process parameters on microstructure evolution during the fabrication of carbonâ€"carbon composites: a review. Journal of Materials Science, 2021, 56, 17877-17914.	3.7	16
218	Design and Development of an I-Beam from Natural Composites. Journal of Biobased Materials and Bioenergy, 2009, 3, 181-187.	0.3	16
219	Preliminary Study on Composite Hip Prostheses Made by Resin Transfer Molding. Journal of Composite Materials, 1999, 33, 852-870.	2.4	15
220	Accelerating hydrogen absorption in a metal hydride storage tank by physical mixing. International Journal of Hydrogen Energy, 2014, 39, 11035-11046.	7.1	15
221	Self-Healing Composite Membrane for Proton Electrolyte Membrane Fuel Cell Applications. Journal of the Electrochemical Society, 2016, 163, F1267-F1271.	2.9	15
222	Prediction of capillary pressure for resin flow between fibers. Composites Science and Technology, 2016, 126, 130-138.	7.8	15
223	A review on selfâ€healing polymers and polymer composites for structural applications. Polymer Composites, 2022, 43, 7643-7668.	4.6	15
224	A continuum approach to determination of elastic properties of short fibre composites. Mechanics of Composite Materials, 1993, 29, 127-137.	1.4	14
225	Vent Location Optimization Using Map-Based Exhaustive Search in Liquid Composite Molding Processes. Materials and Manufacturing Processes, 2004, 19, 523-548.	4.7	14
226	Slow drag in polydisperse granular mixtures under high pressure. Physical Review E, 2005, 71, 061304.	2.1	14
227	Spontaneous radial capillary impregnation across a bank of aligned micro-cylinders. Part II: Experimental investigations. International Journal of Multiphase Flow, 2006, 32, 677-691.	3.4	14
228	Random field generation of stochastically varying through the thickness permeability of a plain woven fabric. Composites Science and Technology, 2018, 159, 199-207.	7.8	14
229	A new methodology for race-tracking detection and criticality in resin transfer molding process using pressure sensors. Journal of Composite Materials, 2018, 52, 4087-4103.	2.4	14
230	Processing and properties of co-injected resin transfer molded vinyl ester and phenolic composites. Polymer Composites, 1999, 20, 780-788.	4.6	13
231	Simulation of injection molding into rapidâ€prototyped molds. Rapid Prototyping Journal, 2001, 7, 42-51.	3.2	13
232	Amino Functionalization of MWNTs and Their Effect on ILSS of Hybrid Nanocomposites. Composite Interfaces, 2011, 18, 339-355.	2.3	13
233	Role of in-plane stacking sequence on transverse effective thermal conductivity of unidirectional composite laminates. International Journal of Heat and Mass Transfer, 2015, 85, 897-903.	4.8	13
234	Cerium Migration in Polymer Electrolyte Membranes. ECS Transactions, 2016, 75, 707-714.	0.5	13

#	Article	IF	Citations
235	Novel epoxy powder for manufacturing thick-section composite parts under vacuum-bag-only conditions. Part I: Through-thickness process modelling. Composites Part A: Applied Science and Manufacturing, 2020, 136, 105969.	7.6	13
236	An experimental investigation of consolidation in thermoplastic filament winding. Composites Manufacturing, 1991, 2, 97-104.	0.2	12
237	A cell model to describe the spherulitic growth in semicrystalline polymers. Polymer Engineering and Science, 1996, 36, 520-534.	3.1	12
238	A theory to describe heat transfer during laminar incompressible flow of a fluid in periodic porous media. Physics of Fluids, 1999, 11, 1738-1748.	4.0	12
239	Simulation of slowly dragging a cylinder through a confined pressurized bed of granular materials using the discrete element method. Physics of Fluids, 2007, 19, 013301.	4.0	12
240	Resin flow modeling in compliant porous media: an efficient approach for liquid composite molding. International Journal of Material Forming, 2018, 11, 503-515.	2.0	12
241	Influence of filament distribution on transverse tow permeability: Model predictions and experimental validation. Composites Part A: Applied Science and Manufacturing, 2019, 118, 150-161.	7.6	12
242	Prediction of process-induced void formation in anisotropic Fiber-reinforced autoclave composite parts. International Journal of Material Forming, 2020, 13, 143-158.	2.0	12
243	Experimental and Numerical Studies of Enhanced Interdigitated Flow Field for PEM Fuel Cells. Journal of Energy Engineering - ASCE, 2021, 147, .	1.9	12
244	Fluid Impregnation of Deformed Preforms. Journal of Reinforced Plastics and Composites, 2000, 19, 552-568.	3.1	12
245	The evolution of radial fingering in a Hele-Shaw cell using C1 continuous overhauser boundary element method. Engineering Analysis With Boundary Elements, 1995, 16, 183-195.	3.7	11
246	Sensor placement study for online flow monitoring in liquid composite molding. Polymer Composites, 2000, 21, 436-449.	4.6	11
247	Use of sensors and actuators to address flow disturbances during the resin transfer molding process. Polymer Composites, 2003, 24, 237-248.	4.6	11
248	Effects of interaction volume on X-ray line-scans across an ultrasonically consolidated aluminum/copper interface. Scanning, 2013, 35, 327-335.	1.5	11
249	A Predictive Model for Heat Flow During Crystallization of Semi-Crystalline Polymers. Journal of Thermoplastic Composite Materials, 1990, 3, 90-109.	4.2	10
250	A BEM approach to model heat flow during crystallization. International Journal for Numerical Methods in Engineering, 1992, 35, 351-368.	2.8	10
251	Processing models and characterization of thermoplastic composite wound parts. Polymer Composites, 1997, 18, 405-411.	4.6	10
252	Gate elements at injection locations in numerical simulations of flow through porous media: applications to mold filling. International Journal for Numerical Methods in Engineering, 2004, 61, 1501-1519.	2.8	10

#	Article	IF	Citations
253	Role of acceleration forces in numerical simulation of mold filling processes in fibrous porous media. Composites Part A: Applied Science and Manufacturing, 2006, 37, 1970-1982.	7.6	10
254	A functional monomer to synthesize sulfonated poly(ether ether ketone) with sulfonic acid group in the pendant side chain. Journal of Applied Polymer Science, 2012, 123, 3331-3336.	2.6	10
255	Adhesion study of high reflectivity water-based coatings. International Journal of Adhesion and Adhesives, 2013, 40, 120-128.	2.9	10
256	A model to describe stickâ€"slip transition time during ultrasonic consolidation. International Journal of Advanced Manufacturing Technology, 2015, 79, 1931-1937.	3.0	10
257	A model for fibre washout during high injection pressure resin transfer moulding. Journal of Reinforced Plastics and Composites, 2018, 37, 865-876.	3.1	10
258	Manifold embedding of heterogeneity in permeability of a woven fabric for optimization of the VARTM process. Composites Science and Technology, 2018, 168, 238-245.	7.8	10
259	Simulation and Validation of Injection-Compression Filling Stage of Liquid Moulding with Fast Curing Resins. Applied Composite Materials, 2019, 26, 41-63.	2.5	10
260	Comparison of in-plane resin transfer molding and vacuum-assisted resin transfer molding â€˜effectiveâ€™ permeabilities based on mold filling experiments and simulations. Journal of Reinforced Plastics and Composites, 2020, 39, 31-44.	3.1	10
261	A continuum approach for consolidation modeling in composites processing. Composites Science and Technology, 2020, 186, 107892.	7.8	10
262	Gate Effectiveness in Controlling Resin Advance in Liquid Composite Molding Processes. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2003, 125, 548-555.	2.2	9
263	Design and Testing of a New Injection Approach for Liquid Composite Molding. Journal of Reinforced Plastics and Composites, 2004, 23, 1625-1638.	3.1	9
264	Experimental Investigation of Vortex Flow in a Two-Chamber Solar Thermochemical Reactor. Journal of Fluids Engineering, Transactions of the ASME, 2013, 135, .	1.5	9
265	Analytic method to estimate multiple equivalent permeability components from a single rectilinear experiment in liquid composite molding processes. Composites Part A: Applied Science and Manufacturing, 2014, 67, 157-170.	7.6	9
266	The Effects of Cerium Migration on PEM Fuel Cell Performance. ECS Transactions, 2017, 80, 643-650.	0.5	9
267	Modeling of anisotropic dual scale flow in RTM using the finite elements method. Composites Part B: Engineering, 2021, 214, 108735.	12.0	9
268	Thermoset Resin Cure Kinetics and Rheology. , 2000, , 32-107.		9
269	Non-Linear response of a long, discontinuous fiber/melt system in elongational flows. Rheologica Acta, 1996, 35, 347-355.	2.4	8
270	Flow Instabilities during the Squeeze Flow of Multiaxial Laminates. Journal of Composite Materials, 1997, 31, 2146-2160.	2.4	8

#	Article	IF	Citations
271	<title>Long-period gratings as flow sensors for liquid-composite molding</title>. , 2000, 3993, 240.		8
272	Survey of Stress Analyses of the Femoral Hip Prosthesis. Applied Mechanics Reviews, 2000, 53, 1-18.	10.1	8
273	Free boundary viscous flows at micro and mesolevel during liquid composites moulding process. International Journal for Numerical Methods in Fluids, 2004, 46, 435-455.	1.6	8
274	Filtration of Particles through a Single Layer of Dual Scale Fibrous Porous Media. Advanced Composites Letters, 2007, 16, 096369350701600.	1.3	8
275	Temperature distribution in a thin composite plate exposed to a concentrated heat source. International Journal of Heat and Mass Transfer, 2007, 50, 2883-2894.	4.8	8
276	Methanol diffusion rates through the anode diffusion layer in direct methanol fuel cells from limiting current measurements. Heat and Mass Transfer, 2008, 44, 1199-1206.	2.1	8
277	Opportunities and challenges of multiscale modeling and simulation in polymer composite processing. International Journal of Material Forming, 2009, 2, 39-44.	2.0	8
278	Coupling of Kinetic and Mass Transfer Processes in Direct Methanol Fuel Cells. Journal of the Electrochemical Society, 2010, 157, B1443.	2.9	8
279	Experimental investigation of ZnO powder flow and feeding characterization for a solar thermochemical reactor. Powder Technology, 2014, 261, 219-231.	4.2	8
280	Comparison of two finite element homogenization prediction approaches for through thickness thermal conductivity of particle embedded textile composites. Composite Structures, 2015, 133, 719-726.	5.8	8
281	Axisymmetric flow simulations of fiber suspensions as described by 3D probability distribution function. Journal of Non-Newtonian Fluid Mechanics, 2020, 284, 104367.	2.4	8
282	Solidification of semicrystalline polymers using a variable interface temperature model. Journal of Polymer Science, Part B: Polymer Physics, 1996, 34, 471-483.	2.1	7
283	An experimental investigation of initial oscillations in a radial Hele-Shaw cell. Experiments in Fluids, 1996, 21, 187-200.	2.4	7
284	Role of coupling microscopic and macroscopic phenomena during the crystallization of semicrystalline polymers. Polymer Engineering and Science, 2001, 41, 1871-1885.	3.1	7
285	Spatially homogeneous gelation in liquid composite molding. Polymer Engineering and Science, 2002, 42, 1667-1673.	3.1	7
286	On-line mixing during injection and simultaneous curing in liquid composite molding processes. Polymer Composites, 2005, 26, 74-83.	4.6	7
287	Simulating three-dimensional flow in compression resin transfer molding process. Revue Europeenne Des Elements, 2005, 14, 777-802.	0.1	7
288	Enhancement of adhesion between copper and vinyl ester in glass fiberâ€"vinyl ester composites. Composite Interfaces, 2007, 14, 99-116.	2.3	7

#	Article	IF	Citations
289	Freezeâˆ•Thaw Durability Study of MWCNT-Reinforced Nafion Membranes. Journal of the Electrochemical Society, 2011, 158, B1499.	2.9	7
290	Composite Membrane Based on SiO2-MWCNTs and Nafion for PEMFCs. Journal of the Electrochemical Society, 2012, 159, F490-F493.	2.9	7
291	A method to determine open pore volume with pulse decay. Applied Physics Letters, 2014, 105, .	3.3	7
292	Model-based characterization and enhancement of the through-thickness thermal conductivity of polymer compositesÂusingÂinfrared camera. International Journal of Thermal Sciences, 2014, 80, 118-125.	4.9	7
293	The investigation of bubble mobility in channel flow with wavy porous media walls. International Journal of Multiphase Flow, 2015, 70, 1-14.	3.4	7
294	â€œEquivalentâ€•permeability and flow in compliant porous media. Composites Part A: Applied Science and Manufacturing, 2016, 80, 107-110.	7.6	7
295	Experimental investigation of heterogeneous hydrolysis with Zn vapor under a temperature gradient. International Journal of Hydrogen Energy, 2017, 42, 7847-7856.	7.1	7
296	A bond-line porosity model that integrates fillet shape and prepreg facesheet consolidation during equilibrated co-cure of sandwich composite structures. Composites Part A: Applied Science and Manufacturing, 2020, 139, 106071.	7.6	7
297	Experimental investigation of dry powder coating processing parameters on the polystyrene particle's distribution on the surface of carbon fibers. Powder Technology, 2021, 393, 461-470.	4.2	7
298	Modelling and simulation of flow, heat transfer and cure. , 1998, , 225-281.		6
299	Approximate numerical method for prediction of temperature distribution in flow through narrow gaps containing porous media. Computational Mechanics, 2003, 32, 1-9.	4.0	6
300	Dependence Map-Based Flow Control to Reduce Void Content in Liquid Composite Molding. Materials and Manufacturing Processes, 2005, 20, 933-960.	4.7	6
301	Experimental Validation of Dependence Map based Control in Liquid Composite Molding. Journal of Composite Materials, 2006, 40, 1137-1162.	2.4	6
302	Nonequilibrium molecular dynamics simulation to describe the rotation of rigid, low aspect ratio carbon nanotubes in simple shear flow. Journal of Chemical Physics, 2007, 126, 144711.	3.0	6
303	A semi-analytical model to characterize single ply and multiple plies UD-fabric permeability. Composites Part A: Applied Science and Manufacturing, 2020, 136, 105951.	7.6	6
304	Semi-analytical formulation of effective permeability of a dual scale unidirectional fabric. Composites Part A: Applied Science and Manufacturing, 2021, 150, 106630.	7.6	6
305	Role of Flow Enhancement Network during Filling of Fibrous Porous Media. Journal of Porous Media, 2005, 8, 281-297.	1.9	6
306	Process modelling for manufacture of orthopedic implants from short fiber composites. Polymer Composites, 1994, 15, 7-17.	4.6	5

#	Article	IF	Citations
307	Numerical simulation of crystallization in high density polyethylene extrudates. Polymer Engineering and Science, 2000, 40, 2356-2373.	3.1	5
308	Transport Phenomena in Liquid Composites Molding Processes and their Roles in Process Control and Optimization. , 2005, , 573-606.		5
309	In-plane permeability characterization of the vacuum infusion processes with fiber relaxation. International Journal of Material Forming, 2010, 3, 1267-1275.	2.0	5
310	Hydrogen production via the heterogeneous hydrolysis of Zn vapor under a temperature gradient: Modeling and efficiency analysis. International Journal of Hydrogen Energy, 2016, 41, 10557-10567.	7.1	5
311	Experimental parametric study of flowâ€induced fiber washout during highâ€injectionâ€pressure resin transfer molding. Polymer Composites, 2020, 41, 1053-1065.	4.6	5
312	Learning the Macroscopic Flow Model of Short Fiber Suspensions from Fine-Scale Simulated Data. Entropy, 2020, 22, 30.	2.2	5
313	Prediction of equilibrium spacing between charged polymer particles in contact with a carbon fiber. Journal of Electrostatics, 2021, 111, 103577.	1.9	5
314	A MODEL FOR PARTICLE DEPOSITION DURING IMPREGNATION OF FIBROUS POROUS MEDIA. Journal of Porous Media, 2011, 14, 383-394.	1.9	5
315	Filling of a System of Channels and Porous Medium: An Effectiveness Factor Based on Momentum Transfer. Journal of Porous Media, 2003, 6, 223-234.	1.9	5
316	Fiberâ€"fiber and fiberâ€"wall interactions during the flow of non-dilute suspensions. , 1997, , 43-76.		4
317	Transient Analysis and Measurement of Anisotropic Heat Conduction in Transversely Isotropic Composite Materials. Journal of Composite Materials, 1999, 33, 594-613.	2.4	4
318	The Compaction Behavior of Fibrous Preform Materials during the VARTM Infusion. AIP Conference Proceedings, 2007, , .	0.4	4
319	A Model for the Equilibrated Co-Cure of Honeycomb Core Sandwich Structures in Autoclave Processing. , 0, , .		4
320	Rheology of long discontinuous fiber thermoplastic composites. Rheology Series, 1999, 8, 843-892.	0.1	3
321	Characterisation of Permeability around a 90Â° Corner. Advanced Composites Letters, 2000, 9, 096369350000900.	1.3	3
322	Mold Filling Simulation of Sandwich Composite Structures Manufactured by Liquid Molding: A Parametric Study. Journal of Sandwich Structures and Materials, 2000, 2, 117-130.	3.5	3
323	2.2 Role of Process Models in Composites Manufacturing. , 2018, , 24-41.		3
324	Prediction of micro impregnation phenomena in additively manufactured composite materials. Composites Part A: Applied Science and Manufacturing, 2022, 156, 106861.	7.6	3

#	Article	IF	Citations
325	Analysis of periodic 3D viscous flows using a quadratic discrete Galerkin boundary element method. International Journal for Numerical Methods in Fluids, 1994, 18, 953-981.	1.6	2
326	Effect of Dispersion State on the Rheology of Multi-walled Carbon nanotube Suspensions in Shear Flow. AIP Conference Proceedings, 2004, , .	0.4	2
327	Dispersion, Bonding and Orientation of Carbon Nanotubes in Polymer Matrices. , 2006, , 61-98.		2
328	Impact of the Fibre Bed on Resin Viscosity in Liquid Composite Moulding Simulations. Applied Composite Materials, 2012, 19, 669-688.	2.5	2
329	Graetzâ€"Brinkman problem in laminar core-annular flow of two immiscible liquids. International Journal of Thermal Sciences, 2015, 89, 362-371.	4.9	2
330	A METHODOLOGY TO CHARACTERIZE FIBER PREFORM PERMEABILITY BY USING KARDARâ€"PARISIâ€"ZHANG EQUATION. Journal of Porous Media, 2019, 22, 799-811.	1.9	2
331	Influence of relative humidity on charge stability of ozone treated polystyrene particles. Journal of Applied Polymer Science, 2021, 138, 49900.	2.6	2
332	A Numerical Model to Simulate Void Dynamics During Processing of Honeycomb Core Sandwich Structures with Prepreg Face-Sheets. , 0, , .		2
333	EXPERIMENTAL CHARACTERIZATION OF THERMAL DISPERSION IN FIBROUS POROUS MEDIA. Journal of Porous Media, 2014, 17, 323-336.	1.9	2
334	Modeling short fiber deformation in dilute suspension: Fiber deposition process. Composites Science and Technology, 2022, 218, 109149.	7.8	2
335	Experimental Study to Illustrate Flow Control in Presence of Race Tracking Disturbances in Resin Transfer Moulding. Advanced Composites Letters, 2003, 12, 096369350301200.	1.3	1
336	Modeling of Resin Flow in Reinforced Dielectric Prepregs. Journal of Electronic Packaging, Transactions of the ASME, 2008, 130, .	1.8	1
337	Design of a Novel High Temperature Gravity-Fed Solar Thermochemical Reactor for Solar-Fuels Production: Case Study - ZnO Powder. , 2011, , .		1
338	Advanced High Resolution Characterization Techniques for Degradation Studies in Fuel Cells. , 2012, , 365-421.		1
339	Thermal modeling during continuous ultrasonic welding. Turkish Journal of Engineering and Environmental Sciences, 2014, 38, 79-96.	0.1	1
340	Numerical model of fiber wetting with finite resin volume. Integrating Materials and Manufacturing Innovation, 2015, 4, 21-36.	2.6	1
341	Thin polymeric film microstructure manipulation for diffused reflectance applications. Polymer Engineering and Science, 2015, 55, 2878-2883.	3.1	1
342	Self-Healing Composite Membrane for Proton Exchange Membrane Fuel Cell Applications. ECS Transactions, 2017, 80, 545-557.	0.5	1

#	Article	IF	Citations
343	Impact of resin-rich layer on the through-thickness resistivity of carbon fiber reinforced polymers. Journal of Composite Materials, 2019, 53, 3469-3481.	2.4	1
344	Experimental investigation of through-thickness resistivity of unidirectional carbon fiber tows. Journal of Composite Materials, 2019, 53, 2993-3003.	2.4	1
345	A micromechanics model to predict extensional viscosity of aligned long discontinuous fiber suspensions. International Journal of Material Forming, 2019, 12, 777-791.	2.0	1
346	A non-local void dynamics modeling and simulation using the Proper Generalized Decomposition. International Journal of Material Forming, 2020, 13, 533-546.	2.0	1
347	Characterization of mesoscale geometrical features of a preform using spectral MoirÃ© analysis on pressure print. Composites Part A: Applied Science and Manufacturing, 2021, 150, 106608.	7.6	1
348	Mechanical Characterization of a Nanotube-Polyethylene Composite Material. , 2003, , .		1
349	Process Modeling. , 2001, , 423-433.		1
350	Effect of the initial resin distribution in partially impregnated thermoplastic prepregs on consolidation. Composites Science and Technology, 2022, 225, 109488.	7.8	1
351	Experimental validation of co-cure process of honeycomb sandwich structures simulation: adhesive fillet shape and bond-line porosity. Advanced Manufacturing: Polymer and Composites Science, 0, , 1-14.	0.4	1
352	Special Section on Heat and Mass Transfer in Solidification Processing. Journal of Engineering Materials and Technology, Transactions of the ASME, 1993, 115, 1-1.	1.4	0
353	Modeling Concepts for the Spherulitic Growth in Polymers and Composites. , 2003, , .		0
354	Publisherâ€™s Note: Coupling of Kinetic and Mass Transfer Processes in Direct Methanol Fuel Cells [J. Electrochem. Soc., 157, B1443 (2010)]. Journal of the Electrochemical Society, 2010, 157, S22.	2.9	0
355	3D modeling of squeeze flow of unidirectionally thermoplastic composite inserts. AIP Conference Proceedings, 2016, , .	0.4	0
356	Validation and Implementation of Control Strategies for Liquid Composite Molding Processes. , 2003, , .		0
357	Characterization of the Viscous Behavior of Compacted Ceramic Particles Under Shear and Pressure Loads. , 2003, , .		0
358	A Coupled Solution for the Fiber Orientation and Rheology of Nonâ€“Dilute Short Fiber Suspensions in Radial Flow. , 1992, , 874-876.		0
359	Lattice Boltzmann Simulation of a Gas-to-Solid Reaction and Precipitation Process in a Circular Tube. CMES - Computer Modeling in Engineering and Sciences, 2018, 117, 527-553.	1.1	0
360	Data-Driven Upscaling of Orientation Kinematics in Suspensions of Rigid Fibres. CMES - Computer Modeling in Engineering and Sciences, 2018, 117, 367-386.	1.1	0

#	Article	IF	Citations
361	Fiberâ€“fiber and fiberâ€“wall interactions during the flow of nondilute suspensions. , 2022, , 31-61.		0
362	A multi-scale statistical description of stacks of non-cohesive thin particles. Powder Technology, 2021, , .	4.2	0