

Suresh G Advani

List of Publications by Year in descending order

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362
papers

16,546
citations

13068

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373
times ranked

8855
citing authors

#	ARTICLE	IF	CITATIONS
1	The Use of Tensors to Describe and Predict Fiber Orientation in Short Fiber Composites. <i>Journal of Rheology</i> , 1987, 31, 751-784.	1.3	1,474
2	Melt processing and mechanical property characterization of multi-walled carbon nanotube/high density polyethylene (MWNT/HDPE) composite films. <i>Carbon</i> , 2003, 41, 2779-2785.	5.4	388
3	A finite element/control volume approach to mold filling in anisotropic porous media. <i>Polymer Composites</i> , 1990, 11, 398-405.	2.3	360
4	Closure approximations for three-dimensional structure tensors. <i>Journal of Rheology</i> , 1990, 34, 367-386.	1.3	333
5	Interlaminar shear strength of glass fiber reinforced epoxy composites enhanced with multi-walled carbon nanotubes. <i>Composites Part A: Applied Science and Manufacturing</i> , 2008, 39, 540-554.	3.8	322
6	Experimental investigation of liquid water formation and transport in a transparent single-serpentine PEM fuel cell. <i>Journal of Power Sources</i> , 2007, 170, 334-344.	4.0	276
7	Use of epoxy/multiwalled carbon nanotubes as adhesives to join graphite fibre reinforced polymer composites. <i>Nanotechnology</i> , 2003, 14, 791-793.	1.3	214
8	Experimental determination of the permeability of engineering textiles: Benchmark II. <i>Composites Part A: Applied Science and Manufacturing</i> , 2014, 61, 172-184.	3.8	202
9	Experimental characterization of in-plane permeability of gas diffusion layers. <i>Journal of Power Sources</i> , 2006, 162, 1226-1231.	4.0	187
10	Rheology of multiwall carbon nanotube suspensions. <i>Journal of Rheology</i> , 2007, 51, 585-604.	1.3	177
11	Experimental study of an air-cooled thermal management system for high capacity lithium-titanate batteries. <i>Journal of Power Sources</i> , 2012, 216, 345-352.	4.0	170
12	Diffusion-induced growth of a gas bubble in a viscoelastic fluid. <i>Rheologica Acta</i> , 1991, 30, 274-283.	1.1	166
13	Analysis of the vacuum infusion moulding process: I. Analytical formulation. <i>Composites Part A: Applied Science and Manufacturing</i> , 2005, 36, 1645-1656.	3.8	165
14	On Flow through Aligned Fiber Beds and Its Application to Composites Processing. <i>Journal of Composite Materials</i> , 1992, 26, 1351-1373.	1.2	150
15	Permeability characterization. Part 1: A proposed standard reference fabric for permeability. <i>Polymer Composites</i> , 1995, 16, 429-445.	2.3	149
16	Properties of polyethylene-layered silicate nanocomposites prepared by melt intercalation with a PP-g-MA compatibilizer. <i>Composites Science and Technology</i> , 2005, 65, 1996-2002.	3.8	149
17	Desirable features in mold filling simulations for Liquid Composite Molding processes. <i>Polymer Composites</i> , 2004, 25, 355-367.	2.3	147
18	A numerical approach to model non-isothermal viscous flow through fibrous media with free surfaces. <i>International Journal for Numerical Methods in Fluids</i> , 1994, 19, 575-603.	0.9	146

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19	Analysis of a femoral hip prosthesis designed to reduce stress shielding. <i>Journal of Biomechanics</i> , 2000, 33, 1655-1662.	0.9	142
20	Preparation and characterization of layered silicate/glass fiber/epoxy hybrid nanocomposites via vacuum-assisted resin transfer molding (VARTM). <i>Composites Science and Technology</i> , 2006, 66, 2116-2125.	3.8	139
21	Characterization of orientation state of carbon nanotubes in shear flow. <i>Polymer</i> , 2005, 46, 5232-5240.	1.8	133
22	Modelling and simulation of resin transfer moulding (RTM) gate control, venting and dry spot prediction. <i>Composites Part A: Applied Science and Manufacturing</i> , 1996, 27, 135-141.	3.8	127
23	Experimental investigation of transverse flow through aligned cylinders. <i>International Journal of Multiphase Flow</i> , 1995, 21, 755-774.	1.6	125
24	Experimental investigation of dispersion during flow of multi-walled carbon nanotube/polymer suspension in fibrous porous media. <i>Carbon</i> , 2004, 42, 871-876.	5.4	123
25	The implications of fiber compaction and saturation on fully coupled VARTM simulation. <i>Composites Part A: Applied Science and Manufacturing</i> , 2004, 35, 159-169.	3.8	122
26	In situ comparison of water content and dynamics in parallel, single-serpentine, and interdigitated flow fields of polymer electrolyte membrane fuel cells. <i>Journal of Power Sources</i> , 2010, 195, 3553-3568.	4.0	120
27	Cobalt oxides as Co ₂ B catalyst precursors for the hydrolysis of sodium borohydride solutions to generate hydrogen for PEM fuel cells. <i>International Journal of Hydrogen Energy</i> , 2008, 33, 7095-7102.	3.8	115
28	Power management system for a fuel cell/battery hybrid vehicle incorporating fuel cell and battery degradation. <i>International Journal of Hydrogen Energy</i> , 2019, 44, 8479-8492.	3.8	110
29	The interaction between micro- and macro-scopic flow in RTM preforms. <i>Composite Structures</i> , 1994, 27, 93-107.	3.1	108
30	High durability sulfonated poly (ether ether ketone)-ceria nanocomposite membranes for proton exchange membrane fuel cell applications. <i>Journal of Membrane Science</i> , 2018, 556, 12-22.	4.1	108
31	Characterization and modeling of race-tracking in liquid composite molding processes. <i>Composites Science and Technology</i> , 1999, 59, 2215-2229.	3.8	105
32	A numerical model to predict fiber tow saturation during liquid composite molding. <i>Composites Science and Technology</i> , 2003, 63, 1725-1736.	3.8	104
33	A numerical simulation of short fiber orientation in compression molding. <i>Polymer Composites</i> , 1990, 11, 164-173.	2.3	100
34	Predicting the Orientation of Short Fibers in Thin Compression Moldings. <i>Journal of Composite Materials</i> , 1986, 20, 539-557.	1.2	99
35	Investigation of draping and its effects on the mold filling process during manufacturing of a compound curved composite part. <i>Composites Part A: Applied Science and Manufacturing</i> , 1997, 28, 801-816.	3.8	99
36	A numerical study of bubble growth during low pressure structural foam molding process. <i>Polymer Engineering and Science</i> , 1990, 30, 1330-1337.	1.5	98

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37	Correlation of void distribution to VARTM manufacturing techniques. Composites Part A: Applied Science and Manufacturing, 2007, 38, 802-813.	3.8	98
38	Thin-film CoB catalyst templates for the hydrolysis of NaBH ₄ solution for hydrogen generation. Applied Catalysis B: Environmental, 2009, 86, 137-144.	10.8	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.	3.8	98
40	The consolidation of commingled thermoplastic fabrics. Polymer Composites, 1991, 12, 417-427.	2.3	97
41	Permeability characterization of dual scale fibrous porous media. Composites Part A: Applied Science and Manufacturing, 2006, 37, 2057-2068.	3.8	96
42	Metal foams as flow field and gas diffusion layer in direct methanol fuel cells. Journal of Power Sources, 2007, 165, 49-57.	4.0	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.	5.4	96
44	On the relative influence of convection in serpentine flow fields of PEM fuel cells. Journal of Power Sources, 2006, 161, 404-412.	4.0	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.	3.8	93
46	Permeability model for a woven fabric. Polymer Composites, 1996, 17, 887-899.	2.3	92
47	Flow front measurements and model validation in the vacuum assisted resin transfer molding process. Polymer Composites, 2001, 22, 477-490.	2.3	92
48	Thermal analysis and management of lithiumâ€“titanate batteries. Journal of Power Sources, 2011, 196, 6517-6524.	4.0	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.	2.5	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.	1.2	91
51	Performance of a metallic gas diffusion layer for PEM fuel cells. Journal of Power Sources, 2008, 176, 293-298.	4.0	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.	3.8	84
53	A generalized model for the transverse fluid permeability in unidirectional fibrous media. Polymer Composites, 1996, 17, 222-230.	2.3	80
54	Analytic characterization of the permeability of dual-scale fibrous porous media. Composites Science and Technology, 2006, 66, 2795-2803.	3.8	80

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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.	1.2	79
57	Quantitative characterization of catalyst layer degradation in PEM fuel cells by X-ray photoelectron spectroscopy. Electrochimica Acta, 2009, 54, 4025-4030.	2.6	79
58	Transverse squeeze flow of concentrated aligned fibers in viscous fluids. Journal of Non-Newtonian Fluid Mechanics, 1996, 65, 47-74.	1.0	77
59	Use of genetic algorithms to optimize gate and vent locations for the resin transfer molding process. Polymer Composites, 1999, 20, 167-178.	2.3	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.	1.3	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.	1.9	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.	3.8	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.	3.8	76
64	Cerium Migration during PEM Fuel Cell Accelerated Stress Testing. Journal of the Electrochemical Society, 2016, 163, F1023-F1031.	1.3	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.	3.8	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.	1.5	74
67	Investigation of fiber motion near solid boundaries in simple shear flow. Rheologica Acta, 2001, 40, 296-306.	1.1	71
68	Numerical simulation of unsaturated flow in woven fiber preforms during the resin transfer molding process. Polymer Composites, 1998, 19, 71-80.	2.3	70
69	Permeability characterization. Part 2: Flow behavior in multiple-layer preforms. Polymer Composites, 1995, 16, 446-458.	2.3	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.	3.8	69
71	Process analysis of compression resin transfer molding. Composites Part A: Applied Science and Manufacturing, 2009, 40, 431-441.	3.8	68
72	Effect of ceria loading on performance and durability of sulfonated poly (ether ether ketone) nanocomposite membranes for proton exchange membrane fuel cell applications. Journal of Membrane Science, 2018, 565, 342-357.	4.1	68

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73	Wear behavior of Carbon Nanotube/High Density Polyethylene composites. <i>Mechanics of Materials</i> , 2009, 41, 1108-1115.	1.7	67
74	Analysis, operation and maintenance of a fuel cell/battery series-hybrid bus for urban transit applications. <i>Journal of Power Sources</i> , 2010, 195, 3939-3949.	4.0	67
75	Rotating ring-disc electrode (RRDE) investigation of borohydride electro-oxidation. <i>Journal of Power Sources</i> , 2008, 182, 106-111.	4.0	66
76	A model to characterize acoustic softening during ultrasonic consolidation. <i>Journal of Materials Processing Technology</i> , 2013, 213, 1835-1845.	3.1	65
77	Flow near the permeable boundary of a porous medium: An experimental investigation using LDA. <i>Experiments in Fluids</i> , 1997, 22, 408-422.	1.1	64
78	Numerical computation of the fiber preform permeability tensor by the homogenization method. <i>Polymer Composites</i> , 2002, 23, 758-770.	2.3	63
79	A FAST NUMERICAL METHOD FOR ISOTHERMAL RESIN TRANSFER MOLD FILLING. <i>International Journal for Numerical Methods in Engineering</i> , 1996, 39, 1405-1417.	1.5	61
80	Fabric structure and mold curvature effects on preform permeability and mold filling in the RTM process. Part I. Experiments. <i>Composites Part A: Applied Science and Manufacturing</i> , 2000, 31, 423-438.	3.8	61
81	Performance simulation and analysis of a fuel cell/battery hybrid forklift truck. <i>International Journal of Hydrogen Energy</i> , 2013, 38, 4241-4249.	3.8	61
82	Nonisothermal bubble growth in polymeric foams. <i>Polymer Engineering and Science</i> , 1995, 35, 252-260.	1.5	60
83	Effective average permeability of multi-layer preforms in resin transfer molding. <i>Composites Science and Technology</i> , 1996, 56, 519-531.	3.8	60
84	Branch and bound search to optimize injection gate locations in liquid composite molding processes. <i>Composites Part A: Applied Science and Manufacturing</i> , 2002, 33, 1263-1272.	3.8	60
85	Effects of oxidative conditions on properties of multi-walled carbon nanotubes in polymer nanocomposites. <i>Composites Science and Technology</i> , 2007, 67, 1027-1034.	3.8	60
86	A Non-Isothermal Process Model for Consolidation and Void Reduction during In-Situ Tow Placement of Thermoplastic Composites. <i>Journal of Composite Materials</i> , 1995, 29, 1040-1062.	1.2	59
87	Numerical simulations of Stokes–Brinkman equations for permeability prediction of dual scale fibrous porous media. <i>Physics of Fluids</i> , 2010, 22, .	1.6	58
88	Wicking across a Fiber-Bank. <i>Journal of Colloid and Interface Science</i> , 1996, 183, 100-110.	5.0	57
89	On-line strategic control of liquid composite mould filling process. <i>Composites Part A: Applied Science and Manufacturing</i> , 2000, 31, 1383-1394.	3.8	57
90	Flow sensing and control strategies to address race-tracking disturbances in resin transfer molding. Part I: design and algorithm development. <i>Composites Part A: Applied Science and Manufacturing</i> , 2004, 35, 1149-1159.	3.8	56

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91	Hydrogen storage systems based on hydride materials with enhanced thermal conductivity. International Journal of Hydrogen Energy, 2012, 37, 290-298.	3.8	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.	2.5	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.	1.2	55
94	Fiber optic flow and cure sensing for liquid composite molding. Optics and Lasers in Engineering, 2001, 35, 91-104.	2.0	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.	2.3	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.	3.8	54
97	Integration of batteries with ultracapacitors for a fuel cell hybrid transit bus. Journal of Power Sources, 2012, 199, 360-366.	4.0	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.	1.0	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.	1.2	53
100	Prediction-based optimal power management in a fuel cell/battery plug-in hybrid vehicle. Journal of Power Sources, 2010, 195, 6699-6708.	4.0	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.	3.8	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.	3.8	51
103	Degradation reduction of polymer electrolyte membranes using CeO ₂ as a free-radical scavenger in catalyst layer. Electrochimica Acta, 2013, 109, 775-780.	2.6	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.	3.8	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.	3.8	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.	3.8	50
107	Hydrogen storage system based on hydride materials incorporating a helical-coil heat exchanger. International Journal of Hydrogen Energy, 2012, 37, 14292-14299.	3.8	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.	3.8	49

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109	Flow sensing and control strategies to address race-tracking disturbances in resin transfer molding part II: automation and validation. Composites Part A: Applied Science and Manufacturing, 2005, 36, 1581-1589.	3.8	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.	3.8	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.	3.8	48
112	The draping and consolidation of commingled fabrics. Composites Manufacturing, 1991, 2, 10-22.	0.4	47
113	Design and application of actively controlled injection schemes for resin-transfer molding. Composites Science and Technology, 2001, 61, 1625-1637.	3.8	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.	1.3	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.	5.2	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.	3.8	45
118	Experimental analysis and numerical modeling of flow channel effects in resin transfer molding. Polymer Composites, 2000, 21, 134-153.	2.3	45
119	In Situ Characterization of the Catalyst Layer in a Polymer Electrolyte Membrane Fuel Cell. Journal of the Electrochemical Society, 2007, 154, B1152.	1.3	45
120	Characterization of preform permeability in the presence of race tracking. Composites Part A: Applied Science and Manufacturing, 2004, 35, 1393-1405.	3.8	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.	3.8	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.	4.0	43
123	Experimental investigation of flow through multi-layered preforms. Polymer Composites, 1997, 18, 649-655.	2.3	42
124	Durable and self-hydrating tungsten carbide-based composite polymer electrolyte membrane fuel cells. Nature Communications, 2017, 8, 418.	5.8	42
125	Simultaneous Neutron and Optical Imaging in PEM Fuel Cells. Journal of the Electrochemical Society, 2009, 156, B109.	1.3	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.	0.8	40

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127	Characterization of 3D fiber preform permeability tensor in radial flow using an inverse algorithm based on sensors and simulation. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011, 42, 1283-1292.	3.8	40
128	Resin film impregnation in fabric prepregs with dual length scale permeability. <i>Composites Part A: Applied Science and Manufacturing</i> , 2013, 53, 118-128.	3.8	39
129	A closed form solution to describe infusion of resin under vacuum in deformable fibrous porous media. <i>Modelling and Simulation in Materials Science and Engineering</i> , 2004, 12, S191-S204.	0.8	38
130	Modeling of filtration through multiple layers of dual scale fibrous porous media. <i>Polymer Composites</i> , 2006, 27, 570-581.	2.3	38
131	The effect of fabric and fiber tow shear on dual scale flow and fiber bundle saturation during liquid molding of textile composites. <i>International Journal of Material Forming</i> , 2012, 5, 83-97.	0.9	38
132	A methodology to reduce variability during vacuum infusion with optimized design of distribution media. <i>Composites Part A: Applied Science and Manufacturing</i> , 2015, 78, 223-233.	3.8	38
133	Experimental Investigation of the Carbothermal Reduction of ZnO Using a Beam-Down, Gravity-Fed Solar Reactor. <i>Industrial & Engineering Chemistry Research</i> , 2015, 54, 8319-8332.	1.8	38
134	Experimental Characterization of the Influence of Tackifier Material on Preform Permeability. <i>Journal of Composite Materials</i> , 2002, 36, 2297-2310.	1.2	37
135	Permeability estimation algorithm to simultaneously characterize the distribution media and the fabric preform in vacuum assisted resin transfer molding process. <i>Composites Science and Technology</i> , 2005, 65, 2129-2139.	3.8	37
136	Modeling resin flow and fiber tow saturation induced by distribution media collapse in VARTM. <i>Composites Science and Technology</i> , 2007, 67, 2757-2769.	3.8	37
137	A closed form solution for flow in dual scale fibrous porous media under constant injection pressure conditions. <i>Composites Science and Technology</i> , 2008, 68, 699-708.	3.8	37
138	Role of heat pipes in improving the hydrogen charging rate in a metal hydride storage tank. <i>International Journal of Hydrogen Energy</i> , 2014, 39, 10552-10563.	3.8	37
139	Role of friction on the thermal development in ultrasonically consolidated aluminum foils and composites. <i>Journal of Materials Processing Technology</i> , 2011, 211, 1864-1877.	3.1	36
140	Simulation and experimental validation of flow flooding chamber method of resin delivery in liquid composite molding. <i>Composites Part A: Applied Science and Manufacturing</i> , 2007, 38, 2131-2141.	3.8	35
141	Investigation of a polymer electrolyte membrane fuel cell catalyst layer with bidirectionally-graded composition. <i>Journal of Power Sources</i> , 2014, 270, 594-602.	4.0	35
142	Characterization of orientation clustering in short-fiber composites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 1990, 28, 2651-2672.	2.4	33
143	Role of micro-convection due to non-affine motion of particles in a mono-disperse suspension. <i>International Journal of Heat and Mass Transfer</i> , 1995, 38, 2945-2958.	2.5	32
144	Investigation of a copper etching technique to fabricate metallic gas diffusion media. <i>Journal of Micromechanics and Microengineering</i> , 2006, 16, N23-N27.	1.5	32

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145	Liquid Composite Molding control methodologies using Vacuum Induced Preform Relaxation. Composites Part A: Applied Science and Manufacturing, 2011, 42, 57-65.	3.8	32
146	A 3D microstructure based resistor network model for the electrical resistivity of unidirectional carbon composites. Composite Structures, 2015, 134, 740-749.	3.1	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.	1.2	31
148	Simultaneous gate and vent location optimization in liquid composite molding processes. Composites Part A: Applied Science and Manufacturing, 2004, 35, 1419-1432.	3.8	31
149	High Through-thickness Thermal Conductivity Composites Based on Three-Dimensional Woven Fiber Architectures. AIAA Journal, 2008, 46, 2944-2954.	1.5	31
150	Energy and bond strength development during ultrasonic consolidation. Journal of Materials Processing Technology, 2014, 214, 1665-1672.	3.1	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.	3.8	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.	3.8	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.	4.0	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.	3.8	30
155	A model of two-phase resin and void flow during composites processing. International Journal of Multiphase Flow, 2014, 65, 51-60.	1.6	30
156	Optimization of polymer electrolyte membrane fuel cell flow channels using a genetic algorithm. Journal of Power Sources, 2011, 196, 9407-9418.	4.0	29
157	Prediction of effective through-thickness thermal conductivity of woven fabric reinforced composites with embedded particles. Composite Structures, 2015, 127, 132-140.	3.1	29
158	3D modeling of squeeze flow of multiaxial laminates. Journal of Non-Newtonian Fluid Mechanics, 2016, 234, 188-200.	1.0	29
159	Determination of the Transverse Permeability of a Fiber Preform. Journal of Reinforced Plastics and Composites, 1999, 18, 1450-1464.	1.6	28
160	Nafion membranes reinforced with magnetically controlled Fe ₃ O ₄ @MWCNTs for PEMFCs. Journal of Materials Chemistry, 2012, 22, 14008.	6.7	28
161	Mechanical Stability of H ₃ PO ₄ -Doped PBI/Hydrophilic-Pretreated PTFE Membranes for High Temperature PEMFCs. Electrochimica Acta, 2014, 120, 30-38.	2.6	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.	1.3	28

#	ARTICLE	IF	CITATIONS
163	Use of Centroidal Voronoi Diagram to find optimal gate locations to minimize mold filling time in resin transfer molding. <i>Composites Part A: Applied Science and Manufacturing</i> , 2016, 87, 243-255.	3.8	27
164	PBI/Nafion/SiO ₂ hybrid membrane for high-temperature low-humidity fuel cell applications. <i>Electrochimica Acta</i> , 2013, 105, 530-534.	2.6	26
165	Second-order boundary element method calculations of hydrodynamic interactions between particles in close proximity. <i>International Journal for Numerical Methods in Fluids</i> , 1992, 14, 1063-1086.	0.9	25
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