

Woo Il Lee

List of Publications by Year in descending order

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85
papers

2,666
citations

186265

28
h-index

197818

49
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86
all docs

86
docs citations

86
times ranked

1617
citing authors

#	ARTICLE	IF	CITATIONS
1	Heat of Reaction, Degree of Cure, and Viscosity of Hercules 3501-6 Resin. Journal of Composite Materials, 1982, 16, 510-520.	2.4	313
2	A Model of the Manufacturing Process of Thermoplastic Matrix Composites. Journal of Composite Materials, 1987, 21, 1017-1055.	2.4	250
3	Modeling and simulation of voids and saturation in liquid composite molding processes. Composites Part A: Applied Science and Manufacturing, 2011, 42, 658-668.	7.6	154
4	Measurement of the Three-Dimensional Permeability of Fiber Preforms Using Embedded Fiber Optic Sensors. Journal of Composite Materials, 1995, 29, 714-733.	2.4	102
5	Microwave Curing of Composites. Journal of Composite Materials, 1984, 18, 387-409.	2.4	92
6	An analysis of the three-dimensional resin-transfer mold filling process. Composites Science and Technology, 2000, 60, 961-975.	7.8	87
7	Analysis and minimization of void formation during resin transfer molding process. Composites Science and Technology, 2006, 66, 3281-3289.	7.8	84
8	A study on the mold filling process in resin transfer molding. Polymer Engineering and Science, 1991, 31, 765-771.	3.1	80
9	A new VOF-based numerical scheme for the simulation of fluid flow with free surface. Part I: New free surface-tracking algorithm and its verification. International Journal for Numerical Methods in Fluids, 2003, 42, 765-790.	1.6	74
10	Improvement of ablation resistance of phenolic composites reinforced with low concentrations of carbon nanotubes. Composites Science and Technology, 2015, 121, 16-24.	7.8	68
11	A model for a thermoplastic pultrusion process using commingled yarns. Composites Science and Technology, 2001, 61, 1065-1077.	7.8	58
12	Numerical simulation of the resin transfer mold filling process using the boundary element method. Polymer Composites, 1996, 17, 368-374.	4.6	57
13	Inverse estimation of thermophysical properties for anisotropic composite. Experimental Thermal and Fluid Science, 2003, 27, 697-704.	2.7	56
14	Interaction of Electromagnetic Radiation with Organic Matrix Composites. Journal of Composite Materials, 1984, 18, 357-386.	2.4	54
15	Improved genetic algorithm for multidisciplinary optimization of composite laminates. Computers and Structures, 2008, 86, 1894-1903.	4.4	49
16	Analysis of resin transfer moulding process with controlled multiple gates resin injection. Composites Part A: Applied Science and Manufacturing, 2000, 31, 407-422.	7.6	48
17	A new VOF-based numerical scheme for the simulation of fluid flow with free surface. Part II: application to the cavity filling and sloshing problems. International Journal for Numerical Methods in Fluids, 2003, 42, 791-812.	1.6	45
18	An Expert System for Autoclave Curing of Composites. Journal of Composite Materials, 1991, 25, 1542-1587.	2.4	44

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19	Model for Determining the Vent Locations and the Fill Time of Resin Transfer Molds. <i>Journal of Composite Materials</i> , 1995, 29, 306-333.	2.4	44
20	Simultaneous optimization of composite structures considering mechanical performance and manufacturing cost. <i>Composite Structures</i> , 2004, 65, 117-127.	5.8	44
21	A Model of the Resin Impregnation in Thermoplastic Composites. <i>Journal of Composite Materials</i> , 1991, 25, 1127-1142.	2.4	40
22	Solution of inverse heat conduction problems using maximum entropy method. <i>International Journal of Heat and Mass Transfer</i> , 2002, 45, 381-391.	4.8	40
23	A study on heat transfer during thermoplastic composite tape lay-up process. <i>Experimental Thermal and Fluid Science</i> , 1996, 13, 408-418.	2.7	39
24	Finite element analysis of incompressible viscous flow with moving free surface by selective volume of fluid method. <i>International Journal of Heat and Fluid Flow</i> , 2000, 21, 197-206.	2.4	38
25	Analysis of two main LNG CCS (cargo containment system) insulation boxes for leakage safety using experimentally defined thermal properties. <i>Applied Ocean Research</i> , 2012, 37, 72-89.	4.1	36
26	Numerical analysis of convective flow and thermal stratification in a cryogenic storage tank. <i>Numerical Heat Transfer; Part A: Applications</i> , 2017, 71, 402-422.	2.1	35
27	Weight minimization of composite laminated plates with multiple constraints. <i>Composites Science and Technology</i> , 2003, 63, 1015-1026.	7.8	33
28	Pultrusion of Thermoplastics—A Model. <i>Journal of Composite Materials</i> , 1991, 25, 1632-1652.	2.4	31
29	Modeling of mechanical property degradation by short-term aging at high temperatures. <i>Composites Part B: Engineering</i> , 2002, 33, 531-543.	12.0	27
30	A Model for Thermosetting Composite Pultrusion Process. <i>Journal of Composite Materials</i> , 1997, 31, 2105-2122.	2.4	22
31	Multiconstraint Optimization of Composite Structures Manufactured by Resin Transfer Molding Process. <i>Journal of Composite Materials</i> , 2005, 39, 347-374.	2.4	22
32	An integrated optimisation for the weight, the structural performance and the cost of composite structures. <i>Composites Science and Technology</i> , 2009, 69, 1101-1107.	7.8	22
33	Electrical and mechanical properties of graphite/maleic anhydride grafted polypropylene nanocomposites. <i>Composites Part B: Engineering</i> , 2013, 45, 1548-1553.	12.0	22
34	Analysis of thermal properties and heat transfer mechanisms for polyurethane foams blown with water. <i>Journal of Thermal Analysis and Calorimetry</i> , 2018, 132, 1253-1262.	3.6	22
35	Improvement of ablation resistance of epoxy composites reinforced with low concentrations of multi walled carbon nanotubes. <i>Composites Part A: Applied Science and Manufacturing</i> , 2019, 124, 105471.	7.6	21
36	Effects of PZT particle-enhanced ply interfaces on the vibration damping behavior of CFRP composites. <i>Composites Part A: Applied Science and Manufacturing</i> , 2011, 42, 1477-1482.	7.6	19

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37	A SOLUTION METHOD FOR A NONLINEAR THREE-DIMENSIONAL INVERSE HEAT CONDUCTION PROBLEM USING THE SEQUENTIAL GRADIENT METHOD COMBINED WITH CUBIC-SPLINE FUNCTION SPECIFICATION. Numerical Heat Transfer, Part B: Fundamentals, 2003, 43, 43-61.	0.9	18
38	Analysis of pulling force during pultrusion process of phenolic foam composites. Composites Science and Technology, 2008, 68, 140-146.	7.8	18
39	Smart cure of thick composite filament wound structures to minimize the development of residual stresses. Composites Part A: Applied Science and Manufacturing, 2006, 37, 530-537.	7.6	16
40	Molecular Dynamic Studies on Deformation of Polymer Resist During Thermal Nano Imprint Lithographic Process. Tribology Letters, 2009, 36, 209-222.	2.6	16
41	Thickness optimization of composite plates by Boxâ€™s complex method considering the process and material parameters in compression molding of SMC. Composites Part A: Applied Science and Manufacturing, 2009, 40, 1192-1198.	7.6	16
42	Molecular Dynamic Simulation on the Effect of Polymer Molecular Size in Thermal Nanoimprint Lithographic (T-NIL) Process. Tribology Letters, 2013, 49, 421-430.	2.6	16
43	Analysis of curing behavior of endo-dicyclopentadiene using different amounts of decelerator solution. Composites Part B: Engineering, 2019, 161, 439-454.	12.0	14
44	An inverse estimation of surface temperature using the maximum entropy method. International Communications in Heat and Mass Transfer, 2007, 34, 37-44.	5.6	13
45	Optimisation of location and dimension of SMC precharge in compression moulding process. Computers and Structures, 2011, 89, 1523-1534.	4.4	13
46	Mechanical properties of norbornene-based silane treated glass fiber reinforced polydicyclopentadiene composites manufactured by the S-RIM process. E-Polymers, 2017, 17, 159-166.	3.0	13
47	Effect of Temperature on the Mechanical Properties and Polymerization Kinetics of Polyamide-6 Composites. Polymers, 2020, 12, 1133.	4.5	13
48	Finite element analysis of flow and heat transfer with moving free surface using fixed grid system. International Journal of Computational Fluid Dynamics, 2005, 19, 263-276.	1.2	12
49	Assessment of particle distribution in particle-containing composite materials using an electron probe microanalyzer. Composites Science and Technology, 2013, 82, 38-46.	7.8	12
50	Density variation of nanoscale patterns in thermal nanoimprint lithography. Applied Physics Letters, 2007, 91, 253111.	3.3	11
51	Analysis of buckling load of glass fiber/epoxy-reinforced plywood and its temperature dependence. Journal of Composite Materials, 2014, 48, 2191-2206.	2.4	11
52	A dual-scale analysis of macroscopic resin flow in vacuum assisted resin transfer molding. Polymer Composites, 2004, 25, 510-520.	4.6	10
53	Finite element analysis for wavelike flow marks in injection molding. Polymer Engineering and Science, 2007, 47, 922-933.	3.1	10
54	Characteristics of micro-glass bead/PLA porous composite prepared by electrospinning. Advanced Composite Materials, 2018, 27, 183-193.	1.9	10

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55	IMPLEMENTATION OF INVERSE METHOD FOR ESTIMATING UNDETERMINED BOUNDARY IN A TWO-DIMENSIONAL SLAB BASED ON TEMPERATURE MEASUREMENT. Numerical Heat Transfer; Part A: Applications, 2004, 46, 515-523.	2.1	9
56	Analysis of flow characteristics of cryogenic liquid in porous media. International Journal of Heat and Mass Transfer, 2015, 87, 161-183.	4.8	9
57	Analysis of leaked LNG flow and consequent thermal effect for safety in LNG cargo containment system. Ocean Engineering, 2016, 113, 276-294.	4.3	9
58	Analysis of coalescence behavior for compressed droplets. Applied Surface Science, 2017, 397, 57-69.	6.1	9
59	Minimal contact formation between hollow glass microparticles toward low-density and thermally insulating composite materials. Journal of Materials Science, 2017, 52, 6726-6740.	3.7	9
60	Electrospun nanofiber composites with micro-/nano-particles for thermal insulation. Advanced Composite Materials, 2019, 28, 193-202.	1.9	9
61	Characterization of boundary conditions during thermoplastic composite tape lay-up process using an inverse method. Modelling and Simulation in Materials Science and Engineering, 2003, 11, 417-426.	2.0	8
62	Microstructure and property characterization of flexible syntactic foam for insulation material via mold casting. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 169-176.	4.9	8
63	An Experimental Study on the Thermoplastic Filament Winding Process using Commingled Yarns. Advanced Composites Letters, 2002, 11, 096369350201100.	1.3	7
64	Penalty formulation for postfilling analysis during injection molding. International Journal for Numerical Methods in Fluids, 2008, 57, 139-155.	1.6	7
65	Particle filtration and distribution during the liquid composite molding process for manufacturing particles containing composite materials. Composites Part A: Applied Science and Manufacturing, 2016, 90, 330-339.	7.6	7
66	Solving a nonlinear inverse convection problem using the sequential gradient method. Journal of Mechanical Science and Technology, 2002, 16, 710-719.	0.4	6
67	Evolution of transient meniscus in a wettable microchannel for Newtonian fluid. Journal of Micromechanics and Microengineering, 2006, 16, 2692-2696.	2.6	6
68	Enhanced ablative resistance of epoxy composites at low loadings of boron nitride nanotubes by the formation of near-graphitic structures. Advanced Composite Materials, 2020, 29, 205-216.	1.9	6
69	Measurement of pull-off force on imprinted nanopatterns in an inert liquid. Nanotechnology, 2010, 21, 295306.	2.6	5
70	Analysis of Cryogenic Impact Properties for a Glass-Fiber-Reinforced Dicyclopentadiene with a Different Amount of Decelerator Solution. Materials, 2019, 12, 3246.	2.9	5
71	Assessment of Long Fiber Spray-up Molding of Chopped Glass Fiber Reinforced Polydicyclopentadiene Composites. Fibers and Polymers, 2020, 21, 1134-1141.	2.1	5
72	A semi-implicit method for the analysis of two-dimensional fluid flow with moving free surfaces. Journal of Mechanical Science and Technology, 2002, 16, 720-731.	0.4	4

#	ARTICLE	IF	CITATIONS
73	A Maximum Entropy Solution for a Two-Dimensional Inverse Heat Conduction Problem. Journal of Heat Transfer, 2003, 125, 1197-1205.	2.1	4
74	An Effective Calculation Method for Radiative Exchange in an Enclosure with Specular Surfaces. Numerical Heat Transfer; Part A: Applications, 2006, 50, 865-881.	2.1	3
75	Isotropic conductivities in chopped carbon fiber composites using expanded polypropylene. Advanced Composite Materials, 2014, 23, 409-420.	1.9	3
76	Effect of a pressurized cavity on the replication of micro-patterns with injection molding. E-Polymers, 2016, 16, 373-378.	3.0	3
77	Preference for Case Materials in Smart Devices: A Comparative Study in Korea, USA, and Tanzania. International Journal of Precision Engineering and Manufacturing, 2019, 20, 749-767.	2.2	3
78	Analysis of the Binding of Analyte-Receptor in a Micro-Fluidic Channel for a Biosensor Based on Brownian Motion. Micromachines, 2020, 11, 570.	2.9	3
79	Effect of ammonium polyphosphate and acrylic acid on <scp>NaCl</scp> treated electrospun <scp>PLA</scp> microfiber mat. Polymer Engineering and Science, 2020, 60, 2448-2458.	3.1	2
80	Study on the monitoring of resin flow and curing in the vacuum assisted resin transfer molding process using a long-period fiber bragg grating. , 0, , .		0
81	Inverse Estimation of Surface Temperature in Nanoscale Using the Artificial Neural Network. , 2005, , 403.		0
82	Passive vibration damping of carbon fiber reinforced plastic with PZT particles and SMA powder. , 2016, , .		0
83	Effect of radius of gyration on polymer deformation for thermal nanoimprint lithography. Macromolecular Research, 2016, 24, 847-850.	2.4	0
84	Simulation of Multi-cavity Micro-injection System for Reducing Cavity Filling Deviation. Fibers and Polymers, 2019, 20, 375-383.	2.1	0
85	Optimal Adjustment of Composite-Material Club Shaft Characteristics. , 2006, , 329-334.		0