Charles L Tucker Iii

List of Publications by Year
in descending order

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71 papers	7,913 citations	94269 37 h-index	91712 69 g-index
73 all docs	73 docs citations	73 times ranked	3013 citing authors

#	Article	IF	Citations
1	Analysis of anisotropic rotary diffusion models for fiber orientation. Composites Part A: Applied Science and Manufacturing, 2019, 126, 105605.	3.8	23
2	Uncertainty quantification of fiber orientation distribution measurements for long-fiber-reinforced thermoplastic composites. Journal of Composite Materials, 2018, 52, 1781-1797.	1.2	17
3	Reliability in the characterization of fiber length distributions of injection molded long carbon fiber composites. Polymer Composites, 2018, 39, 4594-4604.	2.3	11
4	Mechanics of random discontinuous long-fiber thermoplastics. Part II: Direct simulation of uniaxial compression. Journal of Rheology, 2013, 57, 1463-1489.	1.3	23
5	A model for fiber length attrition in injection-molded long-fiber composites. Composites Part A: Applied Science and Manufacturing, 2013, 51, 11-21.	3.8	104
6	Mechanics of Random Discontinuous Long-Fiber Thermoplasticsâ€"Part I: Generation and Characterization of Initial Geometry. Journal of Applied Mechanics, Transactions ASME, 2013, 80, .	1.1	10
7	Prediction of the Elasticâ€"Plastic Stress/Strain Response for Injection-Molded Long-Fiber Thermoplastics. Journal of Composite Materials, 2009, 43, 217-246.	1.2	39
8	An anisotropic rotary diffusion model for fiber orientation in short- and long-fiber thermoplastics. Journal of Non-Newtonian Fluid Mechanics, 2009, 156, 165-176.	1.0	269
9	Prediction of fiber orientation in a rotating compressing and expanding mold. Polymer Engineering and Science, 2008, 48, 1405-1413.	1.5	22
10	An objective model for slow orientation kinetics in concentrated fiber suspensions: Theory and rheological evidence. Journal of Rheology, 2008, 52, 1179-1200.	1.3	240
11	Fiber Length and Orientation in Long-Fiber Injection-Molded Thermoplastics â€" Part I: Modeling of Microstructure and Elastic Properties. Journal of Composite Materials, 2008, 42, 1003-1029.	1.2	80
12	Lagrangian particle calculations of distributive mixing: Limitations and applications. Chemical Engineering Science, 2006, 61, 6826-6836.	1.9	49
13	Stretch and Shape Distributions of Droplets with Interfacial Tension in Chaotic Mixing. International Polymer Processing, 2005, 20, 128-135.	0.3	4
14	Stretching distributions in chaotic mixing of droplet dispersions with unequal viscosities. Physics of Fluids, 2005, 17, 053101.	1.6	8
15	Microstructural Development of Polymer Blends in Chaotic Flows. AIP Conference Proceedings, 2004, , .	0.3	0
16	Theory for drop deformation in viscoelastic systems. Journal of Rheology, 2004, 48, 417-438.	1.3	61
17	Numerical simulation of mold filling in foam reaction injection molding. International Journal for Numerical Methods in Fluids, 2003, 42, 1105-1134.	0.9	31
18	Enhanced conductivity of fuel cell plates through controlled fiber orientation. AICHE Journal, 2003, 49, 18-29.	1.8	43

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19	A model for large deformation of an ellipsoidal droplet with interfacial tension. Journal of Rheology, 2003, 47, 659-682.	1.3	107
20	Ideal Forming Analysis for Random Fiber Preforms. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2003, 125, 146-153.	1.3	8
21	MICROSTRUCTURALEVOLUTION INPOLYMERBLENDS. Annual Review of Fluid Mechanics, 2002, 34, 177-210.	10.8	372
22	Modeling and simulation of two-dimensional consolidation for thermoset matrix composites. Composites Part A: Applied Science and Manufacturing, 2002, 33, 877-892.	3.8	56
23	Fiber Suspensions in Complex Geometries: Flow/Orientation Coupling. Canadian Journal of Chemical Engineering, 2002, 80, 1093-1106.	0.9	109
24	Material stretching in laminar mixing flows: extended mapping technique applied to the journal bearing flow. International Journal for Numerical Methods in Fluids, 2002, 40, 189-196.	0.9	15
25	A global, multi-scale simulation of laminar fluid mixing: the extended mapping method. International Journal of Multiphase Flow, 2002, 28, 497-523.	1.6	29
26	Optimal curing for thermoset matrix composites: Thermochemical and consolidation considerations. Polymer Composites, 2002, 23, 739-757.	2.3	23
27	Measurements of droplet deformation in simple shear flow with zero interfacial tension. Journal of Rheology, 2001, 45, 259-273.	1.3	20
28	Numerical simulation of injection/compression liquid composite molding. Part 2: preform compression. Composites Part A: Applied Science and Manufacturing, 2001, 32, 207-220.	3.8	44
29	Microstructural evolution during complex laminar flow of liquidâ€“liquid dispersions. Journal of Non-Newtonian Fluid Mechanics, 2001, 101, 21-41.	1.0	5
30	Optimal curing for thermoset matrix composites: Thermochemical considerations. Polymer Composites, 2001, 22, 118-131.	2.3	65
31	Dimensional Accuracy of Thermoset Composites: Simulation of Process-Induced Residual Stresses. Journal of Composite Materials, 2001, 35, 2171-2205.	1.2	140
32	Droplet deformation in dispersions with unequal viscosities and zero interfacial tension. Journal of Fluid Mechanics, 2001, 426, 199-228.	1.4	114
33	Numerical simulation of injection/compression liquid composite molding. Part 1. Mesh generation. Composites Part A: Applied Science and Manufacturing, 2000, 31, 87-94.	3.8	27
34	Fiber Orientation in 3-D Injection Molded Features. International Polymer Processing, 1999, 14, 409-420.	0.3	67
35	Area tensors for modeling microstructure during laminar liquid-liquid mixing. International Journal of Multiphase Flow, 1999, 25, 35-61.	1.6	95
36	Stiffness predictions for unidirectional short-fiber composites: Review and evaluation. Composites Science and Technology, 1999, 59, 655-671.	3.8	597

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37	Optimal design for polymer extrusion. Part I: Sensitivity analysis for nonlinear steady-state systems. Computer Methods in Applied Mechanics and Engineering, 1998, 167, 283-302.	3.4	52
38	Optimal design for polymer extrusion. Part II: Sensitivity analysis for weakly-coupled nonlinear steady-state systems. Computer Methods in Applied Mechanics and Engineering, 1998, 167, 303-323.	3.4	33
39	Analysis and sensitivity analysis for polymer injection and compression molding. Computer Methods in Applied Mechanics and Engineering, 1998, 167, 325-344.	3.4	47
40	Forming limit measurements for random-fiber mats. Polymer Composites, 1998, 19, 370-376.	2.3	3
41	The Optimized Quasi-Planar Approximation for Predicting Fiber Orientation in Injection-Molded Composites1. International Polymer Processing, 1997, 12, 238-248.	0.3	15
42	Heat transfer and reaction issues in liquid composite molding. Polymer Composites, 1996, 17, 60-72.	2.3	25
43	A finite element method for flow in compression molding of thin and thick parts. Polymer Composites, 1995, 16, 70-82.	2.3	21
44	Thermal dispersion in resin transfer molding. Polymer Composites, 1995, 16, 495-506.	2.3	39
45	The Continuous Cuing Process for Thermoset Polymer Composites. Part 1: Modeling and Demonstration. Journal of Composite Materials, 1995, 29, 1222-1253.	1.2	71
46	Orthotropic closure approximations for flowâ€induced fiber orientation. Journal of Rheology, 1995, 39, 1095-1122.	1.3	370
47	A theory for concentrated fiber suspensions with strong fiberâ€fiber interactions. Makromolekulare Chemie Macromolecular Symposia, 1993, 68, 291-300.	0.6	9
48	Fiber orientation in simple injection moldings. Part I: Theory and numerical methods. Polymer Composites, 1992, 13, 317-331.	2.3	208
49	Fiber orientation in simple injection moldings. Part II: Experimental results. Polymer Composites, 1992, 13, 332-341.	2.3	161
50	Stereological measurement and error estimates for three-dimensional fiber orientation. Polymer Engineering and Science, 1992, 32, 240-253.	1.5	220
51	Flow regimes for fiber suspensions in narrow gaps. Journal of Non-Newtonian Fluid Mechanics, 1991, 39, 239-268.	1.0	150
52	A numerical simulation of short fiber orientation in compression molding. Polymer Composites, 1990, 11, 164-173.	2.3	100
53	Stiffness and thermal expansion predictions for hybrid short fiber composites. Polymer Composites, 1990, 11, 229-239.	2.3	115
54	Compression Mold Filling Simulation for Non-Planar Parts. International Polymer Processing, 1990, 5, 79-87.	0.3	53

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55	Closure approximations for threeâ€dimensional structure tensors. Journal of Rheology, 1990, 34, 367-386.	1.3	333
56	A boundary element simulation of compression mold filling. Polymer Engineering and Science, 1988, 28, 413-420.	1.5	36
57	The Use of Tensors to Describe and Predict Fiber Orientation in Short Fiber Composites. Journal of Rheology, 1987, 31, 751-784.	1.3	1,474
58	Flow and heat transfer in compression mold filling. Journal of Non-Newtonian Fluid Mechanics, 1987, 24, 245-264.	1.0	31
59	Predicting the Orientation of Short Fibers in Thin Compression Moldings. Journal of Composite Materials, 1986, 20, 539-557.	1.2	99
60	Mechanical Property Predictions for Short Fiber/Brittle Matrix Composites. Journal of Reinforced Plastics and Composites, 1984, 3, 120-129.	1.6	25
61	Simulation of Compression Molding for Fiber-Reinforced Thermosetting Polymers. Journal of Engineering for Industry, 1984, 106, 114-125.	0.8	81
62	Orientation Behavior of Fibers in Concentrated Suspensions. Journal of Reinforced Plastics and Composites, 1984, 3, 98-119.	1.6	936
63	Prediction and Control of Fiber Orientation in Molded Parts. Advances in Chemistry Series, 1984, , 279-299.	0.6	10
64	A model of compression mold filling. Polymer Engineering and Science, 1983, 23, 69-73.	1.5	49
65	Sample variance measurement of mixing. Chemical Engineering Science, 1981, 36, 1829-1839.	1.9	15
66	Mixing for reaction injection molding. I. Impingement mixing of liquids. Polymer Engineering and Science, 1980, 20, 875-886.	1.5	85
67	Mixing for reaction injection molding II. Impingement mixing of fiber suspensions. Polymer Engineering and Science, 1980, 20, 887-898.	1.5	16
68	Discussion: â€œVortex Motions Induced by V-Groove Rotating Cylinders and Their Effect on Mixing Performanceâ€•(Rotz, C. A., and Suh, N. P., 1979, ASME J. Fluids Eng., 100, pp. 186â€“192). Journal of Fluids Engineering, Transactions of the ASME, 1980, 102, 387-388.	0.8	1
69	Fluid Delivery and Metering for Reaction-Injection Molding. Journal of Engineering for Industry, 1977, 99, 678-681.	0.8	2
70	Electrostatic powder mixing. Polymer Engineering and Science, 1976, 16, 657-663.	1.5	13
71	Title is missing!. , 0, .		15