

Morton M Denn

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/9203106/publications.pdf>

Version: 2024-02-01

112
papers

6,850
citations

76326

40
h-index

60623

81
g-index

116
all docs

116
docs citations

116
times ranked

3555
citing authors

#	ARTICLE	IF	CITATIONS
1	Discontinuous Shear Thickening of Frictional Hard-Sphere Suspensions. Physical Review Letters, 2013, 111, 218301.	7.8	522
2	EXTRUSION INSTABILITIES AND WALL SLIP. Annual Review of Fluid Mechanics, 2001, 33, 265-287.	25.0	513
3	Yield stress materials in soft condensed matter. Reviews of Modern Physics, 2017, 89, .	45.6	511
4	Shear thickening, frictionless and frictional rheologies in non-Brownian suspensions. Journal of Rheology, 2014, 58, 1693-1724.	2.6	454
5	Instabilities in polymer processing. AIChE Journal, 1976, 22, 209-236.	3.6	453
6	On different ways of measuring σ_c yield stress. Journal of Non-Newtonian Fluid Mechanics, 2016, 238, 233-241.	2.4	251
7	A theory of isothermal melt spinning and draw resonance. AIChE Journal, 1976, 22, 236-246.	3.6	215
8	Yield Stress Fluids Slowly Yield to Analysis. Science, 2009, 324, 1401-1402.	12.6	195
9	A model for moving-bed coal gasification reactors. AIChE Journal, 1978, 24, 885-903.	3.6	187
10	DYNAMICAL PHENOMENA IN LIQUID-CRYSTALLINE MATERIALS. Annual Review of Fluid Mechanics, 2002, 34, 233-266.	25.0	187
11	Mechanics of steady spinning of a viscoelastic liquid. AIChE Journal, 1975, 21, 791-799.	3.6	168
12	Rheology of Non-Brownian Suspensions. Annual Review of Chemical and Biomolecular Engineering, 2014, 5, 203-228.	6.8	166
13	Discontinuous shear thickening in Brownian suspensions by dynamic simulation. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15326-15330.	7.1	150
14	A constitutive model for simple shear of dense frictional suspensions. Journal of Rheology, 2018, 62, 457-468.	2.6	150
15	Stability of plane poiseuille flow of a highly elastic liquid. Journal of Non-Newtonian Fluid Mechanics, 1977, 3, 179-195.	2.4	114
16	Issues in the flow of yield-stress liquids. Rheologica Acta, 2011, 50, 307-315.	2.4	103
17	Convergence of a regularization method for creeping flow of a Bingham material about a rigid sphere. Journal of Non-Newtonian Fluid Mechanics, 2002, 102, 179-191.	2.4	97
18	Multiplicities and instabilities in film blowing. Polymer Engineering and Science, 1988, 28, 1527-1541.	3.1	82

#	ARTICLE	IF	CITATIONS
19	Finite-amplitude stability and draw resonance in isothermal melt spinning. <i>Chemical Engineering Science</i> , 1975, 30, 1129-1134.	3.8	79
20	“Everything flows?” elastic effects on startup flows of yield-stress fluids. <i>Rheologica Acta</i> , 2017, 56, 189-194.	2.4	78
21	Shear thickening in concentrated suspensions of smooth spheres in Newtonian suspending fluids. <i>Soft Matter</i> , 2018, 14, 170-184.	2.7	77
22	Mechanics of nonisothermal polymer melt spinning. <i>AIChE Journal</i> , 1977, 23, 23-28.	3.6	75
23	Capillary and slit methods of normal stress measurements. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1980, 6, 163-185.	2.4	74
24	Nonmonotonic flow curves of shear thickening suspensions. <i>Physical Review E</i> , 2015, 91, 052302.	2.1	72
25	Bubble coalescence dynamics. <i>AIChE Journal</i> , 1997, 43, 2385-2392.	3.6	70
26	Computer simulation of steady polymer melt spinning. <i>Polymer Engineering and Science</i> , 1981, 21, 844-853.	3.1	69
27	Fifty years of non-Newtonian fluid dynamics. <i>AIChE Journal</i> , 2004, 50, 2335-2345.	3.6	69
28	Simulation of non-recirculating flows of dilute fiber suspensions. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1990, 37, 317-345.	2.4	68
29	From Yielding to Shear Jamming in a Cohesive Frictional Suspension. <i>Physical Review Letters</i> , 2019, 122, 098004.	7.8	62
30	Boundary layer flows for a class of elastic fluids. <i>Chemical Engineering Science</i> , 1967, 22, 395-405.	3.8	61
31	Blends of linear and branched polyethylenes. <i>Polymer Engineering and Science</i> , 2000, 40, 1132-1142.	3.1	61
32	Profile development in continuous drawing of viscoelastic liquids. <i>Industrial & Engineering Chemistry Fundamentals</i> , 1983, 22, 347-355.	0.7	55
33	Magnetic resonance studies of polypeptides adsorbed on silica and hydroxyapatite surfaces. <i>Journal of the American Chemical Society</i> , 1992, 114, 9634-9642.	13.7	55
34	Pressure drop-flow rate equation for adiabatic capillary flow with a pressure- and temperature-dependent viscosity. <i>Polymer Engineering and Science</i> , 1981, 21, 65-68.	3.1	52
35	Shear and normal stress measurements in non-Brownian monodisperse and bidisperse suspensions. <i>Journal of Rheology</i> , 2016, 60, 289-296.	2.6	50
36	Effect of Edge Fracture on Constant Torque Rheometry of Entangled Polymer Solutions. <i>Macromolecules</i> , 2005, 38, 9385-9388.	4.8	49

#	ARTICLE	IF	CITATIONS
37	The yield normal stress. <i>Journal of Rheology</i> , 2019, 63, 285-290.	2.6	49
38	Shear jamming and fragility in dense suspensions. <i>Granular Matter</i> , 2019, 21, 1.	2.2	48
39	Interactions of two rigid spheres translating collinearly in creeping flow in a Bingham material. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2003, 113, 49-67.	2.4	46
40	Interacting two-dimensional bubbles and droplets in a yield-stress fluid. <i>Physics of Fluids</i> , 2008, 20, .	4.0	45
41	Constitutive equations based on the transient network concept. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1983, 12, 69-83.	2.4	40
42	Mechanics of the "falling plate" extensional rheometer. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1991, 40, 281-288.	2.4	39
43	Emergence of structure in a model of liquid crystalline polymers with elastic coupling. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 91, 255-271.	2.4	39
44	Initial Profile Development in Melt Spinning. <i>Industrial & Engineering Chemistry Fundamentals</i> , 1980, 19, 195-197.	0.7	38
45	Nuclear magnetic resonance studies of blends containing poly(ethylene terephthalate) (PET) and poly(p-hydroxybenzoic acid-co-p-hydroxynaphthoic acid) (Vectra-A). <i>Macromolecules</i> , 1993, 26, 4269-4274.	4.8	35
46	Frequency Response Analysis of Polymer Melt Spinning. <i>Industrial & Engineering Chemistry Research</i> , 1994, 33, 2384-2390.	3.7	35
47	Stability of rotational couette flow of polymer solutions. <i>AIChE Journal</i> , 1972, 18, 1010-1015.	3.6	33
48	Analysis of transient periodic textures in nematic polymers. <i>Liquid Crystals</i> , 1989, 4, 409-422.	2.2	31
49	Interfacial Tension of Liquid Crystalline Droplets. <i>Langmuir</i> , 2003, 19, 7370-7373.	3.5	31
50	Rupture of entangled polymeric liquids in elongational flow with dissipation. <i>Journal of Rheology</i> , 2004, 48, 591-598.	2.6	31
51	Dynamics and control of the activated sludge wastewater process. <i>AIChE Journal</i> , 1978, 24, 693-698.	3.6	30
52	Converging flow of a viscoelastic liquid. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1976, 1, 83-92.	2.4	25
53	Converging flow of tumbling nematic liquid crystals. <i>Liquid Crystals</i> , 1989, 4, 253-272.	2.2	24
54	Flow Enhancement in the Continuous Extrusion of Linear Low-Density Polyethylene. <i>Industrial & Engineering Chemistry Research</i> , 2001, 40, 4309-4316.	3.7	23

#	ARTICLE	IF	CITATIONS
55	Polymer melt flow in very thin slits. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1993, 48, 101-110.	2.4	22
56	Extrudate distortions in linear low-density polyethylene solutions and melt. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1994, 54, 143-151.	2.4	22
57	Spatial development of director orientation of tumbling nematic liquid crystals in pressure-driven channel flow. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1998, 79, 515-527.	2.4	22
58	Jeffrey-Hamel flow of Leslie-Ericksen nematic liquids. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1988, 27, 375-401.	2.4	21
59	Structural, dielectric, and rheological characterization of a thermotropic polyester displaying smectic A, nematic, and isotropic phases. <i>Macromolecules</i> , 1990, 23, 5192-5200.	4.8	18
60	Correlations for Transport Coefficients in Textile Fiber Spinning. <i>Industrial & Engineering Chemistry Research</i> , 1996, 35, 2842-2843.	3.7	17
61	Isothermal Crystallization Kinetics of Poly(ethylene terephthalate) in Blends with a Liquid Crystalline Polyester (Vectra A). <i>Polymers for Advanced Technologies</i> , 1996, 7, 168-172.	3.2	17
62	Co-current axisymmetric flow in complex geometries: Experiments. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1989, 32, 229-252.	2.4	16
63	Dynamic simulation of low-speed melt spinning. <i>Industrial & Engineering Chemistry Fundamentals</i> , 1982, 21, 13-17.	0.7	15
64	Rheology of a liquid crystalline polymer dispersed in a flexible polymer matrix. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1999, 86, 3-14.	2.4	15
65	Planar contraction flow with a slip boundary condition. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2003, 114, 185-195.	2.4	15
66	Parameter Sensitivity and Kinetics-Free Modeling of Moving Bed Coal Gasifiers. <i>Industrial & Engineering Chemistry Fundamentals</i> , 1979, 18, 286-288.	0.7	14
67	Investigation of microstructure in poly[(p-hydroxybenzoic acid)-co-(ethylene terephthalate)] using nuclear magnetic resonance spectroscopy. <i>Macromolecules</i> , 1991, 24, 3250-3260.	4.8	14
68	JET BREAKUP ENHANCED BY AN INITIAL PULSE. <i>Chemical Engineering Communications</i> , 1987, 53, 61-68.	2.6	12
69	Disturbance propagation in melt spinning. <i>Chemical Engineering Science</i> , 1989, 44, 1807-1818.	3.8	12
70	Effect of hydrostatic pressure on polystyrene diffusivity in toluene. <i>Macromolecules</i> , 1990, 23, 245-251.	4.8	12
71	Near-surface dynamics of sheared polymer melts using ATR/FTIR. <i>AIChE Journal</i> , 1998, 44, 701-710.	3.6	12
72	The deformation and retraction of thermotropic LCP droplets in a flexible polymer matrix. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 2000, 93, 315-323.	2.4	12

#	ARTICLE	IF	CITATIONS
73	Monte Carlo simulation of steady extensional flows. <i>Journal of Rheology</i> , 2004, 48, 805-821.	2.6	12
74	Simulation of polymer melt processing. <i>AICHE Journal</i> , 2009, 55, 1641-1647.	3.6	12
75	Influence of Bulk Nematic Orientation on the Interface between a Liquid Crystalline Polymer and a Flexible Polymer. <i>Physical Review Letters</i> , 2001, 86, 656-659.	7.8	11
76	The optimality of an easily implementable feedback control system: An inverse problem in optimal control theory. <i>AICHE Journal</i> , 1967, 13, 926-931.	3.6	10
77	Free-surface effects in torsional parallel-plate rheometry. <i>Industrial & Engineering Chemistry Research</i> , 1991, 30, 918-922.	3.7	10
78	Surface interactions in a shear field. <i>AICHE Journal</i> , 1995, 41, 1266-1272.	3.6	10
79	Interface between a Liquid Crystalline Polymer and a Flexible Polymer. <i>Macromolecules</i> , 2002, 35, 6446-6454.	4.8	10
80	Dependence of nonlinear elasticity on filler size in composite polymer systems. <i>Rheologica Acta</i> , 2017, 56, 583-589.	2.4	10
81	Dielectric Spectroscopy of Liquid Crystalline Dispersions. <i>Langmuir</i> , 2006, 22, 2528-2533.	3.5	9
82	An elementary derivation of the maximum principle. <i>AICHE Journal</i> , 1965, 11, 367-368.	3.6	8
83	Radial effects in moving bed coal gasifiers. <i>Chemical Engineering Science</i> , 1983, 38, 1467-1481.	3.8	8
84	Post-fracture analyses of polyethylene-metal interfaces. <i>Chemical Engineering Science</i> , 1994, 49, 655-658.	3.8	8
85	Dynamics of flow-induced surface exchange. <i>Industrial & Engineering Chemistry Research</i> , 1995, 34, 3336-3341.	3.7	8
86	Transient behavior of moving-bed coal gasification reactors. <i>AICHE Journal</i> , 1979, 25, 429-439.	3.6	7
87	Visualization of the flow of a thermotropic liquid crystalline polymer in a tube with a conical contraction. <i>Journal of Non-Newtonian Fluid Mechanics</i> , 1997, 69, 207-219.	2.4	7
88	On an analysis of draw resonance by Hyun. <i>AICHE Journal</i> , 1980, 26, 292-294.	3.6	6
89	Brownian dynamics of sterically-stabilized colloidal suspensions. <i>AICHE Journal</i> , 1994, 40, 283-293.	3.6	4
90	Molecular motion and orientation distributions in melt-processed, fully aromatic liquid crystalline polyesters from NMR. <i>Solid State Nuclear Magnetic Resonance</i> , 1998, 12, 97-112.	2.3	4

#	ARTICLE	IF	CITATIONS
91	Surface Effects on the Phase Separation of Binary Polymer Blends. Industrial & Engineering Chemistry Research, 2004, 43, 354-363.	3.7	4
92	On the Optimization of Continuous Complex Systems by the Maximum Principle. International Journal of Control, 1965, 1, 487-496.	1.9	3
93	A modal approach to dynamics of nonlinear processes. AIChE Journal, 1978, 24, 519-523.	3.6	3
94	SULFUR CAPTURE DURING PARTIAL COAL COMBUSTION. Chemical Engineering Communications, 1987, 55, 83-93.	2.6	3
95	Rheology in polymer processing, by Chang Dae Han, Academic Press, 366 pp., 1976, \$29.50. AIChE Journal, 1977, 23, 405-405.	3.6	2
96	Simulation of non-isothermal draw and twist of a bi-component chiral glass fiber. Chemical Engineering Science, 2009, 64, 1687-1694.	3.8	2
97	The control problem in the complex plant. Chemical Engineering Science, 1966, 21, 703-705.	3.8	1
98	A macroscopic condition for stability. AIChE Journal, 1970, 16, 670-672.	3.6	1
99	Stability of a catalytic reaction to finite amplitude disturbances. The Chemical Engineering Journal, 1972, 4, 105-112.	0.3	1
100	Selecting a publication vehicle. AIChE Journal, 1989, 35, 353-353.	3.6	1
101	Solid-phase rheology of an anisotropic polymer (Vectra A). Polymers for Advanced Technologies, 1995, 6, 693-702.	3.2	1
102	Simulation of the evolution of concentrated shear layers in a Maxwell fluid with a fast high-resolution finite-difference scheme. Journal of Non-Newtonian Fluid Mechanics, 1999, 84, 275-287.	2.4	1
103	Notes: On the Evaluation of Rheological Constitutive Equations in a Paper by Tsai and Darby. Journal of Rheology, 1979, 23, 371-373.	2.6	0
104	Comments on "Parameter Sensitivity and Kinetics-Free Modeling of Moving Bed Coal Gasifiers". Industrial & Engineering Chemistry Fundamentals, 1980, 19, 325-325.	0.7	0
105	Computer-aided design and control of an activated sludge process. The Chemical Engineering Journal, 1983, 27, B13-B27.	0.3	0
106	The role of a broadly-based journal. AIChE Journal, 1985, 31, 1057-1057.	3.6	0
107	Change in format and style. AIChE Journal, 1985, 31, 1937-1937.	3.6	0
108	Distorting the practice and publication of research. AIChE Journal, 1991, 37, 802-802.	3.6	0

#	ARTICLE	IF	CITATIONS
109	Reuel Shinnar at 80: An Appreciation. Industrial & Engineering Chemistry Research, 2004, 43, 243-244.	3.7	0
110	Preface to T. W. Fraser Russell Festschrift. Industrial & Engineering Chemistry Research, 2009, 48, 5921-5922.	3.7	0
111	Surface Defects and Failure of Adhesion in Polymer Melt Extrusion. Studies in Applied Mechanics, 1987, 15, 77-80.	0.4	0
112	The Flow of Liquid Dairy Foods in Small Gaps. Nihon Reoroji Gakkaishi, 1994, 22, 86-89.	1.0	0