

Arne J Pearlstein

List of Publications by Year in descending order

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87
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2,076
citations

186209

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254106

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87
docs citations

87
times ranked

1312
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessment of a novel in-flight washing device: Microbial reduction and food quality of chopped iceberg lettuce during storage. <i>Food Control</i> , 2021, 120, 107538.	2.8	1
2	Machine learning-enabled non-destructive paper chromogenic array detection of multiplexed viable pathogens on food. <i>Nature Food</i> , 2021, 2, 110-117.	6.2	54
3	Nondestructive multiplex detection of foodborne pathogens with background microflora and symbiosis using a paper chromogenic array and advanced neural network. <i>Biosensors and Bioelectronics</i> , 2021, 183, 113209.	5.3	24
4	Free Response of a Rotational Nonlinear Energy Sink Coupled to a Linear Oscillator: Fractality, Riddling, and Initial-Condition Sensitivity at Intermediate Initial Displacements. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2021, 88, .	1.1	2
5	<i>Listeria monocytogenes</i> biofilm formation as affected by stainless steel surface topography and coating composition. <i>Food Control</i> , 2021, 130, 108275.	2.8	15
6	Free Response of a Rotational Nonlinear Energy Sink: Complete Dissipation of Initial Energy for Small Initial Rectilinear Displacements. <i>Journal of Applied Mechanics, Transactions ASME</i> , 2021, 88, .	1.1	2
7	High Schmidt number “Washout” of a soluble contaminant downstream of a backward-facing step. <i>International Journal of Heat and Mass Transfer</i> , 2020, 159, 119740.	2.5	3
8	On-off switching of vortex shedding and vortex-induced vibration in crossflow past a circular cylinder by locking or releasing a rotational nonlinear energy sink. <i>Physical Review Fluids</i> , 2020, 5, .	1.0	8
9	Coexistence of multiple long-time solutions for two-dimensional laminar flow past a linearly sprung circular cylinder with a rotational nonlinear energy sink. <i>Physical Review Fluids</i> , 2019, 4, .	1.0	8
10	Effect of an internal nonlinear rotational dissipative element on vortex shedding and vortex-induced vibration of a sprung circular cylinder. <i>Journal of Fluid Mechanics</i> , 2017, 828, 196-235.	1.4	31
11	Sequential Preparation of Series of Ternary Solutions. <i>Journal of Solution Chemistry</i> , 2017, 46, 505-519.	0.6	0
12	Transparent, immiscible, surrogate liquids with matchable refractive indexes: Increased range of density and viscosity ratios. <i>Physics of Fluids</i> , 2016, 28, 127102.	1.6	6
13	Surrogate immiscible liquid pairs with refractive indexes matchable over a wide range of density and viscosity ratios. <i>Physics of Fluids</i> , 2015, 27, .	1.6	13
14	Whole-head washing, prior to cutting, provides sanitization advantages for fresh-cut Iceberg lettuce (<i>Lactuca sativa</i> L.). <i>International Journal of Food Microbiology</i> , 2014, 179, 18-23.	2.1	15
15	Quality of Iceberg (<i>Lactuca sativa</i> L.) and Romaine (<i>L. sativa</i> L. var. <i>longifolia</i>) lettuce treated by combinations of sanitizer, surfactant, and ultrasound. <i>LWT - Food Science and Technology</i> , 2014, 56, 261-268.	2.5	39
16	Fabrication of Biomimetically Patterned Surfaces and Their Application to Probing Plant-“Bacteria Interactions. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 12467-12478.	4.0	49
17	Computational study of vortex-induced vibration of a sprung rigid circular cylinder with a strongly nonlinear internal attachment. <i>Journal of Fluids and Structures</i> , 2013, 40, 214-232.	1.5	30
18	Microbial inactivation by ultrasound for enhanced food safety. <i>Proceedings of Meetings on Acoustics</i> , 2013, , .	0.3	0

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19	Electric Power Generation Using Buoyancy-Induced Vortices Sustained by Entrained Solar-Heated Air. , 2013, , .		1
20	Vortex-Induced Vibration of a Sprung Rigid Circular Cylinder Augmented With a Nonlinear Energy Sink. , 2012, , .		0
21	Power Generation From Concentrated Solar-Heated Air Using Buoyancy-Induced Vortices. , 2012, , .		5
22	Continuous-flow ultrasonic washing system for fresh produce surface decontamination. Innovative Food Science and Emerging Technologies, 2012, 16, 427-435.	2.7	39
23	The Effect of Salt on Protein Chemical Potential Determined by Ternary Diffusion in Aqueous Solutions. Journal of Physical Chemistry B, 2006, 110, 1405-1415.	1.2	26
24	Linear stability of spiral and annular Poiseuille flow for small radius ratio. Journal of Fluid Mechanics, 2006, 547, 1.	1.4	21
25	Diffusion-Induced Nonuniformity of Photoinitiation in a Photobleaching Medium. Macromolecules, 2004, 37, 1565-1575.	2.2	29
26	The connection between centrifugal instability and Tollmien-Schlichting-like instability for spiral Poiseuille flow. Journal of Fluid Mechanics, 2004, 509, 331-351.	1.4	23
27	Computational assessment of subcritical and delayed onset in spiral Poiseuille flow experiments. Journal of Fluid Mechanics, 2004, 509, 353-378.	1.4	11
28	Nonuniformity of Chain-Length Distributions in Photopolymerized Layers. Macromolecules, 2003, 36, 6346-6358.	2.2	18
29	Spatially Controlled Microstructural Variation using a Free-Surface Flow Driven by a Rotating Cylinder Electrode. Journal of the Electrochemical Society, 2002, 149, B248.	1.3	5
30	Stokes-flow computation of the diffusion coefficient and rotational diffusion tensor of lysozyme, a globular protein. Physics of Fluids, 2002, 14, 2376.	1.6	11
31	Potential flow model of cavitation-induced interfacial fracture in a confined ductile layer. Journal of the Mechanics and Physics of Solids, 2002, 50, 549-569.	2.3	8
32	Effect of steady ampoule rotation on radial dopant segregation in vertical Bridgman growth of GaSe. Journal of Crystal Growth, 2002, 240, 581-602.	0.7	6
33	Effects of Optical Attenuation and Consumption of a Photobleaching Initiator on Local Initiation Rates in Photopolymerizations. Macromolecules, 2001, 34, 3195-3204.	2.2	120
34	Effects of Kinetics and Optical Attenuation on the Completeness, Uniformity, and Dynamics of Monomer Conversion in Free-Radical Photopolymerizations. Macromolecules, 2001, 34, 8894-8906.	2.2	41
35	Thermodynamically self-consistent approximations to the liquidus and solidus of $Hg_{1-x}Cd_xTe$. Journal of Electronic Materials, 2001, 30, 65-69.	1.0	0
36	Precision measurement of ternary diffusion coefficients and implications for protein crystal growth: lysozyme chloride in aqueous ammonium chloride at 25°C. Journal of Crystal Growth, 2001, 232, 273-284.	0.7	15

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37	Simulation of radial dopant segregation in vertical Bridgman growth of GaSe, a semiconductor with anisotropic solid-phase thermal conductivity. <i>Journal of Crystal Growth</i> , 2001, 231, 148-170.	0.7	8
38	Interface Shape and Thermally-Driven Convection in Vertical Bridgman Growth of Gallium Selenide: A Semiconductor With Anisotropic Solid-Phase Thermal Conductivity. <i>Journal of Heat Transfer</i> , 2001, 123, 729-740.	1.2	9
39	Simulation of radial solute segregation in vertical Bridgman growth of pyridine-doped benzene, a surrogate for binary organic nonlinear optical materials. <i>Journal of Crystal Growth</i> , 2000, 218, 334-352.	0.7	7
40	Simulation of vertical Bridgman growth of benzene, a material with anisotropic solid-phase thermal conductivity. <i>Journal of Crystal Growth</i> , 2000, 209, 934-952.	0.7	10
41	Extraction of Thermodynamic Data from Ternary Diffusion Coefficients. Use of Precision Diffusion Measurements for Aqueous Lysozyme Chloride + NaCl at 25 °C To Determine the Change of Lysozyme Chloride Chemical Potential with Increasing NaCl Concentration Well into the Supersaturated Region. <i>Journal of the American Chemical Society</i> , 2000, 122, 5916-5928.	6.6	59
42	Isobaric equation of state for liquid Hg _{1-x} CdxTe. <i>Journal of Crystal Growth</i> , 1999, 204, 282-288.	0.7	1
43	Precision Measurements of Binary and Multicomponent Diffusion Coefficients in Protein Solutions Relevant to Crystal Growth: % Lysozyme Chloride in Water and Aqueous NaCl at pH 4.5 and 25 °C. <i>Journal of the American Chemical Society</i> , 1999, 121, 3256-3266.	6.6	76
44	Current oscillations in potentiostatic electro-oxidation of aluminum in phosphoric and sulfuric acids. <i>Electrochimica Acta</i> , 1998, 43, 417-421.	2.6	9
45	Steady axisymmetric motion of deformable drops falling or rising through a homoviscous fluid in a tube at intermediate Reynolds number. <i>Journal of Fluid Mechanics</i> , 1997, 336, 1-32.	1.4	45
46	Simulation of extraction of velocity from passive scalar data in a two-dimensional diverging channel flow. <i>Physics of Fluids</i> , 1996, 8, 2447-2459.	1.6	3
47	Free-solution electrophoresis with amplification of small mobility differences by helical flow. <i>Journal of Chromatography A</i> , 1995, 707, 87-103.	1.8	6
48	On the determination of solenoidal or compressible velocity fields from measurements of passive or reactive scalars. <i>Physics of Fluids</i> , 1995, 7, 754-763.	1.6	18
49	Three-Dimensional Field-Flow Fractionation Using Helical Flow. <i>Separation Science and Technology</i> , 1995, 30, 2251-2258.	1.3	5
50	Forced localization in a periodic chain of non-linear oscillators. <i>International Journal of Non-Linear Mechanics</i> , 1994, 29, 429-447.	1.4	53
51	Hot spot locations and temperature distributions in a forced convection photochemical reactor. <i>International Journal of Heat and Mass Transfer</i> , 1993, 36, 2105-2114.	2.5	6
52	Electrodissolution Kinetics of Iron in Chloride Solutions: VIII . Chaos in Potential/Current Oscillations. <i>Journal of the Electrochemical Society</i> , 1993, 140, 721-728.	1.3	42
53	Development of the wake behind a circular cylinder impulsively started into rotatory and rectilinear motion. <i>Journal of Fluid Mechanics</i> , 1993, 253, 449.	1.4	72
54	Plating of copper in tubular holes with rotating screw electrodes. <i>Surface and Coatings Technology</i> , 1992, 52, 269-274.	2.2	3

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55	Coriolis effects on the stability of plane-front solidification of dilute Pb-Sn binary alloys. Metallurgical and Materials Transactions B - Process Metallurgy and Materials Processing Science, 1992, 23, 73-80.	0.5	1
56	Absorbance, light intensity, mass transfer, and sampling time effects in a proposed mechanism for the photolysis of phenyl azide. Journal of the American Chemical Society, 1991, 113, 2132-2140.	6.6	11
57	Convective instability in superposed fluid and anisotropic porous layers. Physics of Fluids A, Fluid Dynamics, 1991, 3, 556-565.	1.6	30
58	Effect of rigid boundaries on the onset of convective instability in a triply diffusive fluid layer. Physics of Fluids A, Fluid Dynamics, 1990, 2, 897-902.	1.6	49
59	Stability of the flow past a sphere. Journal of Fluid Mechanics, 1990, 211, 73-93.	1.4	68
60	Potential/current oscillations and anodic film characteristics of iron in concentrated chloride solutions. Corrosion Science, 1990, 31, 615-620.	3.0	25
61	Stability and Bifurcation of Spatially Coherent Solutions of the Damped-Driven NLS Equation. SIAM Journal on Applied Mathematics, 1990, 50, 791-818.	0.8	49
62	Development of an extended proper orthogonal decomposition and its application to a time periodically forced plane mixing layer. Physics of Fluids A, Fluid Dynamics, 1989, 1, 1363-1373.	1.6	55
63	Global and Conditional Stability of the Steady and Periodic Solutions of the Franck-FitzHugh Model of Electrodeposition of Fe in H_2SO_4 . Journal of the Electrochemical Society, 1989, 136, 1290-1299.	1.3	33
64	Removal of infinite eigenvalues in the generalized matrix eigenvalue problem. Journal of Computational Physics, 1989, 84, 242-246.	1.9	21
65	Selection of convective planform orientation by boundary anisotropy. Journal of Fluid Mechanics, 1989, 207, 267-294.	1.4	3
66	The onset of convective instability in a triply diffusive fluid layer. Journal of Fluid Mechanics, 1989, 202, 443-465.	1.4	91
67	Stability of free-convection flows of variable-viscosity fluids in vertical and inclined slots. Journal of Fluid Mechanics, 1989, 198, 513.	1.4	81
68	The onset of convection in a multicomponent fluid layer. Physics of Fluids A, Fluid Dynamics, 1989, 1, 845-853.	1.6	34
69	Temperature distributions in a laminar-flow tubular photoreactor. AIChE Journal, 1988, 34, 1381-1383.	1.8	1
70	Efficient transformation of certain singular polynomial matrix eigenvalue problems. Journal of Computational Physics, 1988, 78, 305-312.	1.9	9
71	Onset of convection in variable viscosity fluids: Assessment of approximate viscosity-temperature relations. Physics of Fluids, 1988, 31, 1380.	1.4	7
72	Low Peclet Number Heat Transfer in a Laminar Tube Flow Subjected to Axially Varying Wall Heat Flux. Journal of Heat Transfer, 1988, 110, 796-798.	1.2	10

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73	Viscosity-temperature correlation for glycerol-water solutions. Industrial & Engineering Chemistry Research, 1987, 26, 1670-1672.	1.8	55
74	Aerosol reactor theory: Stability and dynamics of a continuous stirred tank aerosol reactor. AIChE Journal, 1986, 32, 177-185.	1.8	25
75	Steady state stability for a surface reaction with external heat and mass transfer resistance. Chemical Engineering Science, 1985, 40, 865-868.	1.9	1
76	Film Formation and Current Oscillations in the Electrodeposition of Copper in Acidic Chloride Media: II. Mathematical Model. Journal of the Electrochemical Society, 1985, 132, 2159-2165.	1.3	53
77	On the two-dimensionality of the critical disturbances for stratified viscous plane parallel shear flows. Physics of Fluids, 1985, 28, 751.	1.4	17
78	Instability and bifurcation analysis for an exothermic surface reaction with diffusive heat and mass transfer. Journal of Chemical Physics, 1985, 83, 6027-6038.	1.2	7
79	Criteria for the absence of thermal convection in photochemical systems. The Journal of Physical Chemistry, 1985, 89, 1054-1058.	2.9	16
80	Film Formation and Current Oscillations in the Electrodeposition of Cu in Acidic Chloride Media: I. Experimental Studies. Journal of the Electrochemical Society, 1985, 132, 1031-1037.	1.3	139
81	On the equivalence of two sets of mode shapes in a cantilever beam problem. Journal of Sound and Vibration, 1984, 95, 559-560.	2.1	3
82	ONSET OF INSTABILITY IN A CHEMICALLY REACTING FLUID LAYER. Annals of the New York Academy of Sciences, 1983, 404, 220-220.	1.8	0
83	Effect of rotation on the stability of a doubly diffusive fluid layer. Journal of Fluid Mechanics, 1981, 103, 389.	1.4	64
84	Exact, efficient calculation of coefficients in certain eigenfunction expansions. Flow, Turbulence and Combustion, 1975, 30, 337-340.	0.2	5
85	Facile birefringence calculation for an isomerization model of S. Kobayasi. Biopolymers, 1974, 13, 2649-2651.	1.2	1
86	Heat Transfer Enhancement in Fin Channels Using Aeroelastically Fluttering Reeds. Journal of Advanced Manufacturing and Processing, 0, , e10110.	1.4	1
87	Free Response of a Rotational Nonlinear Energy Sink Coupled to a Linear Oscillator: Fractality, Riddling, and Initial-Condition Sensitivity at Large Initial Displacements. Journal of Applied Mechanics, Transactions ASME, 0, , 1-15.	1.1	0