Clayton J Radke

List of Publications by Year in descending order

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286 papers 14,430 citations

18436 62 h-index 27345 106 g-index

296 all docs

296 docs citations

296 times ranked

8911 citing authors

#	Article	IF	CITATIONS
1	Protein adsorption at the oil/water interface: characterization of adsorption kinetics by dynamic interfacial tension measurements. Biophysical Chemistry, 1999, 81, 59-80.	1.5	485
2	Thermodynamics of multi-solute adsorption from dilute liquid solutions. AICHE Journal, 1972, 18, 761-768.	1.8	456
3	A pore-level scenario for the development of mixed wettability in oil reservoirs. AICHE Journal, 1993, 39, 1072-1085.	1.8	416
4	Equilibrium measurements of oscillatory disjoining pressures in aqueous foam films. Langmuir, 1992, 8, 3020-3026.	1.6	349
5	Laminar flow of a wetting liquid along the corners of a predominantly gas-occupied noncircular pore. Journal of Colloid and Interface Science, 1988, 121, 392-401.	5.0	316
6	Adsorption of Organic Solutes from Dilute Aqueous Solution of Activated Carbon. Industrial & Engineering Chemistry Fundamentals, 1972, 11, 445-451.	0.7	283
7	Disjoining pressures, zeta potentials and surface tensions of aqueous non-ionic surfactant/electrolyte solutions: theory and comparison to experiment. Advances in Colloid and Interface Science, 2002, 96, 231-264.	7.0	268
8	Interfacial Rheology of Globular and Flexible Proteins at the Hexadecane/Water Interface:Â Comparison of Shear and Dilatation Deformation. Journal of Physical Chemistry B, 2004, 108, 3835-3844.	1.2	258
9	The motion of long bubbles in polygonal capillaries. Part 1. Thin films. Journal of Fluid Mechanics, 1995, 292, 71-94.	1.4	249
10	Mechanisms of Foam Generation in Glass-Bead Packs. SPE Reservoir Engineering, 1988, 3, 573-585.	0.5	238
11	The motion of long bubbles in polygonal capillaries. Part 2. Drag, fluid pressure and fluid flow. Journal of Fluid Mechanics, 1995, 292, 95-110.	1.4	229
12	A mechanistic population balance model for transient and steady-state foam flow in Boise sandstone. Chemical Engineering Science, 1995, 50, 3783-3799.	1.9	211
13	Fundamentals of Foam Transport in Porous Media. Advances in Chemistry Series, 1994, , 115-163.	0.6	205
14	Dilatational Rheology of BSA Conformers at the Air/Water Interface. Langmuir, 2003, 19, 2349-2356.	1.6	199
15	The influence of disjoining pressure on foam stability and flow in porous media. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1994, 83, 109-120.	2.3	178
16	Influence of Texture on Steady Foam Flow in Berea Sandstone. SPE Reservoir Engineering, 1992, 7, 83-90.	0.5	176
17	The role of interfacial rheology in reservoir mixed wettability. Journal of Petroleum Science and Engineering, 2003, 39, 137-158.	2.1	171
18	Shear and Dilatational Relaxation Mechanisms of Globular and Flexible Proteins at the Hexadecane/Water Interface. Langmuir, 2004, 20, 10159-10167.	1.6	167

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19	Direct Imaging of Lysozyme Adsorption onto Mica by Atomic Force Microscopy. Langmuir, 2002, 18, 5841-5850.	1.6	158
20	Generalized entering coefficients: a criterion for foam stability against oil in porous media. Langmuir, 1993, 9, 1704-1713.	1.6	152
21	A filtration model for the flow of dilute, stable emulsions in porous media—I. Theory. Chemical Engineering Science, 1986, 41, 263-272.	1.9	147
22	An ion-binding model for ionic surfactant adsorption at aqueous-fluid interfaces. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 1996, 114, 337-350.	2.3	147
23	Snap-off of gas bubbles in smoothly constricted noncircular capillaries. AICHE Journal, 1987, 33, 753-765.	1.8	144
24	Flow mechanism of dilute, stable emulsions in porous media. Industrial & Engineering Chemistry Fundamentals, 1984, 23, 342-347.	0.7	140
25	Wetting and Spreading Dynamics. , 0, , .		138
26	A Growing Drop Technique for Measuring Dynamic Interfacial Tension. Journal of Colloid and Interface Science, 1993, 160, 435-448.	5.0	135
27	Three-dimensional menisci in polygonal capillaries. Journal of Colloid and Interface Science, 1992, 148, 317-336.	5.0	134
28	An extended evolution equation for liquid film breakup in cylindrical capillaries. Chemical Engineering Science, 1988, 43, 1457-1465.	1.9	129
29	RELAXATION OF ASPHALTENES AT THE TOLUENE/WATER INTERFACE: DIFFUSION EXCHANGE AND SURFACE REARRANGEMENT. Journal of Adhesion, 2004, 80, 481-496.	1.8	123
30	Evaporation-driven instability of the precorneal tear film. Advances in Colloid and Interface Science, 2014, 206, 250-264.	7.0	114
31	Dynamics of surfactant sorption at the air/water interface: continuous-flow tensiometry. Journal of Colloid and Interface Science, 2003, 261, 170-179.	5.0	113
32	Wettability of silicone-hydrogel contact lenses in the presence of tear-film components. Current Eye Research, 2004, 28, 93-108.	0.7	111
33	Mechanistic Foam Flow Simulation in Heterogeneous and Multidimensional Porous Media. SPE Journal, 1997, 2, 511-526.	1.7	110
34	A Pore-Level Investigation of Foam/Oil Interactions in Porous Media. SPE Reservoir Engineering, 1990, 5, 495-502.	0.5	109
35	Transient Foam Displacement in the Presence of Residual Oil:Â Experiment and Simulation Using a Population-Balance Model. Industrial & Engineering Chemistry Research, 2000, 39, 2725-2741.	1.8	109
36	Dynamic interfacial tension minima in finite systems. Chemical Engineering Science, 1980, 35, 1129-1138.	1.9	105

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37	A Chemical Theory for Linear Alkaline Flooding. Society of Petroleum Engineers Journal, 1982, 22, 245-258.	0.9	101
38	In vivo tear-film thickness determination and implications for tear-film stability. Current Eye Research, 1998, 17, 1058-1066.	0.7	100
39	Spillover of the diffuse double layer on montmorillonite particles. Journal of Colloid and Interface Science, 1985, 103, 237-244.	5.0	97
40	Dispersive Mixing in the Posterior Tear Film Under a Soft Contact Lens. Industrial & Engineering Chemistry Research, 2001, 40, 3015-3026.	1.8	97
41	Hole formation and sheeting in the drainage of thin liquid films. Langmuir, 1992, 8, 3027-3032.	1.6	94
42	Surfactant Exchange Kinetics at the Air/Water Interface from the Dynamic Tension of Growing Liquid Drops. Journal of Colloid and Interface Science, 1994, 166, 73-88.	5.0	89
43	A filtration model for the flow of dilute, stable emulsions in porous mediaâ€"II. Parameter evaluation and estimation. Chemical Engineering Science, 1986, 41, 273-281.	1.9	87
44	Phosphorus-31 and aluminum-27 NMR investigations of the effects of pH on aqueous solutions containing aluminum and phosphorus. The Journal of Physical Chemistry, 1993, 97, 775-782.	2.9	87
45	Fuel-Cell Catalyst-Layer Resistance via Hydrogen Limiting-Current Measurements. Journal of the Electrochemical Society, 2019, 166, F3020-F3031.	1.3	84
46	The effects of gel aging on the synthesis of NaY zeolite from colloidal silica. Zeolites, 1992, 12, 742-749.	0.9	83
47	Oxygen-deficient metabolism and corneal edema. Progress in Retinal and Eye Research, 2011, 30, 471-492.	7.3	83
48	Multinuclear NMR investigation of the formation of aluminosilicate anions. The Journal of Physical Chemistry, 1989, 93, 1741-1744.	2.9	82
49	Solubilities and diffusivities of water vapor in poly(methylmethacrylate), poly(2-hydroxyethylmethacrylate), poly(N-vinyl-2-pyrrolidone) and poly(acrylonitrile). Polymer, 2003, 44, 6323-6333.	1.8	82
50	The dynamics of liquid film breakup in constricted cylindrical capillaries. Journal of Colloid and Interface Science, 1990, 134, 14-40.	5.0	81
51	Adsorption Kinetics and Mechanical Properties of Ultrathin Polyelectrolyte Multilayers: Liquid-Supported versus Solid-Supported Films. Journal of Physical Chemistry B, 2009, 113, 7128-7137.	1.2	81
52	Characterization of curcumin incorporated guar gum/orange oil antimicrobial emulsion films. International Journal of Biological Macromolecules, 2020, 148, 110-120.	3.6	78
53	Adsorption of weak organic electrolytes from aqueous solution on activated carbon. Effect of pH. The Journal of Physical Chemistry, 1980, 84, 369-376.	2.9	77
54	Kinetics of liquid/liquid capillary rise. Journal of Colloid and Interface Science, 1986, 109, 398-412.	5.0	76

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55	Charge Effects in the Transient Adsorption of Ionic Surfactants at Fluid Interfaces. Langmuir, 1994, 10, 3555-3566.	1.6	76
56	A physicochemical explanation for flow electrification in low-conductivity liquids in contact with a corroding wall. IEEE Transactions on Industry Applications, 1996, 32, 1051-1057.	3.3	74
57	A physicochemical study of the againg of colloidal silica gels used in zeolite Y synthesis. Zeolites, 1992, 12, 733-741.	0.9	72
58	Variational approach to the electrostatic free energy in charged colloidal suspensions: general theory for open systems. Journal of the Chemical Society, Faraday Transactions, 1990, 86, 3901.	1.7	71
59	Adsorption of weak organic electrolytes from dilute aqueous solution onto activated carbon. Part I. Single-solute systems. Journal of Colloid and Interface Science, 1985, 103, 466-483.	5.0	70
60	Asphaltenes, Water Films, and Wettability Reversal. SPE Journal, 1997, 2, 485-493.	1.7	69
61	Densityâ€functional modeling of structure and forces in thin micellar liquid films. Journal of Chemical Physics, 1994, 101, 6979-6991.	1.2	67
62	Foam flow through a transparent rough-walled rock fracture. Journal of Petroleum Science and Engineering, 1995, 13, 75-86.	2.1	65
63	Permeability and diffusivity for water transport through hydrogel membranes. Journal of Membrane Science, 2003, 214, 199-209.	4.1	65
64	A zeta-potential model for ionic surfactant adsorption on an ionogenic hydrophobic surface. Journal of Colloid and Interface Science, 1988, 125, 575-585.	5.0	64
65	Velocity effects in emulsion flow through porous media. Journal of Colloid and Interface Science, 1984, 102, 462-476.	5.0	63
66	Black-line formation and the "perched" human tear film. Current Eye Research, 2002, 25, 155-162.	0.7	63
67	Structural and Rheological Properties of Meibomian Lipid. , 2013, 54, 2720.		63
68	Migration of Alkaline Pulses in Reservoir Sands. Society of Petroleum Engineers Journal, 1982, 22, 998-1012.	0.9	62
69	Equilibrium Force Isotherms of a Deformable Bubble/Drop Interacting with a Solid Particle across a Thin Liquid Film. Langmuir, 2001, 17, 116-130.	1.6	62
70	Oscillating drop/bubble tensiometry: effect of viscous forces on the measurement of interfacial tension. Journal of Colloid and Interface Science, 2005, 282, 128-132.	5.0	62
71	Phosphorus-31 and aluminum-27 NMR investigations of highly acidic, aqueous solutions containing aluminum and phosphorus. The Journal of Physical Chemistry, 1993, 97, 767-774.	2.9	60
72	Molecular orientation of aqueous surfactants on a hydrophobic solid. Journal of Colloid and Interface Science, 1980, 78, 225-234.	5.0	58

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73	Quantitative determination of siliceous species in sodium silicate solutions by 29Si n.m.r. spectroscopy. Zeolites, 1987, 7, 183-190.	0.9	58
74	Dynamic lattice Monte Carlo simulation of a model protein at an oil/water interface. Journal of Chemical Physics, 2000, 112, 9167-9185.	1.2	58
75	Evidence from alkali-metal NMR spectroscopy for ion pairing in alkaline silicate solutions. The Journal of Physical Chemistry, 1989, 93, 1733-1737.	2.9	57
76	Solution adsorption from liquid chromatography. Journal of Colloid and Interface Science, 1978, 66, 153-165.	5.0	56
77	Peptide interfacial adsorption is kinetically limited by the thermodynamic stability of self association. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 5054-5059.	3.3	56
78	Disjoining pressure and stratification in asymmetric thin-liquid films. Colloid and Polymer Science, 1995, 273, 165-174.	1.0	55
79	Molecular Dynamics Simulations of Surface Tensions of Aqueous Electrolytic Solutions. Journal of Physical Chemistry B, 2004, 108, 9077-9084.	1.2	55
80	Dynamic Stability of Foam Lamellae Flowing Through a Periodically Constricted Pore. ACS Symposium Series, 1989, , 460-479.	0.5	54
81	Multicomponent Diffusion in Highly Asymmetric Systems. An Extended Maxwellâ^'Stefan Model for Starkly Different-Sized, Segment-Accessible Chain Molecules. Macromolecules, 2005, 38, 1364-1370.	2.2	54
82	Surface Forces and Drainage Kinetics of Protein-Stabilized Aqueous Films. Langmuir, 2003, 19, 7503-7513.	1.6	53
83	NMR investigations of tetrapropylammonium aluminosilicate and borosilicate solutions. The Journal of Physical Chemistry, 1991, 95, 372-378.	2.9	51
84	Spreading of Aqueous Trisiloxane Surfactant Solutions over Liquid Hydrophobic Substrates. Langmuir, 2001, 17, 335-348.	1.6	51
85	Cellulase Adsorption and Reactivity on a Cellulose Surface from Flow Ellipsometry. Industrial & Engineering Chemistry Research, 2012, 51, 11389-11400.	1.8	51
86	Sorption and transport of water vapor in thin polymer films at 35 °C. Physical Chemistry Chemical Physics, 2004, 6, 103-108.	1.3	50
87	Gibbs adsorption equation for planar fluid–fluid interfaces: Invariant formalism. Advances in Colloid and Interface Science, 2015, 222, 600-614.	7.0	50
88	Reduced protein adsorption at solid interfaces by sugar excipients. Biotechnology and Bioengineering, 2004, 87, 565-573.	1.7	49
89	Molecular Simulation of Disjoining-Pressure Isotherms for Free Liquid, Lennard-Jones Thin Films. Journal of Physical Chemistry B, 2002, 106, 6529-6537.	1.2	48
90	Tear Dynamics in Healthy and Dry Eyes. Current Eye Research, 2014, 39, 580-595.	0.7	48

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91	Role of Clays in the Enhanced Recovery of Petroleum From Some California Sands. JPT, Journal of Petroleum Technology, 1983, 35, 643-654.	0.1	47
92	Onset of Mobilization and the Fraction of Trapped Foam in Porous Media. Transport in Porous Media, 1997, 28, 253-284.	1.2	47
93	Non-isothermal melting of ice in the gas-diffusion layer of a proton-exchange-membrane fuel cell. International Journal of Heat and Mass Transfer, 2013, 67, 896-901.	2.5	46
94	Double layer interactions between charge-regulated colloidal surfaces: pair potentials for spherical particles bearing ionogenic surface groups. Advances in Colloid and Interface Science, 1993, 47, 59-147.	7.0	45
95	AOT and Pluronic F68 Coadsorption at Fluid/Fluid Interfaces:Â A Continuous-Flow Tensiometry Study. Industrial & Description of the Company of the Continuous	1.8	45
96	Influence of Soluble Surfactants on the Flow of Long Bubbles Through a Cylindrical Capillary. ACS Symposium Series, 1989, , 480-501.	0.5	43
97	Molecular Structure of Interfacial Human Meibum Films. Langmuir, 2012, 28, 11858-11865.	1.6	42
98	Incorporation of aluminum into silicate anions in aqueous and methanolic solutions of TMA silicates. The Journal of Physical Chemistry, 1991, 95, 7847-7851.	2.9	41
99	Competitive Sorption Kinetics of Inhibited Endo- and Exoglucanases on a Model Cellulose Substrate. Langmuir, 2012, 28, 14598-14608.	1.6	41
100	Macromolecule Sorption and Diffusion in HEMA/MAA Hydrogels. Industrial & Engineering Chemistry Research, 2013, 52, 18109-18120.	1.8	41
101	Ice-Crystallization Kinetics in the Catalyst Layer of a Proton-Exchange-Membrane Fuel Cell. Journal of the Electrochemical Society, 2014, 161, F199-F207.	1.3	41
102	Steady-state diffusion of water through soft-contact-lens materials. Biomaterials, 2005, 26, 5704-5716.	5.7	40
103	Water-soluble drug partitioning and adsorption in HEMA/MAA hydrogels. Biomaterials, 2014, 35, 620-629.	5.7	40
104	Solubilities of six lithium salts in five non-aqueous solvents and in a few of their binary mixtures. Fluid Phase Equilibria, 2018, 461, 1-7.	1.4	40
105	A Combined Streaming-Potential Optical Reflectometer for Studying Adsorption at the Water/Solid Surface. Langmuir, 2005, 21, 10127-10139.	1.6	39
106	Dynamics of Haines jumps for compressible bubbles in constricted capillaries. AICHE Journal, 1989, 35, 230-240.	1.8	38
107	Wetting Behavior of Silicone Oils on Solid Substrates Immersed in Aqueous Electrolyte Solutions. Langmuir, 2002, 18, 6821-6829.	1.6	38
108	Modeling Corneal Metabolism and Oxygen Transport During Contact Lens Wear. Optometry and Vision Science, 2009, 86, 454-466.	0.6	38

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109	Dynamics of Flagellum- and Pilus-Mediated Association of Pseudomonas aeruginosa with Contact Lens Surfaces. Applied and Environmental Microbiology, 2011, 77, 3644-3652.	1.4	38
110	Aqueous Solute Partitioning and Mesh Size in HEMA/MAA Hydrogels. Macromolecules, 2012, 45, 9177-9187.	2.2	37
111	Water-evaporation reduction by duplex films: Application to the human tear film. Advances in Colloid and Interface Science, 2013, 197-198, 33-57.	7.0	37
112	Central Corneal Edema with Scleral-Lens Wear. Current Eye Research, 2018, 43, 1305-1315.	0.7	37
113	Experimental determination of gas-bubble breakup in a constricted cylindrical capillary. Industrial & amp; Engineering Chemistry Research, 1988, 27, 1282-1291.	1.8	36
114	Effects of organic and alkali metal cations on the distribution of silicate anions in aqueous solutions. The Journal of Physical Chemistry, 1991, 95, 9513-9518.	2.9	36
115	Cross-flow ultrafiltration of micellar surfactant solutions. AICHE Journal, 1995, 41, 2058-2066.	1.8	36
116	Adsorption dynamics of l-glutamic acid copolymers at a heptane/water interface. Biophysical Chemistry, 1998, 70, 121-132.	1.5	36
117	Kinetics of liquid/liquid capillary rise. Journal of Colloid and Interface Science, 1986, 109, 413-425.	5.0	35
118	Probing metal cluster formation in NaY zeolite by xenon-129 NMR. Journal of the American Chemical Society, 1988, 110, 4465-4467.	6.6	34
119	Molecular simulation of the surface tension of simple aqueous electrolytes and the Gibbs adsorption equation. Current Opinion in Colloid and Interface Science, 2004, 9, 145-148.	3.4	34
120	Osmotic Pressure and Interparticle Interactions in Ionic Micellar Surfactant Solutions. Journal of Physical Chemistry B, 1998, 102, 2739-2753.	1.2	33
121	Hydroxynitrile lyase at the diisopropyl ether/water interface: Evidence for interfacial enzyme activity. Biotechnology and Bioengineering, 1999, 65, 425-436.	1.7	33
122	Permeability and partition coefficient of aqueous sodium chloride in soft contact lenses. Journal of Applied Polymer Science, 2011, 122, 1457-1471.	1.3	33
123	Bulk and Surface Aqueous Speciation of Calcite: Implications for Low-Salinity Waterflooding of Carbonate Reservoirs. SPE Journal, 2018, 23, 84-101.	1.7	33
124	An Experimental Investigation of Gas-Bubble Breakup in Constricted Square Capillaries. JPT, Journal of Petroleum Technology, 1987, 39, 1137-1146.	0.1	32
125	Influence of alkali-metal cations on silicon exchange and silicon-29 spin relaxation in alkaline silicate solutions. The Journal of Physical Chemistry, 1989, 93, 1737-1741.	2.9	32
126	Effect of silicate ratio on the distribution of silicate and aluminosilicate anions in TPA aluminosilicate solutions. The Journal of Physical Chemistry, 1991, 95, 4501-4506.	2.9	32

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127	A Nonequilibrium Description of Alkaline Waterflooding. SPE Reservoir Engineering, 1986, 1, 29-43.	0.5	31
128	Settling and Deformation of a Thin Elastic Shell on a Thin Fluid Layer Lying on a Solid Surface. Journal of Colloid and Interface Science, 2002, 245, 187-197.	5.0	31
129	Electrostatic interactions in colloidal suspensions: Tests of pairwise additivity. AICHE Journal, 1991, 37, 805-824.	1.8	30
130	Role of organic solvents on Pa-hydroxynitrile lyase interfacial activity and stability. Biotechnology and Bioengineering, 2001, 74, 18-28.	1.7	30
131	Experimental and Theoretical Study of the Adsorption of a Diblock Copolymer to Interfaces between Two Homopolymers. Macromolecules, 2005, 38, 3872-3882.	2.2	30
132	Isothermal Ice Crystallization Kinetics in the Gas-Diffusion Layer of a Proton-Exchange-Membrane Fuel Cell. Langmuir, 2012, 28, 1222-1234.	1.6	30
133	Aqueous Foams for Control of Gas Migration and Water Coning in Aquifer Gas Storage. Energy Sources Part A Recovery, Utilization, and Environmental Effects, 1990, 12, 479-497.	0.5	29
134	Thermodynamics of Polymer Blends Organized by Balanced Block Copolymer Surfactants Studied by Mean-Field Theories and Scattering. Macromolecules, 2004, 37, 7401-7417.	2.2	29
135	Theory of Multicomponent Phenomena in Cation-Exchange Membranes: Part I. Thermodynamic Model and Validation. Journal of the Electrochemical Society, 2020, 167, 013547.	1.3	29
136	Spreading of Aqueous Dimethyldidodecylammonium Bromide Surfactant Droplets over Liquid Hydrocarbon Substrates. Langmuir, 1999, 15, 7392-7402.	1.6	28
137	Theory of Multicomponent Phenomena in Cation-Exchange Membranes: Part II. Transport Model and Validation. Journal of the Electrochemical Society, 2020, 167, 013548.	1.3	27
138	Effects of solvent structure on the distribution of silicate anions in mixed aqueous/organic solutions of alkaline tetramethylammonium silicate. The Journal of Physical Chemistry, 1991, 95, 9519-9524.	2.9	26
139	Evaluation of DLVO theory with disjoining-pressure and film-conductance measurements of common-black films stabilized with sodium dodecyl sulfate. Journal of Colloid and Interface Science, 2003, 262, 442-455.	5.0	26
140	Molecular Simulation of Disjoining-Pressure Isotherms for Free Aqueous Thin Films. Journal of Physical Chemistry B, 2003, 107, 13076-13083.	1.2	26
141	Glass-transition temperatures for soft-contact-lens materials. Dependence on water content. Polymer, 2005, 46, 4845-4852.	1.8	26
142	Diffusion of water-soluble sorptive drugs in HEMA/MAA hydrogels. Journal of Controlled Release, 2016, 239, 242-248.	4.8	26
143	Asphaltene Adsorption from Toluene onto Silica through Thin Water Layers. Langmuir, 2019, 35, 428-434.	1.6	26
144	Adsorption of weak organic electrolytes from dilute aqueous solution onto activated carbon. Part II. Multisolute systems. Journal of Colloid and Interface Science, 1985, 103, 484-492.	5.0	25

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145	Caesium and strontium diffusion through sodium montmorillonite at elevated temperature. Journal of Soil Science, 1988, 39, 53-64.	1.2	25
146	Modeling wet impregnation of nickel on \$gamma;-Alumina. Journal of Catalysis, 1989, 117, 52-70.	3.1	25
147	Two-dimensional menisci in nonaxisymmetric capillaries. Journal of Colloid and Interface Science, 1992, 148, 284-287.	5.0	25
148	Scalloped Channels Enhance Tear Mixing Under Hydrogel Contact Lenses. Optometry and Vision Science, 2006, 83, 874-878.	0.6	25
149	Impact of Nano- and Mesoscales on Macroscopic Cation Conductivity in Perfluorinated-Sulfonic-Acid Membranes. Journal of Physical Chemistry C, 2017, 121, 28262-28274.	1.5	25
150	Wetting behavior of four polar organic solvents containing one of three lithium salts on a lithium-ion-battery separator. Journal of Colloid and Interface Science, 2018, 529, 582-587.	5.0	25
151	Linear Oil Displacement by the Emulsion Entrapment Process. Society of Petroleum Engineers Journal, 1984, 24, 351-360.	0.9	24
152	Streaming potentials of nonuniformly charged surfaces. Journal of Colloid and Interface Science, 1991, 141, 338-347.	5.0	24
153	Two-Dimensional Network Simulation of Diffusion-Driven Coarsening of Foam Inside a Porous Medium. Journal of Colloid and Interface Science, 1996, 179, 357-373.	5.0	24
154	Total Internal Reflection Fluorescence Spectrometer To Study Dynamic Adsorption Phenomena at Liquid/Liquid Interfaces. Industrial & Engineering Chemistry Research, 1998, 37, 3159-3168.	1.8	24
155	Modeling the vertical motion of a soft contact lens. Current Eye Research, 2001, 22, 102-108.	0.7	24
156	Post-lens tear-film depletion due to evaporative dehydration of a soft contact lens. Journal of Membrane Science, 2006, 275, 229-243.	4.1	24
157	Flow Evaporimeter To Assess Evaporative Resistance of Human Tear-Film Lipid Layer. Industrial & Engineering Chemistry Research, 2014, 53, 18130-18139.	1.8	24
158	Divalent Ion Exchange With Alkali. Society of Petroleum Engineers Journal, 1983, 23, 657-668.	0.9	23
159	Micellar ultrafiltration in an unstirred batch cell at constant flux. Journal of Membrane Science, 1994, 86, 241-261.	4.1	23
160	A kinetic model for enzyme interfacial activity and stability: pa-hydroxynitrile lyase at the diisopropyl ether/water interface. Biotechnology and Bioengineering, 2002, 78, 595-605.	1.7	23
161	Solvent–amino acid interaction energies in 3-D-lattice MC simulations of model proteins. Aggregation thermodynamics and kinetics. Physical Chemistry Chemical Physics, 2003, 5, 5291-5299.	1.3	23
162	The Effect of Water Hydraulic Permeability on the Settling of a Soft Contact Lens on the Eye. Current Eye Research, 2005, 30, 329-336.	0.7	23

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163	Oxidation of Reduced Platinum Clusters in Pt-NaY. Journal of Catalysis, 1993, 144, 506-524.	3.1	22
164	Hydroxynitrile lyase adsorption at liquid/liquid interfaces. Journal of Molecular Catalysis B: Enzymatic, 1998, 5, 349-354.	1.8	22
165	Recovery of dilute aqueous butanol by membrane vapor extraction with dodecane or mesitylene. Journal of Membrane Science, 2017, 528, 103-111.	4.1	22
166	Assessment of the performance of several novel approaches to improve physical properties of guar gum based biopolymer films. Food Packaging and Shelf Life, 2021, 29, 100687.	3.3	22
167	Flow of dilute, stable liquid and solid dispersions in underground porous media. AICHE Journal, 1985, 31, 1926-1928.	1.8	21
168	The role of electrolytes on protein adsorption at a hydrophilic solid–water interface. Colloids and Surfaces B: Biointerfaces, 2010, 75, 100-106.	2.5	21
169	Surface kinetics for cooperative fungal cellulase digestion of cellulose from quartz crystal microgravimetry. Journal of Colloid and Interface Science, 2013, 394, 498-508.	5.0	21
170	Tear-Film Evaporation Rate from Simultaneous Ocular-Surface Temperature and Tear-Breakup Area. Optometry and Vision Science, 2018, 95, 5-12.	0.6	21
171	The role of alkali cations in zeolite synthesis from silicate solutions containing N,N,N-trimethyl-1-adamantammonium cations. Catalysis Letters, 1996, 38, 1-9.	1.4	20
172	Fenestrations Enhance Tear Mixing under Silicone-Hydrogel Contact Lenses., 2003, 44, 60.		20
173	A single-lens polarographic measurement of oxygen permeability (Dk) for hypertransmissible soft contact lenses. Biomaterials, 2007, 28, 4331-4342.	5.7	20
174	Chromatographie Transport of Alkaline Buffers Through Reservoir Rock. SPE Reservoir Engineering, 1988, 3, 849-856.	0.5	19
175	Water diffusion through hydrogel membranes. Journal of Membrane Science, 2008, 320, 423-430.	4.1	19
176	Polarographic Method for Measuring Oxygen Diffusivity and Solubility in Water-Saturated Polymer Films: A Application to Hypertransmissible Soft Contact Lenses. Industrial & Lamp; Engineering Chemistry Research, 2008, 47, 3540-3550.	1.8	19
177	Linking Perfluorosulfonic Acid Ionomer Chemistry and High-Current Density Performance in Fuel-Cell Electrodes. ACS Applied Materials & Samp; Interfaces, 2021, 13, 42579-42589.	4.0	19
178	Sorption kinetics and equilibrium uptake for water vapor in soft-contact-lens hydrogels. Journal of Biomedical Materials Research - Part A, 2006, 77A, 230-241.	2.1	18
179	Monte Carlo Simulations of Lennard-Jones Nonionic Surfactant Adsorption at the Liquid/Vapor Interface. Langmuir, 2007, 23, 1835-1844.	1.6	18
180	Pseudo-isothermal ice-crystallization kinetics in the gas-diffusion layer of a fuel cell from differential scanning calorimetry. International Journal of Heat and Mass Transfer, 2013, 60, 450-458.	2.5	18

#	Article	IF	CITATIONS
181	The Origin of Reversible Hydroxide Uptake on Reservoir Rock. Society of Petroleum Engineers Journal, 1985, 25, 711-718.	0.9	17
182	Dissolution and Condensation Kinetics of Silica in Alkaline Solution. SPE Reservoir Engineering, 1988, 3, 743-752.	0.5	17
183	Role of tetrapropylammonium cations in gel-phase silicalite synthesis. Microporous Materials, 1994, 2, 145-158.	1.6	17
184	A Linearized Corrosion Double-Layer Model for Laminar Flow Electrification of Hydrocarbon Liquids in Metal Pipes. Industrial & Engineering Chemistry Research, 1996, 35, 3195-3202.	1.8	17
185	Diffusivity of water through a HEMA-based soft contact lens. Fluid Phase Equilibria, 2005, 228-229, 269-273.	1.4	17
186	Role of surfactant on the proteolysis of aqueous bovine serum albumin. Biotechnology and Bioengineering, 2009, 102, 1330-1341.	1.7	17
187	Transport Resistances in Fuel-Cell Catalyst Layers. ECS Transactions, 2017, 80, 321-333.	0.3	17
188	Solvent-amino acid interaction energies in three-dimensional-lattice Monte Carlo simulations of a model 27-mer protein: Folding thermodynamics and kinetics. Protein Science, 2004, 13, 358-369.	3.1	16
189	Immobilized protein films for assessing surface proteolysis kinetics. Journal of Biotechnology, 2007, 132, 32-37.	1.9	16
190	Silicon-Wafer Cleaning with Aqueous Surfactant-Stabilized Gas/Solids Suspensions. Journal of the Electrochemical Society, 2011, 158, H55.	1.3	16
191	Zeolite synthesis from tetraalkylammonium silicate gels. Microporous Materials, 1995, 3, 511-530.	1.6	15
192	Design of Micellar-Enhanced Ultrafilters. Industrial & Engineering Chemistry Research, 1995, 34, 2436-2449.	1.8	15
193	Diffusion and Monod kinetics to determine <i>in vivo</i> human corneal oxygenâ€consumption rate during soft contactâ€ens wear. Journal of Biomedical Materials Research - Part B Applied Biomaterials, 2009, 90B, 202-209.	1.6	15
194	Kinetics of Adsorption and Proteolytic Cleavage of a Multilayer Ovalbumin Film by Subtilisin Carlsberg. Langmuir, 2008, 24, 7388-7393.	1.6	15
195	A Quasi-2-Dimensional Model for Respiration of the Cornea With Soft Contact Lens Wear. Cornea, 2012, 31, 405-417.	0.9	15
196	Aqueous salt transport through soft contact lenses: An osmotic-withdrawal mechanism for prevention of adherence. Contact Lens and Anterior Eye, 2012, 35, 260-265.	0.8	15
197	Hydrophobic Inorganic Oxide Pigments via Polymethylhydrosiloxane Grafting: Dispersion in Aqueous Solution at Extraordinarily High Solids Concentrations. Langmuir, 2018, 34, 11738-11748.	1.6	15
198	Human Lacrimal Production Rate and Wetted Length of Modified Schirmer's Tear Test Strips. Translational Vision Science and Technology, 2019, 8, 40.	1,1	15

#	Article	IF	CITATIONS
199	Calcium Ion Bridging of Aqueous Carboxylates onto Silica: Implications for Low-Salinity Waterflooding. Energy &	2.5	15
200	Transport of aromatic molecules in NaY Zeolite powders. AICHE Journal, 1990, 36, 1562-1568.	1.8	14
201	The Role of Fenestrations and Channels on the Transverse Motion of a Soft Contact Lens. Optometry and Vision Science, 2001, 78, 732-743.	0.6	14
202	In Vivo Oxygen Uptake into the Human Cornea. , 2012, 53, 6331.		14
203	Effects of aqueous polymeric surfactants on silicone-hydrogel soft- contact-lens wettability and bacterial adhesion of Pseudomonas aeruginosa. Contact Lens and Anterior Eye, 2012, 35, 155-162.	0.8	14
204	Stable Aqueous Dispersions of Hydrophobically Modified Titanium Dioxide Pigments through Polyanion Adsorption: Synthesis, Characterization, and Application in Coatings. Langmuir, 2016, 32, 1929-1938.	1.6	14
205	Interfacial versus homogeneous enzymatic cleavage of mandelonitrile by hydroxynitrile lyase in a biphasic system. Biotechnology and Bioengineering, 2003, 83, 498-501.	1.7	13
206	Monte Carlo Simulation of Mixed Lennard-Jones Nonionic Surfactant Adsorption at the Liquid/Vapor Interface. Langmuir, 2007, 23, 11580-11586.	1.6	13
207	Film and membrane-model thermodynamics of free thin liquid films. Journal of Colloid and Interface Science, 2015, 449, 462-479.	5.0	13
208	<i>110th Anniversary</i> : Theory of Activity Coefficients for Lithium Salts in Aqueous and Nonaqueous Solvents and in Solvent Mixtures. Industrial & Engineering Chemistry Research, 2019, 58, 18367-18377.	1.8	13
209	Investigation of surface properties of quince seed extract as a novel polymeric surfactant. Food Hydrocolloids, 2022, 123, 107185.	5.6	13
210	Area effects in spinning-drop dynamic interfacial tensions. Chemical Engineering Science, 1980, 35, 1458-1460.	1.9	12
211	A Self-Consistent Multicomponent Activity Coefficient Model for Ionic Micellar Surfactant Solutions. Langmuir, 1998, 14, 2297-2306.	1.6	12
212	In Vitro Spoilation of Silicone-Hydrogel Soft Contact Lenses in a Model-Blink Cell. Optometry and Vision Science, 2015, 92, 768-780.	0.6	12
213	Fluorescent solute-partitioning characterization of layered soft contact lenses. Acta Biomaterialia, 2015, 15, 48-54.	4.1	12
214	Human Lacrimal Production Rates from Modified Schirmer-Tear Test. Optometry and Vision Science, 2018, 95, 343-348.	0.6	12
215	Limbal Metabolic Support Reduces Peripheral Corneal Edema with Contact-Lens Wear. Translational Vision Science and Technology, 2020, 9, 44.	1.1	12
216	Osmotic and activity coefficients for five lithium salts in three non–aqueous solvents. Journal of Chemical Thermodynamics, 2019, 132, 83-92.	1.0	11

#	Article	IF	Citations
217	A mechanistic study of the synthesis of zeolite SSZ-24. Microporous Materials, 1996, 6, 131-150.	1.6	10
218	Transient linear stability of a Simons-process gas–liquid electrochemical flow reactor using numerical simulations. Chemical Engineering Science, 2001, 56, 5815-5834.	1.9	10
219	Molecular thermodynamics for swelling of a bicontinuous gel. Molecular Physics, 2002, 100, 2277-2297.	0.8	10
220	3D-Lattice Monte Carlo simulations of model proteins. Size effects on folding thermodynamics and kinetics. Biophysical Chemistry, 2003, 106, 81-89.	1.5	10
221	LETTER TO THE EDITOR: Comments on "The Thickness of the Tear Film― Current Eye Research, 2005, 30, 1131-1132.	0.7	10
222	Equilibrium swelling and mesoscopic structure of a diblock copolymer gel in a selective solvent. Molecular Physics, 2005, 103, 1431-1440.	0.8	10
223	Analysis of countercurrent membrane vapor extraction of a dilute aqueous biosolute. AICHE Journal, 2015, 61, 2795-2809.	1.8	10
224	Bulk and Surface Aqueous Speciation of Calcite: Implications for Low-Salinity Waterflooding of Carbonate Reservoirs. , 2016, , .		10
225	Human tear-production rate from closed-eye Schirmer-strip capillary dynamics. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2017, 521, 61-68.	2.3	10
226	A grahame triple-layer model unifies mica monovalent ion exchange, zeta potential, and surface forces. Advances in Colloid and Interface Science, 2021, 288, 102335.	7.0	10
227	Protection against corneal hyperosmolarity with soft-contact-lens wear. Progress in Retinal and Eye Research, 2022, 87, 101012.	7.3	10
228	Statistical Mechanics of Adsorption from Dilute Liquid Solution. Journal of Chemical Physics, 1972, 57, 714-722.	1.2	9
229	Silicon-29 and gallium-71 NMR investigations of alkylammonium gallosilicate solutions. The Journal of Physical Chemistry, 1992, 96, 2968-2975.	2.9	9
230	Modeling Water Uptake and Pt Utilization in High Surface Area Carbon. ECS Transactions, 2019, 92, 247-259.	0.3	9
231	Effect of Alkali Metal Cations on Silicate Structures in Aqueous Solution. ACS Symposium Series, 1988, , 222-235.	0.5	8
232	Surface Conductivity and Disjoining Pressure of Common Black Films Stabilized with Sodium Dodecyl Sulfate. Journal of Colloid and Interface Science, 1998, 203, 69-82.	5.0	8
233	Monte Carlo Simulations of Disjoining-Pressure Isotherms for Lennardâ^Jones Surfactant-Stabilized Free Thin Films. Journal of Physical Chemistry B, 2004, 108, 13412-13418.	1.2	8
234	Water transport through soft contact lenses determined in a fan-evaporation cell. Journal of Membrane Science, 2010, 362, 529-534.	4.1	8

#	Article	lF	CITATIONS
235	Equilibrium water and solute uptake in silicone hydrogels. Acta Biomaterialia, 2015, 18, 112-117.	4.1	8
236	Wettability Reversal of Hydrophobic Pigment Particles Comprising Nanoscale Organosilane Shells: Concentrated Aqueous Dispersions and Corrosion-Resistant Waterborne Coatings. ACS Applied Materials & Samp; Interfaces, 2019, 11, 44851-44864.	4.0	8
237	Chemical Compositions in Salinity Waterflooding of Carbonate Reservoirs: Theory. Transport in Porous Media, 2021, 136, 411-429.	1.2	8
238	Chemical Compositions in Modified Salinity Waterflooding of Calcium Carbonate Reservoirs: Experiment. Transport in Porous Media, 2022, 141, 255-278.	1.2	8
239	Pore-Scale Spontaneous Imbibition at High Advancing Contact Angles in Mixed-Wet Media: Theory and Experiment. Energy & Experiment.	2.5	8
240	The Effect of Alkali Metal Cations on The Structure of Dissolved Silicate Oligomers. Materials Research Society Symposia Proceedings, 1987, 111, 107.	0.1	7
241	Meniscus-Shear Particle Detachment in Foam-Based Cleaning of Silicon Wafers with an Immersion/Withdrawal Cell. Industrial & Engineering Chemistry Research, 2010, 49, 12461-12470.	1.8	7
242	Gas Mass-Transport Coefficients in Ionomer Membranes Using a Microelectrode. ACS Measurement Science Au, 2022, 2, 208-218.	1.9	7
243	Effective viscosities in thin ionic micellar liquid films. AICHE Journal, 1996, 42, 2005-2013.	1.8	6
244	Profiles and Performance Curves in a Parallelâ€Plate Reactor for the Electrochemical Fluorination of Hydrocarbons. Journal of the Electrochemical Society, 1998, 145, 1578-1585.	1.3	6
245	A nonlinear corrosion model for the entrance region in laminar flow electrification of hydrocarbon liquids. Journal of Electrostatics, 1999, 46, 247-257.	1.0	6
246	Dynamics of Pseudomonas aeruginosa association with anionic hydrogel surfaces in the presence of aqueous divalent-cation salts. Journal of Colloid and Interface Science, 2011, 362, 58-66.	5.0	6
247	In Vivo Corneal Oxygen Uptake During Soft-Contact-Lens Wear. , 2013, 54, 3472.		6
248	Mass-Transport Resistances of Acid and Alkaline Ionomer Layers: A Microelectrode Study Part 1 - Microelectrode Development. ECS Transactions, 2019, 92, 77-85.	0.3	6
249	Diffusion of H+ and OH– in porous solids. Journal of the Chemical Society Faraday Transactions I, 1988, 84, 3927.	1.0	5
250	Applications of MAS-NMR Spectroscopy to the Study of Faujasite Synthesis. Studies in Surface Science and Catalysis, 1989, 49, 161-168.	1.5	5
251	Diblock Copolymer Surfactant Transport across the Interface between Two Homopolymers. Langmuir, 2006, 22, 9192-9200.	1.6	5
252	Three-Dimensional Lattice Monte Carlo Simulations of Model Proteins. IV. Proteins at an Oilâ^'Water Interface. Langmuir, 2006, 22, 3265-3272.	1.6	5

#	Article	IF	CITATIONS
253	Ice-Crystallization Kinetics and Water Movement in Gas-Diffusion and Catalyst Layers. ECS Transactions, 2013, 50, 429-435.	0.3	5
254	The Influence of Alkali Metal Hydroxides on Silica Condensation Rates: The Role of Ion Pairing. Materials Research Society Symposia Proceedings, 1988, 121, 67.	0.1	4
255	A radially perfused cell for measuring diffusion in compacted, highly sorbing media. Industrial & Engineering Chemistry Research, 1989, 28, 347-355.	1.8	4
256	Self-Diffusion in Electrostatically Stabilized Colloidal Suspensions Using Brownian Dynamics. Molecular Simulation, 1989, 2, 3-14.	0.9	4
257	Brownian dynamics of sterically-stabilized colloidal suspensions. AICHE Journal, 1994, 40, 283-293.	1.8	4
258	Modeling of a Two-Phase Electrochemical Reactor for the Fluorination of Organic Compounds. 2. Multiple Steady States. Industrial & Engineering Chemistry Research, 2001, 40, 3117-3126.	1.8	4
259	Modeling of a Two-Phase Electrochemical Reactor for the Fluorination of Organic Compounds. 1. Maximum Production Rate. Industrial & Engineering Chemistry Research, 2001, 40, 3109-3116.	1.8	4
260	Ice Crystallization During Cold-Start of a Proton-Exchange-Membrane Fuel Cell. ECS Transactions, 2013, 58, 897-905.	0.3	4
261	Central-to-peripheral corneal edema during wear of embedded-component contact lenses. Contact Lens and Anterior Eye, 2022, 45, 101443.	0.8	4
262	Charge and Filtration of Solvent Refined Coal Suspensions. Industrial & Engineering Chemistry Process Design and Development, 1979, 18, 708-713.	0.6	3
263	Dispersion Attendant Sodium/ Hydrogen Ion Exchange in Reservoir Sands. SPE Reservoir Engineering, 1986, 1, 607-610.	0.5	3
264	The Role of Dispersed Nocardioform Filaments in Activated Sludge Foaming. Water Environment Research, 2010, 82, 483-491.	1.3	3
265	Surface collision theory for suspension-based cleaning of particle-contaminated solid substrates. Journal of Applied Physics, 2011, 109, 053512.	1.1	3
266	Examination of interfacial properties of quince seed extract on a sunflower oil-water interface. Chemical Engineering Science, 2021, 245, 116951.	1.9	3
267	Magic-angle-spinning NMR spectroscopy of gels. Journal of Magnetic Resonance, 1989, 81, 217-219.	0.5	2
268	lonic surface diffusion coefficients using an electrostatic patchy charge model. Journal of Electroanalytical Chemistry, 1996, 405, 23-32.	1.9	2
269	Imaging of reconstituted purple membranes by atomic force microscopy. Colloids and Surfaces B: Biointerfaces, 2005, 41, 263-276.	2.5	2
270	Relationship between Macroscopic and Microscopic Models of Surfactant Adsorption Dynamics at Fluid Interfaces. Langmuir, 2006, 22, 9201-9207.	1.6	2

#	Article	IF	CITATIONS
271	COMMENT ON: a new look at lubrication of the ocular surface—fluid mechanics behind the blinking eyelids. Ocular Surface, 2008, 6, 152-153.	2.2	2
272	Effect of sodium dodecylbenzene sulfonate on subtilisin Carlsberg proteolysis of an immobilized ovalbumin film. Biotechnology and Bioengineering, 2009, 102, 1273-1277.	1.7	2
273	Multiscale Model of Proton Transport in Perfluorosulfonic-Acid Membrane. ECS Transactions, 2015, 69, 731-742.	0.3	2
274	Novel Approach to Study the Impact of Asphaltene Properties on Low Salinity Flooding., 2020,,.		2
275	Prevention of localized corneal hyperosmolarity spikes by soft-contact-lens wear. Contact Lens and Anterior Eye, 2022, 45, 101722.	0.8	2
276	Influence of alkali-metal cations on silicon exchange and silicon-29 spin relaxation in alkaline silicate solutions [Erratum to document cited in CA110(14):122353c]. The Journal of Physical Chemistry, 1989, 93, 8270-8270.	2.9	1
277	Author Response: In Vivo Oxygen Uptake into the Human Cornea. , 2012, 53, 6829.		1
278	Nano- and Mesoscale Ion and Water Transport in Perfluorosulfonic-Acid Membranes. ECS Transactions, 2017, 80, 593-604.	0.3	1
279	Improved Amott Cell Procedure for Predictive Modeling of Oil Recovery Dynamics from Mixed-Wet Carbonates., 2022,,.		1
280	The role of a bentonite-based packing in limiting steady radionuclide release from an underground high-level waste respository. Annals of Nuclear Energy, 1987, 14, 153-157.	0.9	0
281	Response of Drs. Radke and Chauhan. Ocular Surface, 2008, 6, 154.	2.2	0
282	Ice Formation in Gas-Diffusion Layers. ECS Transactions, 2010, 33, 1143-1150.	0.3	0
283	Ice-Crystallization Kinetics and Water Movement in Gas-Diffusion and Catalyst Layers. ECS Meeting Abstracts, 2012, , .	0.0	0
284	Letter to the Editor: "Fluid reservoir thickness and corneal oedema during closed eye scleral lens wear,â€-by Damien Fisher, Michael J. Collins, and Stephen J. Vincent. Contact Lens and Anterior Eye, 2021, 44, 123.	0.8	0
285	To the Editor: A Novel On-Eye Wettability Analyzer for Soft Contact Lenses. Optometry and Vision Science, 2011, 88, 1529.	0.6	0
286	Fast Screening of LSW Brines Using QCM-D and Crude Oil-Brine Interface Analogs. , 2022, , .		0