

Irina V Smirnova

List of Publications by Citations

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165
papers

4,853
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h-index

63
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175
ext. papers

5,682
ext. citations

4.9
avg, IF

6.21
L-index

#	Paper	IF	Citations
165	Polysaccharide-based aerogels Promising biodegradable carriers for drug delivery systems. <i>Carbohydrate Polymers</i> , 2011 , 86, 1425-1438	10.3	517
164	Supercritical drying of aerogels using CO ₂ : Effect of extraction time on the end material textural properties. <i>Journal of Supercritical Fluids</i> , 2012 , 66, 297-306	4.2	192
163	Polysaccharide-based aerogel microspheres for oral drug delivery. <i>Carbohydrate Polymers</i> , 2015 , 117, 797-806	10.3	186
162	Novel non-cytotoxic alginate/lignin hybrid aerogels as scaffolds for tissue engineering. <i>Journal of Supercritical Fluids</i> , 2015 , 105, 1-8	4.2	142
161	Engineering aspects of hydrothermal pretreatment: From batch to continuous operation, scale-up and pilot reactor under biorefinery concept. <i>Bioresource Technology</i> , 2020 , 299, 122685	11	136
160	Comparison of different pretreatment methods for lignocellulosic materials. Part II: Influence of pretreatment on the properties of rye straw lignin. <i>Bioresource Technology</i> , 2011 , 102, 4157-64	11	129
159	Preparation of macroporous alginate-based aerogels for biomedical applications. <i>Journal of Supercritical Fluids</i> , 2015 , 106, 152-159	4.2	112
158	Review on the Production of Polysaccharide Aerogel Particles. <i>Materials</i> , 2018 , 11,	3.5	108
157	Aerogels in Chemical Engineering: Strategies Toward Tailor-Made Aerogels. <i>Annual Review of Chemical and Biomolecular Engineering</i> , 2017 , 8, 307-334	8.9	94
156	Use of supercritical fluid technology for the production of tailor-made aerogel particles for delivery systems. <i>Journal of Supercritical Fluids</i> , 2013 , 79, 152-158	4.2	90
155	Supercritical CO ₂ extraction and antioxidant activity of lycopene and β -carotene-enriched oleoresin from tomato (<i>Lycopersicon esculentum</i> L.) peels by-product of a Tunisian industry. <i>Food and Bioproducts Processing</i> , 2017 , 102, 340-349	4.9	89
154	Aerogel production: Current status, research directions, and future opportunities. <i>Journal of Supercritical Fluids</i> , 2018 , 134, 228-233	4.2	86
153	Dissolution rate enhancement by adsorption of poorly soluble drugs on hydrophilic silica aerogels. <i>Pharmaceutical Development and Technology</i> , 2004 , 9, 443-52	3.4	78
152	An Opinion Paper on Aerogels for Biomedical and Environmental Applications. <i>Molecules</i> , 2019 , 24,	4.8	70
151	Prediction of micelle/water and liposome/water partition coefficients based on molecular dynamics simulations, COSMO-RS, and COSMOmic. <i>Langmuir</i> , 2013 , 29, 3527-37	4	62
150	Development of egg white protein aerogels as new matrix material for microencapsulation in food. <i>Journal of Supercritical Fluids</i> , 2015 , 106, 42-49	4.2	61
149	Hybrid alginate based aerogels by carbon dioxide induced gelation: Novel technique for multiple applications. <i>Journal of Supercritical Fluids</i> , 2015 , 106, 23-33	4.2	56

148	On the Road to Biopolymer Aerogels-Dealing with the Solvent. <i>Gels</i> , 2015 , 1, 291-313	4.2	56
147	Non-Conventional Methods for Gelation of Alginate. <i>Gels</i> , 2018 , 4,	4.2	54
146	Comparison of different pretreatment methods for lignocellulosic materials. Part I: conversion of rye straw to valuable products. <i>Bioresource Technology</i> , 2011 , 102, 5221-8	11	54
145	Conversion of rye straw into fuel and xylitol: a technical and economical assessment based on experimental data. <i>Chemical Engineering Research and Design</i> , 2011 , 89, 631-640	5.5	51
144	Pectin-based nanocomposite aerogels for potential insulated food packaging application. <i>Carbohydrate Polymers</i> , 2018 , 195, 128-135	10.3	50
143	COSMO-RS and UNIFAC in Prediction of Micelle/Water Partition Coefficients. <i>Industrial & Engineering Chemistry Research</i> , 2007 , 46, 6501-6509	3.9	50
142	Amorphization of drugs by adsorptive precipitation from supercritical solutions: A review. <i>Journal of Supercritical Fluids</i> , 2018 , 132, 105-125	4.2	49
141	Dried chitosan-gels as organocatalysts for the production of biomass-derived platform chemicals. <i>Applied Catalysis A: General</i> , 2012 , 445-446, 180-186	5.1	48
140	Molecular dynamics simulation of SDS and CTAB micellization and prediction of partition equilibria with COSMOmic. <i>Langmuir</i> , 2013 , 29, 11582-92	4	47
139	Design of biocompatible magnetic pectin aerogel monoliths and microspheres. <i>RSC Advances</i> , 2012 , 2, 9816	3.7	47
138	Hydrothermal pentose to furfural conversion and simultaneous extraction with SC-CO ₂ --kinetics and application to biomass hydrolysates. <i>Bioresource Technology</i> , 2012 , 123, 592-8	11	46
137	Combination of COSMOmic and molecular dynamics simulations for the calculation of membrane-water partition coefficients. <i>Journal of Computational Chemistry</i> , 2013 , 34, 1332-40	3.5	46
136	Alginate and hybrid alginate-hyaluronic acid aerogel microspheres as potential carrier for pulmonary drug delivery. <i>Journal of Supercritical Fluids</i> , 2019 , 150, 49-55	4.2	45
135	Aerogels: Tailor-made Carriers for Immediate and Prolonged Drug Release. <i>KONA Powder and Particle Journal</i> , 2005 , 23, 86-97	3.4	45
134	Comparison of pretreatment methods for rye straw in the second generation biorefinery: effect on cellulose, hemicellulose and lignin recovery. <i>Bioresource Technology</i> , 2013 , 142, 428-35	11	44
133	Preparation of aerogels from wheat straw lignin by cross-linking with oligo(alkylene glycol)-diglycidyl ethers. <i>Microporous and Mesoporous Materials</i> , 2014 , 195, 303-310	5.3	41
132	Adsorption and thermal release of highly volatile compounds in silica aerogels. <i>Journal of Supercritical Fluids</i> , 2009 , 48, 85-92	4.2	41
131	Synthesis of Silica Aerogels: Influence of the Supercritical CO ₂ on the Sol-Gel Process. <i>Journal of Sol-Gel Science and Technology</i> , 2003 , 28, 175-184	2.3	41

130	Biorefinery cascade processing for creating added value on tomato industrial by-products from Tunisia. <i>Biotechnology for Biofuels</i> , 2016 , 9, 261	7.8	37
129	A redox strategy to tailor the release properties of Fe(III)-alginate aerogels for oral drug delivery. <i>Carbohydrate Polymers</i> , 2018 , 188, 159-167	10.3	36
128	Tailor made protein based aerogel particles from egg white protein, whey protein isolate and sodium caseinate: Influence of the preceding hydrogel characteristics. <i>Food Hydrocolloids</i> , 2018 , 83, 365-374	10.6	36
127	Modelling of pH dependent n-octanol/water partition coefficients of ionizable pharmaceuticals. <i>Fluid Phase Equilibria</i> , 2011 , 305, 197-203	2.5	36
126	Synthesis of an organic conductive porous material using starch aerogels as template for chronic invasive electrodes. <i>Materials Science and Engineering C</i> , 2014 , 37, 177-83	8.3	35
125	Hydrothermal synthesis of highly porous carbon monoliths from carbohydrates and phloroglucinol. <i>RSC Advances</i> , 2013 , 3, 17088	3.7	35
124	Extension of COSMO-RS for monoatomic electrolytes: Modeling of liquid-liquid equilibria in presence of salts. <i>Fluid Phase Equilibria</i> , 2012 , 314, 29-37	2.5	34
123	Levulinic acid production integrated into a sugarcane bagasse based biorefinery using thermal-enzymatic pretreatment. <i>Industrial Crops and Products</i> , 2017 , 99, 172-178	5.9	33
122	Experimental determination of the LLE data of systems consisting of {hexane + benzene + deep eutectic solvent} and prediction using the Conductor-like Screening Model for Real Solvents. <i>Journal of Chemical Thermodynamics</i> , 2017 , 104, 128-137	2.9	33
121	Porous Starch Materials via Supercritical- and Freeze-Drying. <i>Gels</i> , 2019 , 5,	4.2	32
120	Influence of coating and wetting on the mechanical behaviour of highly porous cylindrical aerogel particles. <i>Powder Technology</i> , 2015 , 285, 34-43	5.2	32
119	Integration of Enzymatic Catalysts in a Reactive Distillation Column with Structured Packings. <i>Industrial & Engineering Chemistry Research</i> , 2012 , 51, 11482-11489	3.9	31
118	Experimental methods and prediction with COSMO-RS to determine partition coefficients in complex surfactant systems. <i>Langmuir</i> , 2012 , 28, 118-24	4	31
117	High Pressure Processes in Biorefineries. <i>Chemie-Ingenieur-Technik</i> , 2011 , 83, 1016-1025	0.8	31
116	Reactive Phase Equilibria in Silica Aerogel Synthesis: Experimental Study and Prediction of the Complex Phase Behavior Using the PC-SAFT Equation of State. <i>Industrial & Engineering Chemistry Research</i> , 2004 , 43, 4457-4464	3.9	30
115	Influence of Inorganic Salts on the Phase Equilibrium of Triton X-114 Aqueous Two-Phase Systems. <i>Journal of Chemical & Engineering Data</i> , 2016 , 61, 1496-1501	2.8	29
114	Molecular dynamics simulations of various micelles to predict micelle water partition equilibria with COSMOmic: Influence of micelle size and structure. <i>Fluid Phase Equilibria</i> , 2016 , 422, 43-55	2.5	29
113	Alginate aerogels carrying calcium, zinc and silver cations for wound care: Fabrication and metal detection. <i>Journal of Supercritical Fluids</i> , 2019 , 153, 104545	4.2	28

112	Silica-based monoliths for enzyme catalyzed reactions in microfluidic systems with an emphasis on glucose 6-phosphate dehydrogenase and cellulase. <i>Chemical Engineering Journal</i> , 2013 , 234, 166-172	14.7	27
111	Pilot-scale validation of Enzymatic Reactive Distillation for butyl butyrate production. <i>Chemical Engineering Journal</i> , 2017 , 312, 106-117	14.7	27
110	Kinetic investigation of a solvent-free, chemoenzymatic reaction sequence towards enantioselective synthesis of a amino acid ester. <i>Biotechnology and Bioengineering</i> , 2012 , 109, 1479-89	4.9	27
109	Cascade processing of wheat bran through a biorefinery approach. <i>Energy Conversion and Management</i> , 2014 , 84, 633-639	10.6	26
108	Partition coefficients of ionizable solutes in aqueous micellar two-phase systems. <i>Chemical Engineering Journal</i> , 2013 , 218, 204-213	14.7	26
107	Jet Cutting Technique for the Production of Chitosan Aerogel Microparticles Loaded with Vancomycin. <i>Polymers</i> , 2020 , 12,	4.5	26
106	Polysaccharide-Based Aerogel Bead Production via Jet Cutting Method. <i>Materials</i> , 2018 , 11,	3.5	25
105	Biocatalytic carboxylation of phenol derivatives: kinetics and thermodynamics of the biological Kolbe-Schmitt synthesis. <i>FEBS Journal</i> , 2015 , 282, 1334-45	5.7	25
104	Mobilisation of organic compounds from reservoir rocks through the injection of CO ₂ Comparison of baseline characterization and laboratory experiments. <i>Energy Procedia</i> , 2011 , 4, 4524-4531	2.3	25
103	Mesoporous guar galactomannan based biocomposite aerogels through enzymatic crosslinking. <i>Composites Part A: Applied Science and Manufacturing</i> , 2017 , 94, 93-103	8.4	24
102	110th Anniversary: Solvent Exchange in the Processing of Biopolymer Aerogels: Current Status and Open Questions. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 18590-18600	3.9	24
101	Solubilization in mixed micelles studied by molecular dynamics simulations and COSMOmic. <i>Journal of Physical Chemistry B</i> , 2014 , 118, 3593-604	3.4	24
100	Micelle mediated extraction of fatty acids from microalgae cultures: Implementation for outdoor cultivation. <i>Separation and Purification Technology</i> , 2014 , 135, 127-134	8.3	24
99	Thermodynamic and Transport Properties Modeling of Deep Eutectic Solvents: A Review on gE-Models, Equations of State, and Molecular Dynamics. <i>Journal of Chemical & Engineering Data</i> , 2020 , 65, 943-967	2.8	24
98	Cloud point extraction of microalgae cultures. <i>Separation and Purification Technology</i> , 2013 , 103, 21-27	8.3	23
97	Enzymatic degradation of hyperbranched polyesters. <i>Journal of Applied Polymer Science</i> , 2009 , 112, 1873-1881	3.9	22
96	Development of a COSMO-RS based model for the calculation of phase equilibria in electrolyte systems. <i>AIChE Journal</i> , 2018 , 64, 272-285	3.6	22
95	An injectable alginate-based hydrogel for microfluidic applications. <i>Carbohydrate Polymers</i> , 2017 , 161, 228-234	10.3	21

94	Encapsulation of fish oil in protein aerogel micro-particles. <i>Journal of Food Engineering</i> , 2019 , 260, 1-11	6	21
93	Partition coefficients of ionizable solutes in mixed nonionic/ionic micellar systems. <i>Langmuir</i> , 2013 , 29, 1035-44	4	21
92	Enzymatic Reactive Distillation: Kinetic Resolution of rac-2-Pentanol with Biocatalytic Coatings on Structured Packings. <i>Industrial & Engineering Chemistry Research</i> , 2015 , 54, 9458-9467	3.9	20
91	A continuous approach to the emulsion gelation method for the production of aerogel micro-particle. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019 , 566, 58-69	5.1	20
90	Application of novel and technical lignins in food and pharmaceutical industries: structure-function relationship and current challenges. <i>Biomass Conversion and Biorefinery</i> , 2019 , 1	2.3	19
89	Vertical convective coassembly of refractory YSZ inverse opals from crystalline nanoparticles. <i>ACS Applied Materials & Interfaces</i> , 2013 , 5, 13146-52	9.5	19
88	Integration of Enzymatic Catalysts in a Continuous Reactive Distillation Column: Reaction Kinetics and Process Simulation. <i>Industrial & Engineering Chemistry Research</i> , 2014 , 53, 19612-19619	3.9	18
87	In-vitro-digestion and swelling kinetics of whey protein, egg white protein and sodium caseinate aerogels. <i>Food Hydrocolloids</i> , 2020 , 101, 105534	10.6	18
86	Aqueous food-grade and cosmetic-grade surfactant systems for the continuous countercurrent cloud point extraction. <i>Separation and Purification Technology</i> , 2018 , 202, 76-85	8.3	17
85	Correlating Synthesis Parameters to Morphological Entities: Predictive Modeling of Biopolymer Aerogels. <i>Materials</i> , 2018 , 11,	3.5	17
84	Cytotoxicity and biological capacity of sulfur-free lignins obtained in novel biorefining process. <i>International Journal of Biological Macromolecules</i> , 2019 , 136, 697-703	7.9	16
83	Mixed aqueous solutions of nonionic surfactants Brij 35/Triton X-100: Micellar properties, solutesS partitioning from micellar liquid chromatography and modelling with COSMOmic. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2018 , 538, 45-55	5.1	16
82	Preparation of Biopolymer Aerogels Using Green Solvents. <i>Journal of Visualized Experiments</i> , 2016 ,	1.6	16
81	Model development for sc-drying kinetics of aerogels: Part 1. Monoliths and single particles. <i>Journal of Supercritical Fluids</i> , 2018 , 140, 415-430	4.2	16
80	Development of an integrated thermal and enzymatic hydrolysis for lignocellulosic biomass in fixed-bed reactors. <i>Holzforschung</i> , 2011 , 65,	2	16
79	Microstructures of potato protein hydrogels and aerogels produced by thermal crosslinking and supercritical drying. <i>Food Hydrocolloids</i> , 2021 , 112, 106305	10.6	16
78	Zeolite/silica aerogel composite monoliths and microspheres. <i>Microporous and Mesoporous Materials</i> , 2018 , 263, 106-112	5.3	16
77	Hydrothermal flow-through treatment of wheat-straw: Detailed characterization of fixed-bed properties and axial dispersion. <i>Chemical Engineering Journal</i> , 2015 , 281, 696-703	14.7	15

76	Partitioning equilibria in multicomponent surfactant systems for design of surfactant-based extraction processes. <i>Chemical Engineering Research and Design</i> , 2014 , 92, 2840-2850	5.5	15
75	Mechanically Strong Polyurea/Polyurethane-Cross-Linked Alginate Aerogels. <i>ACS Applied Polymer Materials</i> , 2020 , 2, 1974-1988	4.3	14
74	Continuous Supercritical Drying of Aerogel Particles: Proof of Concept. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 11284-11295	3.9	13
73	Thermal-Enzymatic Hydrolysis of Wheat Straw in a Single High Pressure Fixed Bed. <i>Chemie-Ingenieur-Technik</i> , 2015 , 87, 1305-1312	0.8	13
72	Aqueous Surfactant Two-Phase Systems for the Continuous Countercurrent Cloud Point Extraction. <i>Chemie-Ingenieur-Technik</i> , 2012 , 84, n/a-n/a	0.8	13
71	In situ continuous countercurrent cloud point extraction of microalgae cultures. <i>Separation and Purification Technology</i> , 2018 , 190, 268-277	8.3	12
70	Reactive Separations for In Situ Product Removal of Enzymatic Reactions: A Review. <i>Chemie-Ingenieur-Technik</i> , 2019 , 91, 1522-1543	0.8	12
69	Recovery of sugars from aqueous solution by micellar enhanced ultrafiltration. <i>Separation and Purification Technology</i> , 2012 , 96, 132-138	8.3	12
68	Pressure assisted stabilization of biocatalysts at elevated temperatures: characterization by dynamic light scattering. <i>Biotechnology and Bioengineering</i> , 2013 , 110, 1674-80	4.9	12
67	Impregnation of passion fruit bagasse extract in alginate aerogel microparticles. <i>International Journal of Biological Macromolecules</i> , 2020 , 155, 1060-1068	7.9	12
66	In situ production and renewal of biocatalytic coatings for use in enzymatic reactive distillation. <i>Chemical Engineering Journal</i> , 2016 , 306, 992-1000	14.7	12
65	Product recovery in surfactant-based separation processes: Pervaporation of toluene from concentrated surfactant solutions. <i>Journal of Membrane Science</i> , 2013 , 444, 32-40	9.6	11
64	Polyurea-crosslinked biopolymer aerogel beads. <i>RSC Advances</i> , 2020 , 10, 40843-40852	3.7	11
63	Continuous Countercurrent Extractive Biocatalysis in Aqueous Surfactant Two-Phase Systems. <i>Chemie-Ingenieur-Technik</i> , 2018 , 90, 348-357	0.8	10
62	Hydrothermal flow-through treatment of wheat straw: Coupled heat and mass transfer modeling with changing bed properties. <i>Journal of Supercritical Fluids</i> , 2018 , 133, 625-639	4.2	10
61	The role of phase behavior in the enzyme catalyzed synthesis of glycerol monolaurate. <i>RSC Advances</i> , 2016 , 6, 32422-32429	3.7	10
60	Predicting Critical Micelle Concentrations with Molecular Dynamics Simulations and COSMOmic. <i>Chemie-Ingenieur-Technik</i> , 2017 , 89, 1288-1296	0.8	10
59	Influence of d-glucose as additive on thermodynamics and physical properties of aqueous surfactant two-phase systems for the continuous micellar extraction. <i>Chemical Engineering Research and Design</i> , 2017 , 121, 149-162	5.5	9

58	Odor-Free Lignin from Lignocellulose by Means of High Pressure Unit Operations: Process Design, Assessment and Validation. <i>Chemie-Ingenieur-Technik</i> , 2016 , 88, 1513-1517	0.8	9
57	First Evidence of Solvent Spillage under Subcritical Conditions in Aerogel Production. <i>Industrial & Engineering Chemistry Research</i> , 2018 , 57, 8698-8707	3.9	9
56	Model development for sc-drying kinetics of aerogels: Part 2. Packed bed of spherical particles. <i>Journal of Supercritical Fluids</i> , 2019 , 147, 149-161	4.2	9
55	COSMO-RS for the prediction of the retention behavior in micellar liquid chromatography based on partition coefficients of non-dissociated and dissociated solutes. <i>Journal of Chromatography A</i> , 2013 , 1273, 66-72	4.5	9
54	Glucose-6-phosphate dehydrogenase encapsulated in silica-based hydrogels for operation in a microreactor. <i>Engineering in Life Sciences</i> , 2014 , 14, 170-179	3.4	9
53	Reverse micellar extraction of amino acids and complex enzyme mixtures. <i>Separation and Purification Technology</i> , 2014 , 123, 23-34	8.3	9
52	Optimization of the spray-drying process for developing aquasolv lignin particles using response surface methodology. <i>Advanced Powder Technology</i> , 2020 , 31, 2348-2356	4.6	8
51	Modeling the solubility of CO ₂ in aqueous methyl diethanolamine solutions with an electrolyte model based on COSMO-RS. <i>Fluid Phase Equilibria</i> , 2018 , 461, 39-50	2.5	8
50	Hybrid Alginate-Based Cryogels for Life Science Applications. <i>Chemie-Ingenieur-Technik</i> , 2016 , 88, 1770-1788	8	8
49	Ein-Reaktor-Konzept zur Hochdruckfraktionierung lignocellulosehaltiger Biomasse. <i>Chemie-Ingenieur-Technik</i> , 2012 , 84, 27-35	0.8	8
48	Calculation of thermodynamic equilibria with the predictive electrolyte model COSMO-RS-ES: Improvements for low permittivity systems. <i>Fluid Phase Equilibria</i> , 2020 , 506, 112368	2.5	8
47	Ca-Zn-Ag Alginate Aerogels for Wound Healing Applications: Swelling Behavior in Simulated Human Body Fluids and Effect on Macrophages. <i>Polymers</i> , 2020 , 12,	4.5	8
46	In Situ Separation of the Chiral Target Compound (S)-2-Pentanol in Biocatalytic Reactive Distillation. <i>Industrial & Engineering Chemistry Research</i> , 2017 , 56, 6451-6461	3.9	7
45	Estimation of LPC/water partition coefficients using molecular modeling and micellar liquid chromatography. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2013 , 431, 105-113	5.1	7
44	Aerogels: a fascinating class of materials with a wide potential of application fields. <i>Journal of Sol-Gel Science and Technology</i> , 2017 , 84, 375-376	2.3	7
43	Evaluation and refinement of the novel predictive electrolyte model COSMO-RS-ES based on solid-liquid equilibria of salts and Gibbs free energies of transfer of ions. <i>Fluid Phase Equilibria</i> , 2019 , 483, 165-174	2.5	7
42	Formulation of organic and inorganic hydrogel matrices for immobilization of α -glucosidase in microfluidic platform. <i>Engineering in Life Sciences</i> , 2017 , 17, 714-722	3.4	6
41	Liquid-Liquid Equilibria of Quaternary Systems Composed of 1,3-Propanediol, Short-Chain Alcohol, Water, and Salt. <i>Journal of Chemical & Engineering Data</i> , 2016 , 61, 3548-3558	2.8	6

40	Cellulose aerogel particles: control of particle and textural properties in jet cutting process. <i>Cellulose</i> , 2021 , 28, 223-239	5.5	6
39	Starch-Based Aerogels Obtained via Solvent-Induced Gelation. <i>Gels</i> , 2020 , 6,	4.2	5
38	Prediction of Solvation Free Energies of Ionic Solutes in Neutral Solvents. <i>Journal of Physical Chemistry A</i> , 2020 , 124, 4171-4181	2.8	5
37	Effect of Ethanol on the Textural Properties of Whey Protein and Egg White Protein Hydrogels during Water-Ethanol Solvent Exchange. <i>Molecules</i> , 2020 , 25,	4.8	5
36	Retention characteristics of silica materials in carbon dioxide/methanol mixtures studied by inverse supercritical fluid chromatography. <i>Journal of Chromatography A</i> , 2019 , 1588, 127-136	4.5	5
35	Metal-doped carbons from polyurea-crosslinked alginate aerogel beads. <i>Materials Advances</i> , 2021 , 2, 2684-2699	3.3	5
34	Production of starch aerogel in form of monoliths and microparticles. <i>Colloid and Polymer Science</i> , 2020 , 298, 477-494	2.4	4
33	Experimental and Theoretical Study of Chemical Equilibria in the Reacting System of the di-Alkyl Carbonate Synthesis.. <i>Industrial & Engineering Chemistry Research</i> , 2011 , 50, 9774-9780	3.9	4
32	Pharmaceutical Applications of Aerogels 2011 , 695-717		4
31	Pressure Effects on Lignocellulose-Degrading Enzymes. <i>Chemical Engineering and Technology</i> , 2016 , 39, 786-790	2	4
30	Pressure drop, mechanic deformation, stabilization and scale-up of wheat straw fixed-beds during hydrothermal pretreatment: Experiments and modeling. <i>Chemical Engineering Journal</i> , 2019 , 360, 1587-1600	14.7	4
29	Lignin from second-generation biorefinery for pressure-sensitive adhesive tapes. <i>Biomass Conversion and Biorefinery</i> , 2019 , 1	2.3	3
28	Design of an industrial autohydrolysis pretreatment plant for annual lignocellulose. <i>Biomass Conversion and Biorefinery</i> , 2019 , 1	2.3	3
27	Enzymatic Reactive Distillation for the Transesterification of Ethyl Butyrate: Model Validation and Process Analysis. <i>Computer Aided Chemical Engineering</i> , 2015 , 37, 2135-2140	0.6	3
26	Enzymatische Hydrolyse von Lignocellulose im Festbettreaktor. <i>Chemie-Ingenieur-Technik</i> , 2011 , 83, 867-873	2.8	3
25	Smart Structures Additive Manufacturing of Stimuli-Responsive Hydrogels for Adaptive Packings. <i>Industrial & Engineering Chemistry Research</i> , 2020 , 59, 19458-19464	3.9	3
24	Pulmonary drug delivery with aerogels: engineering of alginate and alginate-hyaluronic acid microspheres. <i>Pharmaceutical Development and Technology</i> , 2021 , 26, 509-521	3.4	3
23	Long-Chain Alcohol-Modified Micellar Systems and Their Application in a Continuous Extraction Process. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 2575-2582	3.9	3

22	Aerogels: current status and challenges for the future. <i>Journal of Supercritical Fluids</i> , 2015 , 106, 1	4.2	2
21	Hydro- and aerogels from ethanolic potato and whey protein solutions: Influence of temperature and ethanol concentration on viscoelastic properties, protein interactions, and microstructure. <i>Food Hydrocolloids</i> , 2022 , 125, 107424	10.6	2
20	In Situ Measurement Methods for the CO-Induced Gelation of Biopolymer Systems. <i>Gels</i> , 2020 , 6,	4.2	2
19	Feasibility of packed columns for continuous cloud point extraction with subsequent product recovery. <i>Separation and Purification Technology</i> , 2021 , 258, 118046	8.3	2
18	Two-Step Autohydrolysis Pretreatment: Towards High Selective Full Fractionation of Wheat Straw. <i>Chemie-Ingenieur-Technik</i> , 2020 , 92, 1723-1732	0.8	1
17	Comparison of Finite Difference and Finite Volume Simulations for a Sc-Drying Mass Transport Model. <i>Gels</i> , 2020 , 6,	4.2	1
16	On the analogy between the restricted primitive model and capacitor circuits: Semi-empirical alternatives for over- and underscreening in the calculation of mean ionic activity coefficients. <i>Journal of Molecular Liquids</i> , 2021 , 326, 115204	6	1
15	Evaluation of the orally administered calcium alginate aerogel on the changes of gut microbiota and hepatic and renal function of Wistar rats. <i>PLoS ONE</i> , 2021 , 16, e0247633	3.7	1
14	Spray coating of cellulose aerogel particles in a miniaturized spouted bed. <i>Cellulose</i> , 2021 , 28, 7795-7813	5.5	1
13	Hydrophobic Modification of Biopolymer Aerogels by Cold Plasma Coating. <i>Polymers</i> , 2021 , 13,	4.5	1
12	Counter-Current Suspension Extraction Process of Lignocellulose in Biorefineries to Reach Low Water Consumption, High Extraction Yields, and Extract Concentrations. <i>Processes</i> , 2021 , 9, 1585	2.9	1
11	An open source COSMO-RS implementation and parameterization supporting the efficient implementation of multiple segment descriptors. <i>Fluid Phase Equilibria</i> , 2022 , 113472	2.5	1
10	CO2 induced gelation of amidated pectin solutions: Impact of viscosity and gel formation. <i>Chemical Engineering Research and Design</i> , 2022 , 180, 153-153	5.5	0
9	Carotenoids-Rich Fatty Fractions Extraction from Tomato Industrial By-Products, Peels and Seeds, Using Supercritical CO2 Green Technology. <i>Advances in Science, Technology and Innovation</i> , 2018 , 1183-1185	9.3	0
8	Dynamic Model of Batch Enzymatic Reactive Distillation for the Production of R-2-Pentyl Butyrate. <i>Industrial & Engineering Chemistry Research</i> , 2019 , 58, 22820-22834	3.9	0
7	Process design of a continuous biotransformation with in situ product removal by cloud point extraction. <i>Canadian Journal of Chemical Engineering</i> , 2021 , 99, 1035-1049	2.3	0
6	Life cycle assessment of advanced building materials towards NZEBs. <i>E3S Web of Conferences</i> , 2022 , 349, 04001	0.5	0
5	On the analogy between the restricted primitive model and capacitor circuits. Part II: A generalized Gibbs-Duhem consistent extension of the Pitzer-Debye-Hückel term with corrections for low and variable relative permittivity. <i>Journal of Molecular Liquids</i> , 2022 , 360, 119398	6	0

- 4 Hochporöse silicabasierte Partikel als Träger für Wirkstoffe: Herstellung, Charakterisierung und neueste Anwendungen. *Chemie-Ingenieur-Technik*, **2016**, 88, 1370-1370 0.8
- 3 CHAPTER 10. Enzymatic Reactive Absorption and Distillation. *RSC Green Chemistry*, **2018**, 210-248 0.9
- 2 Aerogels1-34
- 1 Materialien: Gefrorene Luft macht alles leichter. *Nachrichten Aus Der Chemie*, **2019**, 67, 37-39 0.1