Ruth E Baltus

List of Publications by Year
in descending order

27	1,406	516561 16	526166 27
papers	citations	h-index	g-index

28	28	28	1551
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Low-Pressure Solubility of Carbon Dioxide in Room-Temperature Ionic Liquids Measured with a Quartz Crystal Microbalance. Journal of Physical Chemistry B, 2004, 108, 721-727.	1.2	308
2	Experimental Measurement of the Solubility and Diffusivity of CO₂ in Room-Temperature Ionic Liquids Using a Transient Thin-Liquid-Film Method. Industrial & Engineering Chemistry Research, 2007, 46, 8166-8175.	1.8	237
3	Examination of the Potential of Ionic Liquids for Gas Separations. Separation Science and Technology, 2005, 40, 525-541.	1.3	230
4	CO2/N2 separations using nanoporous alumina-supported ionic liquid membranes: Effect of the support on separation performance. Journal of Membrane Science, 2012, 390-391, 201-210.	4.1	97
5	Diffusivity of Carbon Dioxide in Room-Temperature Ionic Liquids. Industrial & Engineering Chemistry Research, 2010, 49, 9370-9376.	1.8	90
6	Regular Solution Theory for Low Pressure Carbon Dioxide Solubility in Room Temperature Ionic Liquids: Ionic Liquid Solubility Parameter from Activation Energy of Viscosity. Industrial & Engineering Chemistry Research, 2010, 49, 5846-5853.	1.8	76
7	Effect of Ionic Liquid Confinement on Gas Separation Characteristics. Energy & Fuels, 2013, 27, 4161-4166.	2.5	41
8	Hindered diffusion of dextran and polyethylene glycol in porous membranes. AICHE Journal, 2000, 46, 1149-1156.	1.8	39
9	A Piezoelectric Quartz Crystal Biosensor:Â The Use of Two Single Cysteine Mutants of the PeriplasmicEscherichia coliGlucose/Galactose Receptor as Target Proteins for the Detection of Glucoseâ€. Biochemistry, 2004, 43, 14249-14256.	1.2	35
10	Structureâ€“property relationships in transport and thermodynamic properties of imidazolium bistriflamide ionic liquids for CO2 capture. Chemical Engineering Journal, 2014, 250, 377-389.	6.6	33
11	Growth Kinetics and Morphology of Porous Anodic Alumina Films Formed Using Phosphoric Acid. Journal of the Electrochemical Society, 1998, 145, 2699-2706.	1.3	32
12	Distribution of immobilized enzymes on porous membranes. Biotechnology and Bioengineering, 1992, 40, 1173-1180.	1.7	31
13	A biosensor for estrogenic substances using the quartz crystal microbalance. Analytical Biochemistry, 2005, 345, 277-283.	1.1	28
14	Quartz Crystal Microbalance (QCM) with Immobilized Protein Receptors:Â Comparison of Response to Ligand Binding for Direct Protein Immobilization and Protein Attachment via Disulfide Linker. Langmuir, 2007, 23, 3880-3885.	1.6	28
15	Analysis of Configurational Effects on Hindered Convection of Nonspherical Bacteria and Viruses across Microfiltration Membranes. Industrial & Engineering Chemistry Research, 2009, 48, 2404-2413.	1.8	19
16	Effect of solute concentration on hindered diffusion in porous membranes. AICHE Journal, 2000, 46, 1307-1316.	1.8	17
17	Latex particle rejections from virgin and mixed charged surface polycarbonate track etched membranes. Journal of Membrane Science, 2019, 584, 110-119.	4.1	13
18	Effect of electrostatic interactions on rejection of capsular and spherical particles from porous membranes: Theory and experiment. Journal of Colloid and Interface Science, 2015, 448, 492-500.	5.0	11

#	Article	IF	Citations
19	Membrane rejection of nonspherical particles: Modeling and experiment. AICHE Journal, 2013, 59, 3863-3873.	1.8	10
20	CATALYTIC PROCESSING OF HEAVY CRUDE OILS AND RESIDUALS II. DIFFUSIONAL LIMITATIONS AND DEACTIVATION PHENOMENA. Petroleum Science and Technology, 1993, 11, 783-830.	0.2	7
21	CATALYTIC PROCESSING CATALYTIC PROCESSING OF HEAVY CRUDE OILS AND RESIDUALS I. CHARACTERIZATION AND KINETIC STUDIES. Petroleum Science and Technology, 1993, 11, 751-782.	0.2	6
22	MODELING SOLUTE TRANSPORT IN MICELLAR LIQUID CHROMATOGRAPHY. Separation Science and Technology, 2002, 37, 3443-3464.	1.3	5
23	The Effect of the Pore Entrance on Particle Motion in Slit Pores: Implications for Ultrathin Membranes. Membranes, 2017, 7, 42.	1.4	5
24	Free Diffusivity of Icosahedral and Tailed Bacteriophages: Experiments, Modeling, and Implications for Virus Behavior in Media Filtration and Flocculation. Environmental Science & Technology, 2017, 51, 1433-1440.	4.6	4
25	Mathematical Model of a Rotating Annular Continuous Size Exclusion Chromatograph. ACS Symposium Series, 1990, , 268-284.	0.5	2
26	The effect of particle rotation on the motion and rejection of capsular particles in slit pores. AICHE Journal, 2018, 64, 2828-2836.	1.8	1
27	Characterization of gel-filled porous membranes using moment-based interpretation of transport measurements. Journal of Membrane Science, 2006, 276, 101-112.	4.1	0