Annette L Bunge

List of Publications by Year
in descending order

108 papers	3,484 citations	172207 29 h-index	149479 56 g-index
114 all docs	114 docs citations	114 times ranked	2608 citing authors

#	Article	IF	Citations
1	Assessment of dermal bioavailability: predicting the input function for topical glucocorticoids using stratum corneum sampling. Drug Delivery and Translational Research, 2022, 12, 851-861.	3.0	3
2	Skin pharmacokinetics of diclofenac and co-delivered functional excipients. International Journal of Pharmaceutics, 2022, 614, 121469.	2.6	7
3	Investigator Impact on Reproducibility of Drug Bioavailability in Stratum Corneum Sampling by Tape Stripping. Pharmaceutical Research, 2022, 39, 703.	1.7	0
4	Multiscale Simulation of Ternary Stratum Corneum Lipid Mixtures: Effects of Cholesterol Composition. Langmuir, 2022, 38, 7496-7511.	1.6	7
5	Predicting topical drug clearance from the skin. Drug Delivery and Translational Research, 2021, 11, 729-740.	3.0	13
6	Skin Pharmacokinetics of Transdermal Scopolamine: Measurements and Modeling. Molecular Pharmaceutics, 2021, 18, 2714-2723.	2.3	8
7	Calculating leakage in emulsion liquid membrane systems from pH measurements. Separation and Purification Technology, 2020, 235, 116162.	3.9	4
8	Reflections on the OECD guidelines for in vitro skin absorption studies. Regulatory Toxicology and Pharmacology, 2020, 117, 104752.	1.3	27
9	Leakage and swell in emulsion liquid membrane systems: Comparing continuous stirred-tank reactor and batch experiments. Journal of Industrial and Engineering Chemistry, 2020, 87, 68-77.	2.9	10
10	Letter to the editor RE: Hussein et al. (2019), â€œApplication of emulsion and Pickering emulsion liquid membrane technique for wastewater treatment: an overviewâ€• Environmental Science and Pollution Research, 2020, 27, 22135-22137.	2.7	0
11	Characterization of Water Self-Diffusion in Human Stratum Corneum. Journal of Pharmaceutical Sciences, 2018, 107, 1131-1142.	1.6	8
12	Effect of Ceramide Tail Length on the Structure of Model Stratum Corneum Lipid Bilayers. Biophysical Journal, 2018, 114, 113-125.	0.2	36
13	Molecular dynamics simulations of stratum corneum lipid mixtures: A multiscale perspective. Biochemical and Biophysical Research Communications, 2018, 498, 313-318.	1.0	19
14	On the Estimation and Use of Dermal Permeability Coefficients. ISEE Conference Abstracts, 2018, 2018, .	0.0	0
15	Measuring transdermal glucose levels in neonates by passive diffusion: an in vitro porcine skin model. Analytical and Bioanalytical Chemistry, 2017, 409, 3475-3482.	1.9	6
16	Bioequivalence Methodologies for Topical Drug Products: In Vitro and Ex Vivo Studies with a Corticosteroid and an Anti-Fungal Drug. Pharmaceutical Research, 2017, 34, 730-737.	1.7	24
17	Topical bioavailability of diclofenac from locally-acting, dermatological formulations. International Journal of Pharmaceutics, 2017, 529, 55-64.	2.6	38
18	Dermal absorption of benzo[a]pyrene into human skin from soil: Effect of artificial weathering, concentration, and exposure duration. Journal of Exposure Science and Environmental Epidemiology, 2017, 27, 610-617.	1.8	6

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19	Characterization of Water and a Model Lipophilic Compound in Human Stratum Corneum by NMR Spectroscopy and Equilibrium Sorption. Journal of Pharmaceutical Sciences, 2016, 105, 3376-3386.	1.6	4
20	A Coarse-Grained Model of Stratum Corneum Lipids: Free Fatty Acids and Ceramide NS. Journal of Physical Chemistry B, 2016, 120, 9944-9958.	1.2	18
21	Oral Bioavailability, Bioaccessibility, and Dermal Absorption of PAHs from Soilâ€"State of the Science. Environmental Science & Technology, 2016, 50, 2151-2164.	4.6	100
22	The Transient Dermal Exposure II: Post-Exposure Absorption and Evaporation of Volatile Compounds. Journal of Pharmaceutical Sciences, 2015, 104, 1499-1507.	1.6	31
23	Analysis of finite dose dermal absorption data: Implications for dermal exposure assessment. Journal of Exposure Science and Environmental Epidemiology, 2014, 24, 65-73.	1.8	67
24	Dermal permeation of 2-hydroxypropyl acrylate, a model water-miscible compound: Effects of concentration, thermodynamic activity and skin hydration. International Journal of Pharmaceutics, 2014, 460, 240-247.	2.6	16
25	On the Use of the Power-Law Model for Interpreting Constant-Phase-Element Parameters. Journal of the Brazilian Chemical Society, 2014, , .	0.6	3
26	Characterization of Damaged Skin by Impedance Spectroscopy: Chemical Damage by Dimethyl Sulfoxide. Pharmaceutical Research, 2013, 30, 2607-2624.	1.7	21
27	Characterization of Damaged Skin by Impedance Spectroscopy: Mechanical Damage. Pharmaceutical Research, 2013, 30, 2036-2049.	1.7	31
28	Dielectric Properties of Materials Showing Constant-Phase-Element (CPE) Impedance Response. Journal of the Electrochemical Society, 2013, 160, C215-C225.	1.3	370
29	Nanoparticles Do Not Penetrate Human Skinâ€"A Theoretical Perspective. Pharmaceutical Research, 2013, 30, 1943-1946.	1.7	69
30	Comments on Pettyet al.(2011), â€œA quantitative method for estimating dermal benzene absorption from benzene-containing hydrocarbon liquids,â€•IJOEH, 17:287â€“300.. International Journal of Occupational and Environmental Health, 2013, 19, 139-146.	1.2	0
31	Single-Frequency LCR Databridge Impedance Measurements as Surrogate Measures for the Integrity of Human Skin. Journal of the Electrochemical Society, 2012, 159, G161-G165.	1.3	2
32	Progress toward a solid-state ionic field effect transistor. Journal of Applied Physics, 2012, 111, 074511.	1.1	19
33	Single-Frequency LCR Databridge Impedance Measurements as Surrogate Measures for the Integrity of Human Skin. ECS Transactions, 2012, 41, 3-14.	0.3	0
34	Explaining skin permeation of 2-butoxyethanol from neat and aqueous solutions. International Journal of Pharmaceutics, 2012, 435, 50-62.	2.6	27
35	Poissonâ€“Boltzmann model of space charge layer effects on conductivity in randomly distributed nanoionic composites. Electrochimica Acta, 2012, 83, 454-462.	2.6	3
36	Mass transfer through membranes with surface roughness. Journal of Membrane Science, 2012, 409-410, 127-136.	4.1	27

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37	Dermal absorption of benzene in occupational settings: Estimating flux and applications for risk assessment. Critical Reviews in Toxicology, 2011, 41, 111-142.	1.9	26
38	Assessment of Dermal Exposure to Pesticide Residues during Re-entry. Environmental Science & Technology, 2011, 45, 4609-4615.	4.6	26
39	A critical analysis of single-frequency LCR databridge impedance measurements of human skin. Toxicology in Vitro, 2011, 25, 774-784.	1.1	16
40	On the correlation between single-frequency impedance measurements and human skin permeability to water. Toxicology in Vitro, 2011, 25, 2095-2104.	1.1	25
41	Mathematical models of skin permeability: An overview. International Journal of Pharmaceutics, 2011, 418, 115-129.	2.6	294
42	Modeling space charge layer interaction and conductivity enhancement in nanoionic composites. Electrochimica Acta, 2011, 56, 9295-9302.	2.6	13
43	Response to Farahmand and Maibach's Corrigenda. International Journal of Pharmaceutics, 2010, 398, 254-256.	2.6	1
44	Measuring the saturation limit of low-volatility organic compounds in soils: Implications for estimates of dermal absorption. Science of the Total Environment, 2010, 408, 6100-6107.	3.9	4
45	Maximum flux versus transdermal delivery: Comment on Farahmand and Maibach (2009). International Journal of Pharmaceutics, 2010, 398, 247-248.	2.6	1
46	Mechanism of Enhanced Dermal Permeation of 4-Cyanophenol and Methyl Paraben from Saturated Aqueous Solutions Containing Both Solutes. Skin Pharmacology and Physiology, 2010, 23, 152-163.	1.1	14
47	Improved Bioequivalence Assessment of Topical Dermatological Drug Products Using Dermatopharmacokinetics. Pharmaceutical Research, 2009, 26, 316-328.	1.7	82
48	Dermatopharmacokinetics: Factors Influencing Drug Clearance from the Stratum Corneum. Pharmaceutical Research, 2009, 26, 865-871.	1.7	29
49	Dermal absorption of environmental contaminants from soil and sediment: a critical review. Journal of Exposure Science and Environmental Epidemiology, 2009, 19, 119-148.	1.8	30
50	Comparison of numerical simulations of barrier membranes with impermeable flakes. Journal of Membrane Science, 2009, 329, 209-218.	4.1	26
51	Optimizing Metrics for the Assessment of Bioequivalence Between Topical Drug Products. Pharmaceutical Research, 2008, 25, 1621-1630.	1.7	41
52	Determining bioequivalence of topical dermatological drug products by tape-stripping. Journal of Pharmacokinetics and Pharmacodynamics, 2008, 35, 337-348.	0.8	25
53	Effect of PBPK Model Structure on Interpretation of In Vivo Human Aqueous Dermal Exposure Trials. Toxicological Sciences, 2008, 104, 210-217.	1.4	12
54	Chemical transport in silicone rubber membranes from pure powders and saturated aqueous solutions. Journal of Membrane Science, 2007, 292, 35-44.	4.1	11

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55	Numerical simulations compared against experimental results for barrier membranes with lithographically printed flakes. Journal of Membrane Science, 2007, 306, 196-208.	4.1	14
56	Increased permeability for polyethylene glycols through skin compromised by sodium lauryl sulphate. Experimental Dermatology, 2006, 15, 801-807.	1.4	42
57	Mathematical models of diffusion through membranes from spatially distributed sources. Journal of Membrane Science, 2006, 283, 399-410.	4.1	10
58	Dermally adhered soil: 1. Amount and particleâ€size distribution. Integrated Environmental Assessment and Management, 2006, 2, 375-384.	1.6	84
59	Dermally adhered soil: 2. Reconstruction of dryâ€sieve particleâ€size distributions from wetâ€sieve data. Integrated Environmental Assessment and Management, 2006, 2, 385-390.	1.6	16
60	Permeation of 4-Cyanophenol and Methyl Paraben from Powder and Saturated Aqueous Solution through Silicone Rubber Membranes and Human Skin. Journal of Pharmaceutical Sciences, 2006, 95, 2526-2533.	1.6	19
61	Interâ€•and intralaboratory variation of in vitro diffusion cell measurements: An international multicenter study using quasiâ€standardized methods and materials. Journal of Pharmaceutical Sciences, 2005, 94, 632-638.	1.6	57
62	Percutaneous Absorption of 4-Cyanophenol from Freshly Contaminated Soil in Vitro:Â Effects of Soil Loading and Contamination Concentration. Environmental Science & Technology, 2005, 39, 3723-3731.	4.6	10
63	Modeling Dermal Absorption from Soils and Powders Using Stratum Corneum Tape-Stripping In Vivo. , 2005, , 191-212.		1
64	Physical characterization of 0.5 Î¼m cut-off sintered stainless steel membranes. Journal of Membrane Science, 2003, 213, 13-23.	4.1	16
65	Absorption into silicone rubber membranes from powders and aqueous solutions. International Journal of Pharmaceutics, 2003, 250, 169-180.	2.6	23
66	Leakage and Swell in Emulsion Liquid-Membrane Systems: Batch Experiments. Separation Science and Technology, 2003, 38, 519-539.	1.3	18
67	Aqueous Ion Transport Studies in Stainless Steel Membranes. Industrial & Engineering Chemistry Research, 2003, 42, 2853-2860.	1.8	0
68	Comment on Sartorelli <italic>et al.</italic> (1998): Invalid Calculation of Permeability Coefficients. Annals of Occupational Hygiene, 2003, 47, 165-7; author reply 167-72.	1.9	1
69	Uncertainty in Measurements of Dermal Absorption of Pesticides. Risk Analysis, 2002, 22, 1175-1182.	1.5	5
70	Determining dermal absorption parameters in vivo from tape strip data. Pharmaceutical Research, 2002, 19, 292-298.	1.7	77
71	Quantitative structure-permeation relationships for solute transport across silicone membranes. Pharmaceutical Research, 2002, 19, 1622-1629.	1.7	55
72	Dermal Absorption from Pesticide Residues. , 2002, , 55-78.		3

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73	Skin Absorption Databases and Predictive Equations. , 2002, , 57-141.		14
74	Skin Absorption Databases and Predictive Equations. , 2002, , .		3
75	Evaluating the Transdermal Permeability of Chemicals. , 2002, , .		0
76	Partitioning of Chemicals into Skin. , 2002, , .		0
77	Pharmacokinetic models of dermal absorption. Journal of Pharmaceutical Sciences, 2001, 90, 1699-1719.	1.6	89
78	Physiologically Relevant Twoâ€€Compartment Pharmacokinetic Models for Skin. Journal of Pharmaceutical Sciences, 2000, 89, 1212-1235.	1.6	39
79	Does epidermal turnover reduce percutaneous penetration?. Pharmaceutical Research, 2000, 17, 1414-1419.	1.7	55
80	Physiologically relevant twoâ€€compartment pharmacokinetic models for skin. Journal of Pharmaceutical Sciences, 2000, 89, 1212-1235.	1.6	28
81	The determination of a diffusional pathlength through the stratum corneum. International Journal of Pharmaceutics, 1999, 188, 121-124.	2.6	18
82	Chemical uptake into human stratum corneum in vivo from volatile and non-volatile solvents. Pharmaceutical Research, 1999, 16, 1288-1293.	1.7	73
83	Physiologically Relevant One-Compartment Pharmacokinetic Models for Skin. 1. Development of Models. Journal of Pharmaceutical Sciences, 1998, 87, 470-481.	1.6	25
84	Physiologically Relevant One-Compartment Pharmacokinetic Models for Skin. 2. Comparison of Models when Combined with a Systemic Pharmacokinetic Model. Journal of Pharmaceutical Sciences, 1998, 87, 482-490.	1.6	22
85	Release rates from topical formulations containing drugs in suspension. Journal of Controlled Release, 1998, 52, 141-148.	4.8	37
86	Re: ?Dermal Absorption Potential of Industrial Chemicals: Criteria for Skin Notation?. , 1998, 34, 89-90.		4
87	Characterization of the permeability barrier of human skin in vivo. Proceedings of the National Academy of Sciences of the United States of America, 1997, 94, 1562-1567.	3.3	188
88	Chemical Release from Topical Formulations across Synthetic Membranes: Infinite Dose. Journal of Pharmaceutical Sciences, 1997, 86, 187-192.	1.6	14
89	Predicting Dermal Absorption from Contact with Chemically Contaminated Soils. , 1997, , 227-244.		1
90	Removal of Selenium from Contaminated Waters Using Emulsion Liquid Membranes. ACS Symposium Series, 1996, , 342-360.	0.5	3

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91	A new method for estimating dermal absorption from chemical exposure: 2. Effect of molecular weight and octanol-water partitioning. Pharmaceutical Research, 1995, 12, 88-95.	1.7	105
92	A new method for estimating dermal absorption from chemical exposure. 3. Compared with steady-state methods for prediction and data analysis. Pharmaceutical Research, 1995, 12, 972-982.	1.7	43
93	A new method for estimating dermal absorption from chemical exposure. 1. General approach. Pharmaceutical Research, 1993, 10, 497-506.	1.7	197
94	Corrected Analysis of the Effect of Preparation Parameters on Leakage in Liquid Surfactant Membrane Systems. Separation Science and Technology, 1992, 27, 753-763.	1.3	10
95	Aspects of the transdermal delivery of prostaglandins II. International Journal of Pharmaceutics, 1992, 83, 171-175.	2.6	3
96	Computer simulation of penetrant concentration-depth profiles in the stratum corneum. International Journal of Pharmaceutics, 1992, 87, 175-182.	2.6	25
97	In vivo percutaneous penetration/absorption. International Journal of Pharmaceutics, 1991, 74, 1-8.	2.6	12
98	Percutaneous absorption of benzoic acid across human skin. II. Prediction of an in vivo, skin-flap system using in vitro parameters. Pharmaceutical Research, 1990, 07, 352-358.	1.7	15
99	Percutaneous absorption of benzoic acid across human skin. I. In vitro experiments and mathematical modeling. Pharmaceutical Research, 1990, 07, 230-236.	1.7	49
100	Multisolute extraction of organic acids by emulsion liquid membranes. I. Batch experiments and models. Journal of Membrane Science, 1990, 53, 71-103.	4.1	32
101	Multisolute extraction of organic acids by emulsion liquid membranes. II. Continuous flow experiments and models. Journal of Membrane Science, 1990, 53, 105-126.	4.1	10
102	AMINE PHASE PARTITIONING USING EMULSION LIQUID MEMBRANES. Chemical Engineering Communications, 1988, 64, 207-215.	1.5	1
103	Batch extraction of amines using emulsion liquid membranes: Importance of reaction reversibility. AICHE Journal, 1987, 33, 43-53.	1.8	45
104	The Origin of Reversible Hydroxide Uptake on Reservoir Rock. Society of Petroleum Engineers Journal, 1985, 25, 711-718.	0.9	17
105	A diffusion model for reversible comsumption in emulsion liquid membranes. Journal of Membrane Science, 1984, 21, 55-71.	4.1	61
106	Divalent Ion Exchange With Alkali. Society of Petroleum Engineers Journal, 1983, 23, 657-668.	0.9	23
107	Migration of Alkaline Pulses in Reservoir Sands. Society of Petroleum Engineers Journal, 1982, 22, 998-1012.	0.9	62
108	Correction to â€œSkin Pharmacokinetics of Transdermal Scopolamine: Measurements and Modelingâ€• Molecular Pharmaceutics, 0, , .	2.3	0