List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Mathematical models of skin permeability: An overview. International Journal of Pharmaceutics, 2011, 418, 115-129.	5.2	294
2	Osmotic power with Pressure Retarded Osmosis: Theory, performance and trends – A review. Journal of Membrane Science, 2014, 453, 337-358.	8.2	274
3	Molecular Size as the Main Determinant of Solute Maximum Flux Across the Skin. Journal of Investigative Dermatology, 2004, 122, 993-999.	0.7	209
4	Modeling the human skin barrier — Towards a better understanding of dermal absorption. Advanced Drug Delivery Reviews, 2013, 65, 152-168.	13.7	204
5	Microneedles as the technique of drug delivery enhancement in diverse organs and tissues. Journal of Controlled Release, 2018, 270, 184-202.	9.9	161
6	Mathematical and pharmacokinetic modelling of epidermal and dermal transport processes. Advanced Drug Delivery Reviews, 2013, 65, 169-190.	13.7	116
7	Determination of the Effect of Lipophilicity on the in vitro Permeability and Tissue Reservoir Characteristics of Topically Applied Solutes in Human Skin Layers. Journal of Investigative Dermatology, 2003, 120, 759-764.	0.7	87
8	Factors Affecting the Formation of a Skin Reservoir for Topically Applied Solutes. Skin Pharmacology and Physiology, 2004, 17, 3-16.	2.5	79
9	Plasma treatment as an efficient tool for controlled drug release from polymeric materials: A review. Journal of Controlled Release, 2017, 266, 57-74.	9.9	70
10	Diffusion modeling of percutaneous absorption kinetics: 2. Finite vehicle volume and solvent deposited solids. Journal of Pharmaceutical Sciences, 2001, 90, 504-520.	3.3	69
11	Diffusion modeling of percutaneous absorption kinetics. 1. Effects of flow rate, receptor sampling rate, and viable epidermal resistance for a constant donor concentration. Journal of Pharmaceutical Sciences, 1999, 88, 1201-1209.	3.3	63
12	Diffusion Modelling of Percutaneous Absorption Kinetics: 4. Effects of a Slow Equilibration Process Within Stratum Corneum on Absorption and Desorption Kinetics. Journal of Pharmaceutical Sciences, 2009, 98, 772-781.	3.3	61
13	Diffusion Modeling of Percutaneous Absorption Kinetics: 3. Variable Diffusion and Partition Coefficients, Consequences for Stratum Corneum Depth Profiles and Desorption Kinetics. Journal of Pharmaceutical Sciences, 2004, 93, 470-487.	3.3	52
14	Convective transport of highly plasma protein bound drugs facilitates direct penetration into deep tissues after topical application. British Journal of Clinical Pharmacology, 2012, 73, 564-578.	2.4	52
15	Modelling Dermal Drug Distribution After Topical Application in Human. Pharmaceutical Research, 2011, 28, 2119-2129.	3.5	48
16	Modification of polylactic acid surface using RF plasma discharge with sputter deposition of a hydroxyapatite target for increased biocompatibility. Applied Surface Science, 2015, 329, 32-39.	6.1	45
17	The investigation of the production method influence on the structure and properties of the ferroelectric nonwoven materials based on vinylidene fluoride $\hat{a} \in $ tetrafluoroethylene copolymer. Materials Chemistry and Physics, 2016, 182, 338-346.	4.0	45
18	Background free imaging of upconversion nanoparticle distribution in human skin. Journal of Biomedical Optics, 2012, 18, 061215.	2.6	42

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19	Iontophoresis-Mediated Transdermal Permeation of Peptide Dendrimers across Human Epidermis. Skin Pharmacology and Physiology, 2013, 26, 127-138.	2.5	42
20	Microdialysis and response during regional chemotherapy by isolated limb infusion of melphalan for limb malignancies. British Journal of Cancer, 2001, 85, 157-165.	6.4	39
21	The use of magnetron sputtering for the deposition of thin titanium coatings on the surface of bioresorbable electrospun fibrous scaffolds for vascular tissue engineering: A pilot study. Applied Surface Science, 2017, 398, 63-72.	6.1	36
22	Bovine-Serum-Albumin-Containing Receptor Phase Better Predicts Transdermal Absorption Parameters for Lipophilic Compounds. Journal of Investigative Dermatology, 2003, 120, 589-591.	0.7	35
23	Temperature effect on the build-up of exponentially growing polyelectrolyte multilayers. An exponential-to-linear transition point. Physical Chemistry Chemical Physics, 2016, 18, 7866-7874.	2.8	35
24	Surface modification of electrospun poly-(l-lactic) acid scaffolds by reactive magnetron sputtering. Colloids and Surfaces B: Biointerfaces, 2018, 162, 43-51.	5.0	31
25	Pharmacokinetics and pharmacodynamics of melphalan in isolated limb infusion for recurrent localized limb malignancy. Melanoma Research, 2001, 11, 423-431.	1.2	29
26	Surface modification of poly-ε-caprolactone electrospun fibrous scaffolds using plasma discharge with sputter deposition of a titanium target. Materials Letters, 2016, 171, 87-90.	2.6	27
27	Surface modification of poly(l-lactide) and polycaprolactone bioresorbable polymers using RF plasma discharge with sputter deposition of a hydroxyapatite target. Materials Letters, 2014, 132, 281-284.	2.6	26
28	Research of the surface properties of the thermoplastic copolymer of vinilidene fluoride and tetrafluoroethylene modified with radio-frequency magnetron sputtering for medical application. Applied Surface Science, 2012, 263, 187-194.	6.1	25
29	Compartmental modeling of skin transport. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 130, 336-344.	4.3	25
30	Modeling of hepatic elimination and organ distribution kinetics with the extended convection-dispersion model. Journal of Pharmacokinetics and Pharmacodynamics, 1999, 27, 343-382.	0.6	24
31	A fiber distribution model for predicting drug release rates. Journal of Controlled Release, 2017, 258, 218-225.	9.9	24
32	Epidermal iontophoresis: I. Development of the ionic mobility-pore model. Pharmaceutical Research, 1998, 15, 1569-1578.	3.5	23
33	Osteoinductive composite coatings for flexible intramedullary nails. Materials Science and Engineering C, 2017, 75, 207-220.	7.3	23
34	A compartmental model of hepatic disposition kinetics: 1. Model development and application to linear kinetics. Journal of Pharmacokinetics and Pharmacodynamics, 2002, 29, 131-156.	1.8	22
35	Development and validation of a reversed-phase high-performance liquid chromatographic method for quantification of peptide dendrimers in human skin permeation experiments. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2009, 877, 3556-3562.	2.3	22
36	Iontophoretic skin permeation of peptides: an investigation into the influence of molecular properties, iontophoretic conditions and formulation parameters. Drug Delivery and Translational Research, 2014, 4, 222-232.	5.8	22

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37	Investigation of the Size Distribution for Diffusion-Controlled Drug Release From Drug Delivery Systems of Various Geometries. Journal of Pharmaceutical Sciences, 2019, 108, 2690-2697.	3.3	21
38	Interconnected-tubes Model of Hepatic Elimination. Journal of Theoretical Biology, 1997, 188, 89-101.	1.7	20
39	Commentary: Using the Convection–Dispersion Model and Transit Time Density Functions in the Analysis of Organ Distribution Kinetics. Journal of Pharmaceutical Sciences, 2000, 89, 1579-1586.	3.3	20
40	Unexpected Clobetasol Propionate Profile in Human Stratum Corneum After Topical Applicationin Vitro. Pharmaceutical Research, 2003, 20, 1835-1837.	3.5	20
41	Enhanced transdermal delivery of 5â€aminolevulinic acid and a dipeptide by iontophoresis. Biopolymers, 2011, 96, 166-171.	2.4	19
42	Ferroelectric polymer scaffolds based on a copolymer of tetrafluoroethylene with vinylidene fluoride: Fabrication and properties. Materials Science and Engineering C, 2014, 40, 32-41.	7.3	19
43	Estimating Maximal In Vitro Skin Permeation Flux from Studies Using Non-sink Receptor Phase Conditions. Pharmaceutical Research, 2016, 33, 2180-2194.	3.5	18
44	Fatty acid binding protein is a major determinant of hepatic pharmacokinetics of palmitate and its metabolites. American Journal of Physiology - Renal Physiology, 2003, 284, G423-G433.	3.4	16
45	Fluorescence recovery after photo-bleaching as a method to determine local diffusion coefficient in the stratum corneum. International Journal of Pharmaceutics, 2012, 435, 93-97.	5.2	16
46	Hepatic structure-pharmacokinetic relationships: The hepatic disposition and metabolite kinetics of a homologous series of O-acyl derivatives of salicylic acid. British Journal of Pharmacology, 1998, 124, 1475-1483.	5.4	15
47	Modelling Skin Penetration Using the Laplace Transform Technique. Skin Pharmacology and Physiology, 2013, 26, 286-294.	2.5	14
48	Mathematical models in percutaneous absorption. Cutaneous and Ocular Toxicology, 2001, 20, 221-270.	0.3	13
49	Periodic electric field enhanced transport through membranes. Journal of Membrane Science, 2006, 278, 290-300.	8.2	13
50	Mathematical models for skin toxicology. Expert Opinion on Drug Metabolism and Toxicology, 2014, 10, 551-560.	3.3	13
51	Aspects of Mathematical Modelling of Pressure Retarded Osmosis. Membranes, 2016, 6, 13.	3.0	13
52	Modelling drug flux through microporated skin. Journal of Controlled Release, 2016, 241, 194-199.	9.9	13
53	Hepatic Disposition and Metabolite Kinetics of a Homologous Series of Diflunisal Esters. Journal of Pharmaceutical Sciences, 1998, 87, 943-951.	3.3	12
54	Disposition Kinetics of Propranolol Isomers in the Perfused Rat Liver. Journal of Pharmacology and Experimental Therapeutics, 2004, 311, 822-829.	2.5	12

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55	The formation of calcium phosphate coatings by pulse laser deposition on the surface of polymeric ferroelectric. Applied Surface Science, 2015, 349, 420-429.	6.1	12
56	Rutting and Roughness of Flood-Affected Pavements: Literature Review and Deterioration Models. Journal of Infrastructure Systems, 2018, 24, .	1.8	12
57	An Integrated Pharmacokinetic and Imaging Evaluation of Vehicle Effects on Solute Human Epidermal Flux and, Retention Characteristics. Pharmaceutical Research, 2008, 25, 158-166.	3.5	11
58	Flexible intramedullary nails for limb lengthening: a comprehensive comparative study of three nails types. Biomedical Materials (Bristol), 2019, 14, 025005.	3.3	11
59	Alternating Current (AC) Iontophoretic Transport across Human Epidermal Membrane: Effects of AC Frequency and Amplitude. Pharmaceutical Research, 2008, 25, 616-624.	3.5	10
60	Pathway Distribution Model for Solute Transport in Stratum Corneum. Journal of Pharmaceutical Sciences, 2015, 104, 4443-4447.	3.3	10
61	Physiologically based mathematical modelling of solute transport within the epidermis and dermis. International Journal of Pharmaceutics, 2019, 569, 118547.	5.2	10
62	Nitrogen-Doped Titanium Dioxide Thin Films Formation on the Surface of PLLA Electrospun Microfibers Scaffold by Reactive Magnetron Sputtering Method. Plasma Chemistry and Plasma Processing, 2019, 39, 503-517.	2.4	10
63	Modeling drug transport within the viable skin - a review. Expert Opinion on Drug Metabolism and Toxicology, 2021, 17, 105-119.	3.3	10
64	Predicting Viable Skin Concentration: Modelling the Subpapillary Plexus. Pharmaceutical Research, 2022, 39, 783-793.	3.5	10
65	Using a simple equation to predict the microporation-enhanced transdermal drug flux. European Journal of Pharmaceutics and Biopharmaceutics, 2018, 127, 12-18.	4.3	8
66	Sulphonylurea physicochemical-pharmacokinetic relationships in the pancreas and liver. Journal of Pharmaceutical Sciences, 2009, 98, 2807-2821.	3.3	7
67	Fabrication and properties of l -arginine-doped PCL electrospun composite scaffolds. Materials Letters, 2018, 214, 64-67.	2.6	7
68	Relating transdermal delivery plasma pharmacokinetics with in vitro permeation test (IVPT) findings using diffusion and compartment-in-series models. Journal of Controlled Release, 2021, 334, 37-51.	9.9	7
69	Interconnected-Tubes Model of Hepatic Elimination: Steady-state Considerations. Journal of Theoretical Biology, 1999, 199, 435-447.	1.7	6
70	Diffusion modelling of percutaneous absorption kinetics. Predicting urinary excretion from in vitro skin permeation tests (IVPT) for an infinite dose. European Journal of Pharmaceutics and Biopharmaceutics, 2020, 149, 30-44.	4.3	6
71	Metabolite mean transit times in the liver as predicted by various models of hepatic elimination. Journal of Pharmacokinetics and Pharmacodynamics, 1997, 25, 477-505.	0.6	5
72	Lateral iontophoretic solute transport in skin. Pharmaceutical Research, 1999, 16, 46-54.	3.5	5

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73	Intradermal injection of lidocaine with a microneedle device to provide rapid local anaesthesia for peripheral intravenous cannulation: A randomised open-label placebo-controlled clinical trial. PLoS ONE, 2022, 17, e0261641.	2.5	5
74	Predicting viable skin concentration: Diffusional and convective drug transport. Journal of Pharmaceutical Sciences, 2021, 110, 2823-2832.	3.3	4
75	Mathematical Models for Topical and Transdermal Drug Products. , 2014, , 249-298.		4
76	Catheter Effects in Organ Perfusion Experiments. Journal of Theoretical Biology, 2002, 214, 263-273.	1.7	2
77	Dialysis-assisted fiber optic spectroscopy for in situ biomedical sensing. Journal of Biomedical Optics, 2006, 11, 014033.	2.6	2
78	Numerical Investigation of Analytical Models of Drug Flux Through Microporated Skin. Journal of Pharmaceutical Sciences, 2019, 108, 358-363.	3.3	2
79	Introduction to Dermatokinetics. , 2011, , 1-24.		1