

Joke A Bouwstra

List of Publications by Year in descending order

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211
papers

14,429
citations

13827

67
h-index

23472

111
g-index

212
all docs

212
docs citations

212
times ranked

9884
citing authors

#	ARTICLE	IF	CITATIONS
1	Structure of the skin barrier and its modulation by vesicular formulations. <i>Progress in Lipid Research</i> , 2003, 42, 1-36.	5.3	520
2	Microneedle technologies for (trans)dermal drug and vaccine delivery. <i>Journal of Controlled Release</i> , 2012, 161, 645-655.	4.8	504
3	Structural Investigations of Human Stratum Corneum by Small-Angle X-Ray Scattering. <i>Journal of Investigative Dermatology</i> , 1991, 97, 1005-1012.	0.3	499
4	The skin barrier in healthy and diseased state. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2006, 1758, 2080-2095.	1.4	493
5	Liposomes and niosomes as topical drug carriers: dermal and transdermal drug delivery. <i>Journal of Controlled Release</i> , 1994, 30, 1-15.	4.8	422
6	Increase in short-chain ceramides correlates with an altered lipid organization and decreased barrier function in atopic eczema patients. <i>Journal of Lipid Research</i> , 2012, 53, 2755-2766.	2.0	349
7	Water Distribution and Related Morphology in Human Stratum Corneum at Different Hydration Levels. <i>Journal of Investigative Dermatology</i> , 2003, 120, 750-758.	0.3	270
8	The Formation of Competent Barrier Lipids in Reconstructed Human Epidermis Requires the Presence of Vitamin C. <i>Journal of Investigative Dermatology</i> , 1997, 109, 348-355.	0.3	264
9	Vesicles as a tool for transdermal and dermal delivery. <i>Drug Discovery Today: Technologies</i> , 2005, 2, 67-74.	4.0	259
10	In vivo assessment of safety of microneedle arrays in human skin. <i>European Journal of Pharmaceutical Sciences</i> , 2008, 35, 193-202.	1.9	248
11	Stratum Corneum Lipids: Their Role for the Skin Barrier Function in Healthy Subjects and Atopic Dermatitis Patients. <i>Current Problems in Dermatology</i> , 2016, 49, 8-26.	0.8	243
12	TNF- α and Th2 Cytokines Induce Atopic Dermatitis-Like Features on Epidermal Differentiation Proteins and Stratum Corneum Lipids in Human Skin Equivalents. <i>Journal of Investigative Dermatology</i> , 2014, 134, 1941-1950.	0.3	238
13	The importance of free fatty acid chain length for the skin barrier function in atopic eczema patients. <i>Experimental Dermatology</i> , 2014, 23, 45-52.	1.4	201
14	Modes of action of terpene penetration enhancers in human skin; Differential scanning calorimetry, small-angle X-ray diffraction and enhancer uptake studies. <i>International Journal of Pharmaceutics</i> , 1996, 127, 9-26.	2.6	198
15	Administration routes affect the quality of immune responses: A cross-sectional evaluation of particulate antigen-delivery systems. <i>Journal of Controlled Release</i> , 2010, 147, 342-349.	4.8	194
16	LC/MS analysis of stratum corneum lipids: ceramide profiling and discovery. <i>Journal of Lipid Research</i> , 2011, 52, 1211-1221.	2.0	191
17	Aberrant Lipid Organization in Stratum Corneum of Patients with Atopic Dermatitis and Lamellar Ichthyosis. <i>Journal of Investigative Dermatology</i> , 2001, 117, 710-717.	0.3	184
18	Elasticity of vesicles assessed by electron spin resonance, electron microscopy and extrusion measurements. <i>International Journal of Pharmaceutics</i> , 2001, 217, 13-24.	2.6	177

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19	Advances in transcutaneous vaccine delivery: Do all ways lead to Rome?. Journal of Controlled Release, 2010, 148, 266-282.	4.8	177
20	Nasal vaccination with N-trimethyl chitosan and PLGA based nanoparticles: Nanoparticle characteristics determine quality and strength of the antibody response in mice against the encapsulated antigen. Vaccine, 2010, 28, 6282-6291.	1.7	176
21	Electron Diffraction Provides New Information on Human Stratum Corneum Lipid Organization Studied in Relation to Depth and Temperature. Journal of Investigative Dermatology, 1999, 113, 403-409.	0.3	144
22	Interactions of elastic and rigid vesicles with human skin in vitro: electron microscopy and two-photon excitation microscopy. Biochimica Et Biophysica Acta - Biomembranes, 1999, 1461, 155-173.	1.4	144
23	Phase Behavior of Stratum Corneum Lipid Mixtures Based on Human Ceramides: The Role of Natural and Synthetic Ceramide 1. Journal of Investigative Dermatology, 2002, 118, 606-617.	0.3	140
24	Reduced Skin Barrier Function Parallels Abnormal Stratum Corneum Lipid Organization in Patients with Lamellar Ichthyosis. Journal of Investigative Dermatology, 1995, 105, 619-624.	0.3	139
25	3D skin models for 3R research: The potential of 3D reconstructed skin models to study skin barrier function. Experimental Dermatology, 2018, 27, 501-511.	1.4	133
26	Elasticity of vesicles affects hairless mouse skin structure and permeability. Journal of Controlled Release, 1999, 62, 367-379.	4.8	126
27	Effects of iontophoresis and electroporation on the stratum corneum. Advanced Drug Delivery Reviews, 1999, 35, 89-105.	6.6	119
28	The lipid and protein structure of mouse stratum corneum: A wide and small angle diffraction study. Lipids and Lipid Metabolism, 1994, 1212, 183-192.	2.6	117
29	Barrier Characteristics of Different Human Skin Types Investigated with X-Ray Diffraction, Lipid Analysis, and Electron Microscopy Imaging. Journal of Investigative Dermatology, 2000, 114, 654-660.	0.3	114
30	Structure of Fully Hydrated Human Stratum Corneum: A Freeze-Fracture Electron Microscopy Study. Journal of Investigative Dermatology, 1996, 106, 89-95.	0.3	113
31	Lipid and ultrastructural characterization of reconstructed skin models. International Journal of Pharmaceutics, 2000, 203, 211-225.	2.6	112
32	The in vivo and in vitro interactions of elastic and rigid vesicles with human skin. Biochimica Et Biophysica Acta - General Subjects, 2002, 1573, 130-140.	1.1	112
33	The in vitro transport of pergolide from surfactant-based elastic vesicles through human skin: a suggested mechanism of action. Journal of Controlled Release, 2003, 86, 145-156.	4.8	112
34	Intradermal vaccination with hollow microneedles: A comparative study of various protein antigen and adjuvant encapsulated nanoparticles. Journal of Controlled Release, 2017, 266, 109-118.	4.8	110
35	Estradiol permeation from nonionic surfactant vesicles through human stratum corneum in vitro. Pharmaceutical Research, 1994, 11, 659-664.	1.7	109
36	Quantitative Assessment of the Transport of Elastic and Rigid Vesicle Components and a Model Drug from these Vesicle Formulations into Human Skin In Vivo. Journal of Investigative Dermatology, 2004, 123, 902-910.	0.3	109

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37	A Novel in Vitro Percutaneous Penetration Model: Evaluation of Barrier Properties with P-Aminobenzoic Acid and Two of Its Derivatives. <i>Pharmaceutical Research</i> , 2006, 23, 951-960.	1.7	109
38	Non-animal models of epithelial barriers (skin, intestine and lung) in research, industrial applications and regulatory toxicology. <i>ALTEX: Alternatives To Animal Experimentation</i> , 2015, 32, 327-378.	0.9	108
39	Diverse Regulation of Claudin-1 and Claudin-4 in Atopic Dermatitis. <i>American Journal of Pathology</i> , 2015, 185, 2777-2789.	1.9	105
40	Ceramides in the Skin Lipid Membranes: Length Matters. <i>Langmuir</i> , 2013, 29, 15624-15633.	1.6	101
41	Synthesis and characterization of hyperbranched polyglycerol hydrogels. <i>Biomaterials</i> , 2006, 27, 5471-5479.	5.7	99
42	Lamellar Lipid Organization and Ceramide Composition in the Stratum Corneum of Patients with Atopic Eczema. <i>Journal of Investigative Dermatology</i> , 2011, 131, 2136-2138.	0.3	96
43	pH, Cholesterol Sulfate, and Fatty Acids Affect the Stratum Corneum Lipid Organization. <i>Journal of Investigative Dermatology Symposium Proceedings</i> , 1998, 3, 69-74.	0.8	95
44	Covalently stabilized trimethyl chitosan-hyaluronic acid nanoparticles for nasal and intradermal vaccination. <i>Journal of Controlled Release</i> , 2011, 156, 46-52.	4.8	94
45	Adjuvanted, antigen loaded N-trimethyl chitosan nanoparticles for nasal and intradermal vaccination: Adjuvant- and site-dependent immunogenicity in mice. <i>European Journal of Pharmaceutical Sciences</i> , 2012, 45, 475-481.	1.9	94
46	Combined LC/MS-platform for analysis of all major stratum corneum lipids, and the profiling of skin substitutes. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2014, 1841, 70-79.	1.2	94
47	Interactions between liposomes and human skin in vitro, a confocal laser scanning microscopy study. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1998, 1371, 31-39.	1.4	93
48	Towards tailored vaccine delivery: Needs, challenges and perspectives. <i>Journal of Controlled Release</i> , 2012, 161, 363-376.	4.8	93
49	Altered expression of epidermal lipid bio-synthesis enzymes in atopic dermatitis skin is accompanied by changes in stratum corneum lipid composition. <i>Journal of Dermatological Science</i> , 2017, 88, 57-66.	1.0	92
50	Lipid mixtures prepared with well-defined synthetic ceramides closely mimic the unique stratum corneum lipid phase behavior. <i>Journal of Lipid Research</i> , 2005, 46, 2649-2656.	2.0	90
51	Microneedle-based drug and vaccine delivery via nanoporous microneedle arrays. <i>Drug Delivery and Translational Research</i> , 2015, 5, 397-406.	3.0	89
52	Efficient induction of immune responses through intradermal vaccination with N-trimethyl chitosan containing antigen formulations. <i>Journal of Controlled Release</i> , 2010, 142, 374-383.	4.8	86
53	Co-encapsulation of antigen and Toll-like receptor ligand in cationic liposomes affects the quality of the immune response in mice after intradermal vaccination. <i>Vaccine</i> , 2011, 29, 1045-1052.	1.7	83
54	Unraveling Barrier Properties of Three Different In-House Human Skin Equivalents. <i>Tissue Engineering - Part C: Methods</i> , 2012, 18, 1-11.	1.1	83

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55	New Insights into Ultrastructure, Lipid Composition and Organization of Vernix Caseosa. <i>Journal of Investigative Dermatology</i> , 2006, 126, 1823-1833.	0.3	81
56	Lipid organization in human and porcine stratum corneum differs widely, while lipid mixtures with porcine ceramides model human stratum corneum lipid organization very closely. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2008, 1778, 1472-1482.	1.4	80
57	Is an orthorhombic lateral packing and a proper lamellar organization important for the skin barrier function?. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2011, 1808, 1529-1537.	1.4	80
58	IgG-loaded hyaluronan-based dissolving microneedles for intradermal protein delivery. <i>Journal of Controlled Release</i> , 2015, 218, 53-62.	4.8	78
59	Cationic Liposomes Loaded with a Synthetic Long Peptide and Poly(I:C): a Defined Adjuvanted Vaccine for Induction of Antigen-Specific T Cell Cytotoxicity. <i>AAPS Journal</i> , 2015, 17, 216-226.	2.2	77
60	The in vivo transport of elastic vesicles into human skin: effects of occlusion, volume and duration of application. <i>Journal of Controlled Release</i> , 2003, 90, 243-255.	4.8	76
61	Layer-by-Layer Assembly of Inactivated Poliovirus and N-Trimethyl Chitosan on pH-Sensitive Microneedles for Dermal Vaccination. <i>Langmuir</i> , 2015, 31, 8654-8660.	1.6	75
62	Hollow microneedle-mediated micro-injections of a liposomal HPV E743â€“63 synthetic long peptide vaccine for efficient induction of cytotoxic and T-helper responses. <i>Journal of Controlled Release</i> , 2018, 269, 347-354.	4.8	75
63	Intercellular Skin Barrier Lipid Composition and Organization in Netherton Syndrome Patients. <i>Journal of Investigative Dermatology</i> , 2014, 134, 1238-1245.	0.3	74
64	Microneedle-Based Transcutaneous Immunisation in Mice with N-Trimethyl Chitosan Adjuvanted Diphtheria Toxoid Formulations. <i>Pharmaceutical Research</i> , 2010, 27, 1837-1847.	1.7	73
65	Transdermal delivery of pergolide from surfactant-based elastic and rigid vesicles: characterization and in vitro transport studies. <i>Pharmaceutical Research</i> , 2002, 19, 991-997.	1.7	71
66	Water Distribution and Natural Moisturizer Factor Content in Human Skin Equivalents Are Regulated by Environmental Relative Humidity. <i>Journal of Investigative Dermatology</i> , 2008, 128, 378-388.	0.3	71
67	Preparation and characterization of a stratum corneum substitute for in vitro percutaneous penetration studies. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2006, 1758, 636-644.	1.4	69
68	Application of vesicles to rat skin in vivo: a confocal laser scanning microscopy study.. <i>Journal of Controlled Release</i> , 1998, 56, 189-196.	4.8	65
69	Effect of vesicle size on tissue localization and immunogenicity of liposomal DNA vaccines. <i>Vaccine</i> , 2011, 29, 4761-4770.	1.7	65
70	Adjuvant effect of cationic liposomes and CpG depends on administration route. <i>Journal of Controlled Release</i> , 2011, 154, 123-130.	4.8	65
71	Characterization of Stratum Corneum Molecular Dynamics by Natural-Abundance ¹³ C Solid-State NMR. <i>PLoS ONE</i> , 2013, 8, e61889.	1.1	64
72	In vitro human skin barrier perturbation by oleic acid: Thermal analysis and freeze fracture electron microscopy studies. <i>Thermochimica Acta</i> , 1997, 293, 77-85.	1.2	63

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73	Skin penetration and mechanisms of action in the delivery of the D2-agonist rotigotine from surfactant-based elastic vesicle formulations. <i>Pharmaceutical Research</i> , 2003, 20, 1619-1625.	1.7	63
74	Modelling the stratum corneum lipid organisation with synthetic lipid mixtures: the importance of synthetic ceramide composition. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2004, 1664, 132-140.	1.4	63
75	Skin Lipids: Localization of Ceramide and Fatty Acid in the Unit Cell of the Long Periodicity Phase. <i>Biophysical Journal</i> , 2015, 108, 2670-2679.	0.2	61
76	Novel Hollow Microneedle Technology for Depth-Controlled Microinjection-Mediated Dermal Vaccination: A Study with Polio Vaccine in Rats. <i>Pharmaceutical Research</i> , 2014, 31, 1846-54.	1.7	60
77	Efficient Eradication of Established Tumors in Mice with Cationic Liposome-Based Synthetic Long-Peptide Vaccines. <i>Cancer Immunology Research</i> , 2017, 5, 222-233.	1.6	60
78	Novel lipid mixtures based on synthetic ceramides reproduce the unique stratum corneum lipid organization. <i>Journal of Lipid Research</i> , 2004, 45, 923-932.	2.0	59
79	Development of PLGA nanoparticle loaded dissolving microneedles and comparison with hollow microneedles in intradermal vaccine delivery. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2018, 129, 111-121.	2.0	59
80	Model Membranes Prepared with Ceramide EOS, Cholesterol and Free Fatty Acids Form a Unique Lamellar Phase. <i>Langmuir</i> , 2010, 26, 4168-4175.	1.6	57
81	Diphtheria toxoid and N -trimethyl chitosan layer-by-layer coated pH-sensitive microneedles induce potent immune responses upon dermal vaccination in mice. <i>Journal of Controlled Release</i> , 2017, 262, 28-36.	4.8	57
82	Antigen-Adjuvant Nanoconjugates for Nasal Vaccination: An Improvement over the Use of Nanoparticles?. <i>Molecular Pharmaceutics</i> , 2010, 7, 2207-2215.	2.3	54
83	Small is beautiful: N-trimethyl chitosan-ovalbumin conjugates for microneedle-based transcutaneous immunisation. <i>Vaccine</i> , 2011, 29, 4025-4032.	1.7	54
84	Monounsaturated Fatty Acids Reduce the Barrier of Stratum Corneum Lipid Membranes by Enhancing the Formation of a Hexagonal Lateral Packing. <i>Langmuir</i> , 2014, 30, 6534-6543.	1.6	54
85	Effect of the 1%-acylceramides on the lipid organization of stratum corneum model membranes evaluated by X-ray diffraction and FTIR studies (Part I). <i>Chemistry and Physics of Lipids</i> , 2011, 164, 184-195.	1.5	53
86	Psoriasis-Associated Late Cornified Envelope (LCE) Proteins Have Antibacterial Activity. <i>Journal of Investigative Dermatology</i> , 2017, 137, 2380-2388.	0.3	53
87	Investigating the barrier function of skin lipid models with varying compositions. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2011, 79, 334-342.	2.0	51
88	Increased Presence of Monounsaturated Fatty Acids in the Stratum Corneum of Human Skin Equivalents. <i>Journal of Investigative Dermatology</i> , 2013, 133, 59-67.	0.3	51
89	Penetration and distribution of three lipophilic probes in vitro in human skin focusing on the hair follicle. <i>Journal of Controlled Release</i> , 2002, 83, 253-262.	4.8	50
90	Preparation and Characterization of Structured Hydrogel Microparticles Based on Cross-Linked Hyperbranched Polyglycerol. <i>Langmuir</i> , 2007, 23, 11819-11825.	1.6	50

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91	Impact-Insertion Applicator Improves Reliability of Skin Penetration by Solid Microneedle Arrays. <i>AAPS Journal</i> , 2014, 16, 681-684.	2.2	50
92	Hollow microneedle-mediated intradermal delivery of model vaccine antigen-loaded PLGA nanoparticles elicits protective T cell-mediated immunity to an intracellular bacterium. <i>Journal of Controlled Release</i> , 2017, 266, 27-35.	4.8	48
93	Acylceramide Head Group Architecture Affects Lipid Organization in Synthetic Ceramide Mixtures. <i>Journal of Investigative Dermatology</i> , 2004, 123, 911-916.	0.3	47
94	One Peptide for Them All: Gold Nanoparticles of Different Sizes Are Stabilized by a Common Peptide Amphiphile. <i>ACS Nano</i> , 2020, 14, 5874-5886.	7.3	47
95	The effect of the chain length distribution of free fatty acids on the mixing properties of stratum corneum model membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014, 1838, 1851-1861.	1.4	45
96	Elastic Vesicles as a Tool for Dermal and Transdermal Delivery. <i>Journal of Liposome Research</i> , 2006, 16, 273-280.	1.5	44
97	Hyaluronan-based dissolving microneedles with high antigen content for intradermal vaccination: Formulation, physicochemical characterization and immunogenicity assessment. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2019, 134, 49-59.	2.0	44
98	Transdermal Iontophoresis of Rotigotine Across Human Stratum Corneum in Vitro: Influence of pH and NaCl Concentration. <i>Pharmaceutical Research</i> , 2004, 21, 844-850.	1.7	43
99	Transcutaneous Immunization Studies in Mice Using Diphtheria Toxoid-Loaded Vesicle Formulations and a Microneedle Array. <i>Pharmaceutical Research</i> , 2011, 28, 145-158.	1.7	43
100	Knockdown of filaggrin does not affect lipid organization and composition in stratum corneum of reconstructed human skin equivalents. <i>Experimental Dermatology</i> , 2013, 22, 807-812.	1.4	43
101	Permeant lipophilicity and vehicle composition influence accumulation of dyes in hair follicles of human skin. <i>European Journal of Pharmaceutical Sciences</i> , 2003, 18, 329-336.	1.9	41
102	Lipophilic and hydrophilic moisturizers show different actions on human skin as revealed by cryo scanning electron microscopy. <i>Experimental Dermatology</i> , 2007, 16, 891-898.	1.4	41
103	FTIR studies show lipophilic moisturizers to interact with stratum corneum lipids, rendering the more densely packed. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2008, 1778, 1517-1524.	1.4	41
104	Quantitative analysis of ceramides using a novel lipidomics approach with three dimensional response modelling. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2016, 1861, 1652-1661.	1.2	41
105	Human skin equivalents: Impaired barrier function in relation to the lipid and protein properties of the stratum corneum. <i>Advanced Drug Delivery Reviews</i> , 2021, 175, 113802.	6.6	41
106	Free fatty acids chain length distribution affects the permeability of skin lipid model membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 2050-2059.	1.4	40
107	Mesoporous Silica Nanoparticle-Coated Microneedle Arrays for Intradermal Antigen Delivery. <i>Pharmaceutical Research</i> , 2017, 34, 1693-1706.	1.7	40
108	An <i>in vivo</i> human skin model for studying skin barrier repair. <i>Experimental Dermatology</i> , 2015, 24, 48-54.	1.4	38

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109	Repeated fractional intradermal dosing of an inactivated polio vaccine by a single hollow microneedle leads to superior immune responses. <i>Journal of Controlled Release</i> , 2016, 242, 141-147.	4.8	38
110	Two new methods for preparing a unique stratum corneum substitute. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2008, 1778, 2421-2429.	1.4	37
111	Skin barrier disruption by acetone: observations in a hairless mouse skin model. <i>Archives of Dermatological Research</i> , 2009, 301, 609-613.	1.1	37
112	Glucocerebrosidase: Functions in and Beyond the Lysosome. <i>Journal of Clinical Medicine</i> , 2020, 9, 736.	1.0	37
113	Fluorescent Nanoparticle Adhesion Assay: a Novel Method for Surface pK_a Determination of Self-Assembled Monolayers on Silicon Surfaces. <i>Langmuir</i> , 2012, 28, 3403-3411.	1.6	36
114	In vitro iontophoresis of R-apomorphine across human stratum corneum. <i>Journal of Controlled Release</i> , 2002, 84, 49-57.	4.8	35
115	Barrier Properties of an N/TERT-Based Human Skin Equivalent. <i>Tissue Engineering - Part A</i> , 2014, 20, 3041-3049.	1.6	35
116	Lanolin-derived lipid mixtures mimic closely the lipid composition and organization of vernix caseosa lipids. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2008, 1778, 2350-2360.	1.4	34
117	Development of a murine model to evaluate the effect of vernix caseosa on skin barrier recovery. <i>Experimental Dermatology</i> , 2009, 18, 178-184.	1.4	34
118	Dry skin management: practical approach in light of latest research on skin structure and function. <i>Journal of Dermatological Treatment</i> , 2020, 31, 716-722.	1.1	34
119	Transdermal iontophoresis of the dopamine agonist 5-OH-DPAT in human skin in vitro. <i>Journal of Controlled Release</i> , 2005, 103, 393-403.	4.8	33
120	A cross-section device to improve visualization of fluorescent probe penetration into the skin by confocal laser scanning microscopy. <i>Pharmaceutical Research</i> , 1998, 15, 352-356.	1.7	32
121	Transdermal macromolecular delivery: real-time visualization of iontophoretic and chemically enhanced transport using two-photon excitation microscopy. <i>Pharmaceutical Research</i> , 2000, 17, 788-795.	1.7	32
122	Characterization and skin permeation of ketoprofen-loaded vesicular systems. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2014, 86, 156-166.	2.0	32
123	Universal Applicator for Digitally-Controlled Pressing Force and Impact Velocity Insertion of Microneedles into Skin. <i>Pharmaceutics</i> , 2018, 10, 211.	2.0	32
124	Transdermal iontophoresis of rotigotine: influence of concentration, temperature and current density in human skin in vitro. <i>Journal of Controlled Release</i> , 2004, 96, 159-167.	4.8	31
125	Time and depth resolved visualisation of the diffusion of a lipophilic dye into the hair follicle of fresh unfixed human scalp skin. <i>Journal of Controlled Release</i> , 2004, 98, 367-378.	4.8	31
126	Preclinical Studies with 5,10,15-Tris(4-methylpyridinium)20-phenyl[21H,23H]-Porphine Trichloride for the Photodynamic Treatment of Superficial Mycoses Caused by <i>Trichophyton rubrum</i> . <i>Photochemistry and Photobiology</i> , 2009, 85, 733-739.	1.3	30

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127	Nature versus nurture: does human skin maintain its stratum corneum lipid properties <i>in vitro</i> ?. <i>Experimental Dermatology</i> , 2012, 21, 865-870.	1.4	30
128	Ovalbumin-coated pH-sensitive microneedle arrays effectively induce ovalbumin-specific antibody and T-cell responses in mice. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2014, 88, 310-315.	2.0	30
129	Hyaluronan molecular weight: Effects on dissolution time of dissolving microneedles in the skin and on immunogenicity of antigen. <i>European Journal of Pharmaceutical Sciences</i> , 2020, 146, 105269.	1.9	30
130	Hydrophilic and lipophilic moisturizers have similar penetration profiles but different effects on SC water distribution <i>in vivo</i> . <i>Experimental Dermatology</i> , 2009, 18, 954-961.	1.4	29
131	Improved epidermal barrier formation in human skin models by chitosan modulated dermal matrices. <i>PLoS ONE</i> , 2017, 12, e0174478.	1.1	28
132	Barrier Capability of Skin Lipid Models: Effect of Ceramides and Free Fatty Acid Composition. <i>Langmuir</i> , 2019, 35, 15376-15388.	1.6	28
133	Altered lipid properties of the stratum corneum in Canine Atopic Dermatitis. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2018, 1860, 526-533.	1.4	27
134	Human skin equivalents cultured under hypoxia display enhanced epidermal morphogenesis and lipid barrier formation. <i>Scientific Reports</i> , 2019, 9, 7811.	1.6	27
135	A combined approach of vesicle formulations and microneedle arrays for transcutaneous immunization against hepatitis B virus. <i>European Journal of Pharmaceutical Sciences</i> , 2012, 46, 1-7.	1.9	26
136	Nanolayered chemical modification of silicon surfaces with ionizable surface groups for pH-triggered protein adsorption and release: application to microneedles. <i>Journal of Materials Chemistry B</i> , 2013, 1, 4466.	2.9	26
137	Preferential arrangement of lipids in the long-periodicity phase of a stratum corneum matrix model. <i>Journal of Lipid Research</i> , 2018, 59, 2329-2338.	2.0	26
138	Generation of Human Skin Equivalents Under Submerged Conditionsâ€”Mimicking the <i>In Utero</i> Environment. <i>Tissue Engineering - Part A</i> , 2010, 16, 1433-1441.	1.6	25
139	Determination of Depth-Dependent Intradermal Immunogenicity of Adjuvanted Inactivated Polio Vaccine Delivered by Microinjections via Hollow Microneedles. <i>Pharmaceutical Research</i> , 2016, 33, 2269-2279.	1.7	25
140	Lipid bilayer-coated mesoporous silica nanoparticles carrying bovine hemoglobin towards an erythrocyte mimic. <i>International Journal of Pharmaceutics</i> , 2018, 543, 169-178.	2.6	25
141	Immunogenicity of diphtheria toxoid and poly(I:C) loaded cationic liposomes after hollow microneedle-mediated intradermal injection in mice. <i>International Journal of Pharmaceutics</i> , 2018, 547, 250-257.	2.6	25
142	Coated and Hollow Microneedle-Mediated Intradermal Immunization in Mice with Diphtheria Toxoid Loaded Mesoporous Silica Nanoparticles. <i>Pharmaceutical Research</i> , 2018, 35, 189.	1.7	24
143	Predicting the optimal geometry of microneedles and their array for dermal vaccination using a computational model. <i>Computer Methods in Biomechanics and Biomedical Engineering</i> , 2016, 19, 1599-1609.	0.9	23
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