

# Tarl W. Prow

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

125 papers	3,919 citations	34 h-index	60 g-index
159 ext. papers	4,475 ext. citations	5.4 avg, IF	5.22 L-index

#	Paper	IF	Citations
125	Health-related toxicity of emerging per- and polyfluoroalkyl substances: Comparison to legacy PFOS and PFOA.. <i>Environmental Research</i> , <b>2022</b> , 212, 113431	7.9	1
124	Variability in the Histopathological Diagnosis of Non-Melanocytic Lesions Excised to Exclude Melanoma.. <i>Dermatology Practical and Conceptual</i> , <b>2021</b> , 11, e2021094	1.5	1
123	Comparison of physical enhancement technologies in the skin permeation of methyl amino levulinic acid (mALA). <i>International Journal of Pharmaceutics</i> , <b>2021</b> , 610, 121258	6.5	1
122	Elongated microparticles tuned for targeting hyaluronic acid delivery to specific skin strata. <i>International Journal of Cosmetic Science</i> , <b>2021</b> , 43, 738	2.7	0
121	Conducting polymers in wearable devices. <i>Medical Devices &amp; Sensors</i> , <b>2021</b> , 4, e10160	1.6	2
120	Electrochemical stability of PEDOT for wearable on-skin application. <i>Journal of Applied Polymer Science</i> , <b>2021</b> , 138, 51314	2.9	3
119	Towards data-driven quantification of skin ageing using reflectance confocal microscopy. <i>International Journal of Cosmetic Science</i> , <b>2021</b> , 43, 466-473	2.7	
118	Microbiopsy-based minimally invasive skin sampling for molecular analysis is acceptable to Epidermolysis Bullosa Simplex patients where conventional diagnostic biopsy was refused. <i>Skin Research and Technology</i> , <b>2021</b> , 27, 461-463	1.9	0
117	A first-in-human study of BLZ-100 (tozuleristide) demonstrates tolerability and safety in skin cancer patients. <i>Contemporary Clinical Trials Communications</i> , <b>2021</b> , 23, 100830	1.8	0
116	Assessment of a Diagnostic Classification System for Management of Lesions to Exclude Melanoma. <i>JAMA Network Open</i> , <b>2021</b> , 4, e2134614	10.4	3
115	A minimally invasive clinical model to test sunscreen toxicity based on oxidative stress levels using microbiopsy and confocal microscopy - a proof of concept study. <i>International Journal of Cosmetic Science</i> , <b>2020</b> , 42, 462-470	2.7	2
114	Advances and controversies in studying sunscreen delivery and toxicity. <i>Advanced Drug Delivery Reviews</i> , <b>2020</b> , 153, 72-86	18.5	14
113	Physical drug delivery enhancement for aged skin, UV damaged skin and skin cancer: Translation and commercialization. <i>Advanced Drug Delivery Reviews</i> , <b>2020</b> , 153, 2-17	18.5	13
112	Microneedles vs. Other Transdermal Technologies <b>2020</b> , 49-64		
111	Motion Capture Quantification of User Variation in Topical Microparticle Application. <i>Frontiers in Pharmacology</i> , <b>2020</b> , 11, 1343	5.6	1
110	Phase 1 Safety, Pharmacokinetics, and Fluorescence Imaging Study of Tozuleristide (BLZ-100) in Adults With Newly Diagnosed or Recurrent Gliomas. <i>Neurosurgery</i> , <b>2019</b> , 85, E641-E649	3.2	50
109	A review of microsampling techniques and their social impact. <i>Biomedical Microdevices</i> , <b>2019</b> , 21, 81	3.7	40

108	Genomic and Transcriptomic Analysis Reveals Incremental Disruption of Key Signaling Pathways during Melanoma Evolution. <i>Cancer Cell</i> , <b>2018</b> , 34, 45-55.e4	24.3	82
107	The fractional laser-induced coagulation zone characterized over time by laser scanning confocal microscopy-A proof of concept study. <i>Lasers in Surgery and Medicine</i> , <b>2018</b> , 50, 70-77	3.6	16
106	Using elongated microparticles to enhance tailorable nanoemulsion delivery in excised human skin and volunteers. <i>Journal of Controlled Release</i> , <b>2018</b> , 288, 264-276	11.7	15
105	Mind your MolesRstudy: protocol of a prospective cohort study of melanocytic naevi. <i>BMJ Open</i> , <b>2018</b> , 8, e025857	3	8
104	Microbiopsy Biomarker Profiling in a Superficial Melanoma Resembling a Pigmented Basal Cell Carcinoma. <i>JAMA Dermatology</i> , <b>2017</b> , 153, 334-336	5.1	8
103	Minimally invasive microbiopsies: a novel sampling method for identifying asymptomatic, potentially infectious carriers of <i>Leishmania donovani</i> . <i>International Journal for Parasitology</i> , <b>2017</b> , 47, 609-616	4.3	19
102	Magnetophoresis: Skin Penetration Enhancement by a Magnetic Field <b>2017</b> , 195-206		1
101	Fractional laser-assisted drug uptake: Impact of time-related topical application to achieve enhanced delivery. <i>Lasers in Surgery and Medicine</i> , <b>2017</b> , 49, 348-354	3.6	31
100	Nano- and Microtechnology in Skin Delivery of Vaccines <b>2017</b> , 327-341		2
99	RNA-seq reveals more consistent reference genes for gene expression studies in human non-melanoma skin cancers. <i>PeerJ</i> , <b>2017</b> , 5, e3631	3.1	24
98	Reflectance Confocal Microscopy and Aging <b>2017</b> , 1381-1397		
97	Clinical Cutaneous Drug Delivery Assessment Using Single and Multiphoton Microscopy <b>2017</b> , 283-302		
96	A Compact Laser Imaging System for Concurrent Reflectance Confocal Microscopy and Laser Doppler Flowmetry. <i>IEEE Photonics Journal</i> , <b>2016</b> , 8, 1-9	1.8	7
95	Nanomaterials for Wound Healing. <i>Current Dermatology Reports</i> , <b>2016</b> , 5, 278-286	1.5	7
94	Automated Segmentation of Skin Strata in Reflectance Confocal Microscopy Depth Stacks. <i>PLoS ONE</i> , <b>2016</b> , 11, e0153208	3.7	15
93	Current and Next Generation Topical Anti-Skin Cancer Therapeutics. <i>Drug Delivery Letters</i> , <b>2016</b> , 6, 46-56.8		
92	The Potential for Metal Nanoparticle-Enhanced Radiotherapy in Dermatology <b>2016</b> , 217-227		1
91	Imaging Nanoparticle Skin Penetration in Humans <b>2016</b> , 353-366		

90	Concurrent Reflectance Confocal Microscopy and Laser Doppler Flowmetry to Improve Skin Cancer Imaging: A Monte Carlo Model and Experimental Validation. <i>Sensors</i> , <b>2016</b> , 16,	3.8	8
89	ACTR-49. PHASE 1 SAFETY STUDY OF BLZ-100 FOR FLUORESCENCE-GUIDED RESECTION OF GLIOMA IN ADULT SUBJECTS. <i>Neuro-Oncology</i> , <b>2016</b> , 18, vi12-vi13	1	2
88	Histopathology and reflectance confocal microscopy features of photodamaged skin and actinic keratosis. <i>Journal of the European Academy of Dermatology and Venereology</i> , <b>2016</b> , 30, 1901-1911	4.6	12
87	Skin microbiopsy for HPV DNA detection in cutaneous warts. <i>Journal of the European Academy of Dermatology and Venereology</i> , <b>2016</b> , 30, e216-e217	4.6	8
86	Optical feedback effects on terahertz quantum cascade lasers: modelling and applications <b>2016</b> ,		1
85	Diffuse reflectance imaging for non-melanoma skin cancer detection using laser feedback interferometry <b>2016</b> ,		1
84	A randomized, phase IIa exploratory trial to assess the safety and preliminary efficacy of LEO 43204 in patients with actinic keratosis. <i>British Journal of Dermatology</i> , <b>2016</b> , 174, 305-11	4	11
83	Counting actinic keratosis - is photographic assessment a reliable alternative to physical examination in clinical trials?. <i>Acta Dermato-Venereologica</i> , <b>2015</b> , 95, 604-5	2.2	2
82	Effective cutaneous vaccination using an inactivated chikungunya virus vaccine delivered by Foroderm. <i>Vaccine</i> , <b>2015</b> , 33, 5172-80	4.1	11
81	Formulation design for topical drug and nanoparticle treatment of skin disease. <i>Therapeutic Delivery</i> , <b>2015</b> , 6, 197-216	3.8	16
80	BRAF wild-type melanoma in situ arising in a BRAF V600E mutant dysplastic nevus. <i>JAMA Dermatology</i> , <b>2015</b> , 151, 417-21	5.1	11
79	Therapeutic gold, silver, and platinum nanoparticles. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , <b>2015</b> , 7, 428-45	9.2	146
78	Grading keratinocyte atypia in actinic keratosis: a correlation of reflectance confocal microscopy and histopathology. <i>Journal of the European Academy of Dermatology and Venereology</i> , <b>2015</b> , 29, 2216-21	4.6	30
77	Enhanced delivery of nano- and submicron particles using elongated microparticles. <i>Current Drug Delivery</i> , <b>2015</b> , 12, 78-85	3.2	10
76	Non-Invasive Nanoparticle Imaging Technologies for Cosmetic and Skin Care Products. <i>Cosmetics</i> , <b>2015</b> , 2, 196-210	2.7	14
75	ATNT-16PHASE 1 DOSE ESCALATION AND EXPANSION SAFETY STUDY OF BLZ-100 FOR FLUORESCENCE GUIDED RESECTION OF GLIOMA IN ADULTS. <i>Neuro-Oncology</i> , <b>2015</b> , 17, v14.1-v14	1	78
74	Anatomical Skin Segmentation in Reflectance Confocal Microscopy with Weak Labels <b>2015</b> ,		7
73	The future of keratinocyte skin cancer surveillance: automated image analysis to identify and monitor keratinocyte dysplasia. <i>Current Problems in Dermatology</i> , <b>2015</b> , 46, 77-84		0

72	Reflectance confocal microscopy: hallmarks of keratinocyte cancer and its precursors. <i>Current Problems in Dermatology</i> , <b>2015</b> , 46, 85-94		3
71	Phase 1 dose escalation and expansion safety study of BLZ-100 in subjects with skin cancer.. <i>Journal of Clinical Oncology</i> , <b>2015</b> , 33, TPS9084-TPS9084	2.2	1
70	Automated detection of actinic keratoses in clinical photographs. <i>PLoS ONE</i> , <b>2015</b> , 10, e0112447	3.7	11
69	Recent advances in physical delivery enhancement of topical drugs. <i>Current Pharmaceutical Design</i> , <b>2015</b> , 21, 2830-47	3.3	6
68	Reflectance Confocal Microscopy and Aging <b>2015</b> , 1-17		
67	Three-dimensional modelling for estimation of nevus count and probability of nevus-melanoma progression in a murine model. <i>Pigment Cell and Melanoma Research</i> , <b>2014</b> , 27, 317-9	4.5	7
66	Nanodispersed UV blockers in skin-friendly silica vesicles with superior UV-attenuating efficiency. <i>Journal of Materials Chemistry B</i> , <b>2014</b> , 2, 7673-7678	7.3	11
65	Nanocomposite-strengthened dissolving microneedles for improved transdermal delivery to human skin. <i>Advanced Healthcare Materials</i> , <b>2014</b> , 3, 555-64	10.1	46
64	Comparative immune phenotypic analysis of cutaneous Squamous Cell Carcinoma and Intraepidermal Carcinoma in immune-competent individuals: proportional representation of CD8+ T-cells but not FoxP3+ Regulatory T-cells is associated with disease stage. <i>PLoS ONE</i> , <b>2014</b> , 9, e110928	3.7	28
63	High-contrast coherent terahertz imaging of porcine tissue via swept-frequency feedback interferometry. <i>Biomedical Optics Express</i> , <b>2014</b> , 5, 3981-9	3.5	26
62	Vaccine Delivery: Nanocomposite-Strengthened Dissolving Microneedles for Improved Transdermal Delivery to Human Skin (Adv. Healthcare Mater. 4/2014). <i>Advanced Healthcare Materials</i> , <b>2014</b> , 3, 462-462	10.1	2
61	High aspect ratio elongated microparticles for enhanced topical drug delivery in human volunteers. <i>Advanced Healthcare Materials</i> , <b>2014</b> , 3, 860-6	10.1	13
60	BRAFV600E mutation status of involuting and stable nevi in dabrafenib therapy with or without trametinib. <i>JAMA Dermatology</i> , <b>2014</b> , 150, 1079-82	5.1	20
59	Multiphoton Microscopy Applications in Biology <b>2014</b> , 185-197		2
58	Microneedle enhanced delivery of cosmeceutically relevant peptides in human skin. <i>PLoS ONE</i> , <b>2014</b> , 9, e101956	3.7	50
57	Enhanced sonophoretic delivery of 5-aminolevulinic acid: preliminary human ex vivo permeation data. <i>Skin Research and Technology</i> , <b>2013</b> , 19, e283-9	1.9	14
56	Noninvasive methods for the assessment of photoageing. <i>Australasian Journal of Dermatology</i> , <b>2013</b> , 54, 290-5	1.3	5
55	The effect of formulation on the penetration of coated and uncoated zinc oxide nanoparticles into the viable epidermis of human skin in vivo. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2013</b> , 84, 297-308	5.7	97

54	Elongate microparticles for enhanced drug delivery to ex vivo and in vivo pig skin. <i>Journal of Controlled Release</i> , <b>2013</b> , 172, 96-104	11.7	19
53	Background free imaging of upconversion nanoparticle distribution in human skin. <i>Journal of Biomedical Optics</i> , <b>2013</b> , 18, 061215	3.5	33
52	Feasibility of multiphoton microscopy-based quantification of antibiotic uptake into neutrophil granulocytes. <i>Journal of Biomedical Optics</i> , <b>2013</b> , 18, 076003	3.5	1
51	Nanoscale biosensor for detection of reactive oxygen species. <i>Methods in Molecular Biology</i> , <b>2013</b> , 1028, 3-14	1.4	4
50	Computational characterization of reflectance confocal microscopy features reveals potential for automated photoageing assessment. <i>Experimental Dermatology</i> , <b>2013</b> , 22, 458-63	4	18
49	Reflectance confocal microscopy in the diagnosis of nodular skin lesions. <i>British Journal of Dermatology</i> , <b>2013</b> , 169, 4	4	13
48	Zinc oxide nanoparticle removal from wounded human skin. <i>Nanomedicine</i> , <b>2013</b> , 8, 1751-61	5.6	19
47	Effects of ex vivo skin microbiopsy on histopathologic diagnosis in melanocytic skin lesions. <i>JAMA Dermatology</i> , <b>2013</b> , 149, 1107-9	5.1	9
46	Microbiopsy engineered for minimally invasive and suture-free sub-millimetre skin sampling. <i>F1000Research</i> , <b>2013</b> , 2, 120	3.6	9
45	Microbiopsy engineered for minimally invasive and suture-free sub-millimetre skin sampling. <i>F1000Research</i> , <b>2013</b> , 2, 120	3.6	19
44	Topical Microneedle Drug Delivery Enhanced with Magnetophoresis. <i>Issues in Toxicology</i> , <b>2013</b> , 169-177	0.3	2
43	A blueprint for staging of murine melanocytic lesions based on the Cdk4 ( R24C/R24C ) ::Tyr- NRAS ( Q ) ( 61K ) model. <i>Experimental Dermatology</i> , <b>2012</b> , 21, 676-81	4	13
42	In vivo assessment of chronological ageing and photoageing in forearm skin using reflectance confocal microscopy. <i>British Journal of Dermatology</i> , <b>2012</b> , 167, 270-9	4	57
41	Quantum dot penetration into viable human skin. <i>Nanotoxicology</i> , <b>2012</b> , 6, 173-85	5.3	89
40	Multiphoton microscopy applications in nanodermatology. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , <b>2012</b> , 4, 680-90	9.2	10
39	The Human Stratum Corneum Prevents Small Gold Nanoparticle Penetration and Their Potential Toxic Metabolic Consequences. <i>Journal of Nanomaterials</i> , <b>2012</b> , 2012, 1-8	3.2	13
38	High-pressure freezing/freeze substitution and transmission electron microscopy for characterization of metal oxide nanoparticles within sunscreens. <i>Nanomedicine</i> , <b>2012</b> , 7, 541-51	5.6	10
37	Electrical and Physical Methods of Skin Penetration Enhancement <b>2012</b> , 43-65		4

36	Non-invasive imaging of skin physiology and percutaneous penetration using fluorescence spectral and lifetime imaging with multiphoton and confocal microscopy. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , <b>2011</b> , 77, 469-88	5.7	128
35	Nanoparticles and microparticles for skin drug delivery. <i>Advanced Drug Delivery Reviews</i> , <b>2011</b> , 63, 470-918.5	584	
34	Applications of multiphoton tomographs and femtosecond laser nanoprocessing microscopes in drug delivery research. <i>Advanced Drug Delivery Reviews</i> , <b>2011</b> , 63, 388-404	18.5	71
33	Time-correlated single photon counting for simultaneous monitoring of zinc oxide nanoparticles and NAD(P)H in intact and barrier-disrupted volunteer skin. <i>Pharmaceutical Research</i> , <b>2011</b> , 28, 2920-30	4.5	91
32	Gold nanoparticle penetration and reduced metabolism in human skin by toluene. <i>Pharmaceutical Research</i> , <b>2011</b> , 28, 2931-44	4.5	69
31	Site-Selectively Coated, Densely-Packed Microprojection Array Patches for Targeted Delivery of Vaccines to Skin. <i>Advanced Functional Materials</i> , <b>2011</b> , 21, 464-473	15.6	40
30	Potent immunity to low doses of influenza vaccine by probabilistic guided micro-targeted skin delivery in a mouse model. <i>PLoS ONE</i> , <b>2010</b> , 5, e10266	3.7	137
29	Analysis of the metabolic deterioration of ex vivo skin from ischemic necrosis through the imaging of intracellular NAD(P)H by multiphoton tomography and fluorescence lifetime imaging microscopy. <i>Journal of Biomedical Optics</i> , <b>2010</b> , 15, 046008	3.5	70
28	Role of Nrf2 in retinal vascular development and the vaso-obliterative phase of oxygen-induced retinopathy. <i>Experimental Eye Research</i> , <b>2010</b> , 90, 493-500	3.7	49
27	Flexible Nanosomes (SECosomes) Enable Efficient siRNA Delivery in Cultured Primary Skin Cells and in the Viable Epidermis of Ex Vivo Human Skin. <i>Advanced Functional Materials</i> , <b>2010</b> , 20, 4077-4090	15.6	69
26	The effect of strain rate on the precision of penetration of short densely-packed microprojection array patches coated with vaccine. <i>Biomaterials</i> , <b>2010</b> , 31, 4562-72	15.6	110
25	Targeted, needle-free vaccinations in skin using multilayered, densely-packed dissolving microprojection arrays. <i>Small</i> , <b>2010</b> , 6, 1785-93	11	118
24	Nanopatch-targeted skin vaccination against West Nile Virus and Chikungunya virus in mice. <i>Small</i> , <b>2010</b> , 6, 1776-84	11	134
23	Toxicity of nanomaterials to the eye. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , <b>2010</b> , 2, 317-33	9.2	53
22	Dry-coated microprojection array patches for targeted delivery of immunotherapeutics to the skin. <i>Journal of Controlled Release</i> , <b>2009</b> , 139, 212-20	11.7	148
21	Cutaneous short-interfering RNA therapy. <i>Expert Opinion on Drug Delivery</i> , <b>2009</b> , 6, 1333-49	8	54
20	Nanoparticle-delivered biosensor for reactive oxygen species in diabetes. <i>Vision Research</i> , <b>2008</b> , 48, 478-85	21	
19	Novel coating of micro-nanoprojection patches for targeted vaccine delivery to skin <b>2008</b> ,	1	



18	Targeted epidermal delivery of vaccines from coated micro-nanoprojection patches <b>2008</b> ,		1
17	Vascular precursors in developing human retina. <i>Investigative Ophthalmology and Visual Science</i> , <b>2008</b> , 49, 2178-92		40
16	Ocular nanoparticle toxicity and transfection of the retina and retinal pigment epithelium. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2008</b> , 4, 340-9	6	80
15	Hyperoxia inhibits several critical aspects of vascular development. <i>Developmental Dynamics</i> , <b>2007</b> , 236, 981-90	2.9	28
14	The embryonic human choriocapillaris develops by hemo-vasculogenesis. <i>Developmental Dynamics</i> , <b>2007</b> , 236, 2089-100	2.9	35
13	Multifunctional nanoparticles for drug/gene delivery in nanomedicine <b>2007</b> ,		1
12	The human choriocapillaris develops by hemovascuogenesis. <i>FASEB Journal</i> , <b>2007</b> , 21, A379	0.9	
11	The initial fetal human retinal vasculature develops by vasculogenesis. <i>Developmental Dynamics</i> , <b>2006</b> , 235, 3336-47	2.9	66
10	Canine retinal angioblasts are multipotent. <i>Experimental Eye Research</i> , <b>2006</b> , 83, 183-93	3.7	11
9	Construction, gene delivery, and expression of DNA tethered nanoparticles. <i>Molecular Vision</i> , <b>2006</b> , 12, 606-15	2.3	38
8	Nanoparticle tethered antioxidant response element as a biosensor for oxygen induced toxicity in retinal endothelial cells. <i>Molecular Vision</i> , <b>2006</b> , 12, 616-25	2.3	27
7	Biosensor-controlled gene therapy/drug delivery with nanoparticles for nanomedicine <b>2005</b> ,		10
6	Nanomedicine: nanoparticles, molecular biosensors, and targeted gene/drug delivery for combined single-cell diagnostics and therapeutics <b>2004</b> , 5318, 1		6
5	Nanoparticles, molecular biosensors, and multispectral confocal microscopy. <i>Journal of Molecular Histology</i> , <b>2004</b> , 35, 555-64	3.3	13
4	Immunofluorescence assay and flow-cytometry selection of bead-bound aptamers. <i>Nucleic Acids Research</i> , <b>2003</b> , 31, e54	20.1	59
3	Cellular response to conditional expression of hepatitis C virus core protein in Huh7 cultured human hepatoma cells. <i>Hepatology</i> , <b>2002</b> , 35, 1237-46	11.2	72
2	Construction and selection of bead-bound combinatorial oligonucleoside phosphorothioate and phosphorodithioate aptamer libraries designed for rapid PCR-based sequencing. <i>Nucleic Acids Research</i> , <b>2002</b> , 30, e132	20.1	57
1	High-throughput cell analysis and sorting technologies for clinical diagnostics and therapeutics <b>2001</b> , 4255, 16		



