

Maxim Darwin

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/7695870/maxim-darvin-publications-by-year.pdf>

Version: 2024-04-17

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

164
papers

4,155
citations

40
h-index

56
g-index

175
ext. papers

4,885
ext. citations

3.1
avg, IF

5.58
L-index

#	Paper	IF	Citations
164	Skin Care Product Rich in Antioxidants and Anti-Inflammatory Natural Compounds Reduces Itching and Inflammation in the Skin of Atopic Dermatitis Patients. <i>Antioxidants</i> , 2022 , 11, 1071	7.1	0
163	Relations between the Raman spectra and molecular structure of selected carotenoids: DFT study of β -carotene, β -carotene, β -carotene and lycopene.. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021 , 270, 120755	4.4	1
162	Influence of physical-mechanical properties on SPF in sunscreen formulations on ex vivo and in vivo skin. <i>International Journal of Pharmaceutics</i> , 2021 , 598, 120262	6.5	5
161	Characterization of radical types, penetration profile and distribution pattern of the topically applied photosensitizer THPTS in porcine skin ex vivo. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2021 , 162, 50-58	5.7	2
160	Blind source separation of molecular components of the human skin in vivo: non-negative matrix factorization of Raman microspectroscopy data. <i>Analyst, The</i> , 2021 , 146, 3185-3196	5	1
159	Release of the model drug SR101 from polyurethane nanocapsules in porcine hair follicles triggered by LED-derived low dose UVA light. <i>International Journal of Pharmaceutics</i> , 2021 , 597, 120339	6.5	5
158	DFT study of Raman spectra of polyenes and β -carotene: Dependence on length of polyene chain and isomer type. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021 , 255, 119668 ⁴	4.4	5
157	In vivo Skin Penetration, Radical Protection, and Structural Changes after Topical Application of a Herbal Oil Cream Compared to Topical Calcipotriol in Mild to Moderate Psoriasis. <i>Skin Pharmacology and Physiology</i> , 2021 , 34, 337-350	3	
156	Characterization of Collagen I Fiber Thickness, Density, and Orientation in the Human Skin In Vivo Using Second-Harmonic Generation Imaging. <i>Photonics</i> , 2021 , 8, 404	2.2	3
155	Fiber-based SORS-SERDS system and chemometrics for the diagnostics and therapy monitoring of psoriasis inflammatory disease. <i>Biomedical Optics Express</i> , 2021 , 12, 1123-1135	3.5	2
154	Raman Scattering Study of Natural and Synthetic Compounds Containing Polyene Chains. <i>Doklady Physics</i> , 2021 , 66, 257-263	0.8	1
153	Response to comment by Puppels et al. on "A modification for the calculation of water depth profiles in oil-treated skin by in vivo Raman microscopy". <i>Journal of Biophotonics</i> , 2020 , 13, e2460	3.1	1
152	Kinetics of the carotenoid concentration degradation of smoothies and their influence on the antioxidant status of the human skin in vivo during 8 weeks of daily consumption. <i>Nutrition Research</i> , 2020 , 81, 38-46	4	2
151	Microneedle-Facilitated Intradermal Proretinal Nanoparticle Delivery. <i>Nanomaterials</i> , 2020 , 10,	5.4	14
150	Laser scanning microscopy for control of skin decontamination efficacy from airborne particulates using highly absorbent textile nanofiber material in combination with PEG-12 dimethicone. <i>Skin Research and Technology</i> , 2020 , 26, 558-563	1.9	0
149	In vivo detection of changes in cutaneous carotenoids after chemotherapy using shifted excitation resonance Raman difference and fluorescence spectroscopy. <i>Skin Research and Technology</i> , 2020 , 26, 301-307	1.9	1
148	The Oxidation-Induced Autofluorescence Hypothesis: Red Edge Excitation and Implications for Metabolic Imaging. <i>Molecules</i> , 2020 , 25,	4.8	10

147	High-energy visible light at ambient doses and intensities induces oxidative stress of skin-Protective effects of the antioxidant and Nrf2 inducer Licochalcone A in vitro and in vivo. <i>Photodermatology Photoimmunology and Photomedicine</i> , 2020 , 36, 135-144	2.4	21
146	Barrier-disrupted skin: Quantitative analysis of tape and cyanoacrylate stripping efficiency by multiphoton tomography. <i>International Journal of Pharmaceutics</i> , 2020 , 574, 118843	6.5	8
145	Stratum corneum occlusion induces water transformation towards lower bonding state: a molecular level in vivo study by confocal Raman microspectroscopy. <i>International Journal of Cosmetic Science</i> , 2020 , 42, 482-493	2.7	2
144	The Effectiveness of Glycerol Solutions for Optical Clearing of the Intact Skin as Measured by Confocal Raman Microspectroscopy. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2020 , 128, 759-765	0.7	1
143	Melanin distribution from the dermal-epidermal junction to the stratum corneum: non-invasive in vivo assessment by fluorescence and Raman microspectroscopy. <i>Scientific Reports</i> , 2020 , 10, 14374	4.9	6
142	In vivo non-invasive staining-free visualization of dermal mast cells in healthy, allergy and mastocytosis humans using two-photon fluorescence lifetime imaging. <i>Scientific Reports</i> , 2020 , 10, 14930	4.9	5
141	Determination of the pH Gradient in Hair Follicles of Human Volunteers Using pH-Sensitive Melamine Formaldehyde-Pyranine Nile Blue Microparticles. <i>Sensors</i> , 2020 , 20,	3.8	3
140	In vivo Tracking of DNA for Precise Determination of the Stratum Corneum Thickness and Superficial Microbiome Using Confocal Raman Microscopy. <i>Skin Pharmacology and Physiology</i> , 2020 , 33, 30-37	3	8
139	A modification for the calculation of water depth profiles in oil-treated skin by in vivo confocal Raman microscopy. <i>Journal of Biophotonics</i> , 2020 , 13, e201960106	3.1	6
138	Hautkrebsprävention und Sonnenschutzcreme: Ein Update. <i>Tumor Diagnostik Und Therapie</i> , 2019 , 40, 378-381	0.1	
137	Characterization of Penetration of Particles After Dermal Application 2019 , 217-231		
136	Free and bound Thioflavin T molecules with ultrafast relaxation: implications for assessment of protein binding and aggregation. <i>Laser Physics Letters</i> , 2019 , 16, 075601	1.5	4
135	Confocal Raman imaging of skin sections containing hair follicles using classical least squares regression and multivariate curve resolution/alternating least squares. <i>Quantum Electronics</i> , 2019 , 49, 6-12	1.8	2
134	Label-Free Multiphoton Microscopy: The Origin of Fluorophores and Capabilities for Analyzing Biochemical Processes. <i>Biochemistry (Moscow)</i> , 2019 , 84, S69-S88	2.9	6
133	Methods for Optical Skin Clearing in Molecular Optical Imaging in Dermatology. <i>Biochemistry (Moscow)</i> , 2019 , 84, S144-S158	2.9	10
132	Fibroblast origin shapes tissue homeostasis, epidermal differentiation, and drug uptake. <i>Scientific Reports</i> , 2019 , 9, 2913	4.9	29
131	Modified normalization method in in vivo stratum corneum analysis using confocal Raman microscopy to compensate nonhomogeneous distribution of keratin. <i>Journal of Raman Spectroscopy</i> , 2019 , 50, 945	2.3	11
130	Influence of polyester spacer fabric, cotton, chloroprene rubber, and silicone on microclimatic and morphologic physiologic skin parameters in vivo. <i>Skin Research and Technology</i> , 2019 , 25, 389-398	1.9	4

129	Solid Lipid Curcumin-loaded Particles for in vivo Fluorescent Imaging in Humans: A Proof of Concept. <i>Optics and Spectroscopy (English Translation of Optika I Spektroskopiya)</i> , 2019 , 126, 730-735	0.7	0
128	The non-homogenous distribution and aggregation of carotenoids in the stratum corneum correlates with the organization of intercellular lipids in vivo. <i>Experimental Dermatology</i> , 2019 , 28, 1237-1243	4	10
127	Non-invasive depth profiling of the stratum corneum using confocal Raman microscopy considering the non-homogeneous distribution of keratin. <i>Biomedical Optics Express</i> , 2019 , 10, 3092-3103	3.5	10
126	Label-free characterization of white blood cells using fluorescence lifetime imaging and flow-cytometry: molecular heterogeneity and erythrophagocytosis [Invited]. <i>Biomedical Optics Express</i> , 2019 , 10, 4220-4236	3.5	18
125	Hydrogen bound water profiles in the skin influenced by optical clearing molecular agents-Quantitative analysis using confocal Raman microscopy. <i>Journal of Biophotonics</i> , 2019 , 12, e201800283	3.1	31
124	Human skin in vivo has a higher skin barrier function than porcine skin ex vivo-comprehensive Raman microscopic study of the stratum corneum. <i>Journal of Biophotonics</i> , 2018 , 11, e201700355	3.1	37
123	Recent progress in tissue optical clearing for spectroscopic application. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2018 , 197, 216-229	4.4	58
122	Age related depth profiles of human Stratum Corneum barrier-related molecular parameters by confocal Raman microscopy in vivo. <i>Mechanisms of Ageing and Development</i> , 2018 , 172, 6-12	5.6	23
121	Determination of the effect of boiling on the bioavailability of carotenoids in vegetables using resonance Raman spectroscopy. <i>Laser Physics</i> , 2018 , 28, 105602	1.2	8
120	Formation of hemoglobin photoproduct is responsible for two-photon and single photon-excited fluorescence of red blood cells. <i>Laser Physics Letters</i> , 2018 , 15, 075604	1.5	12
119	Nonscanning large-area Raman imaging for ex vivo/in vivo skin cancer discrimination. <i>Journal of Biomedical Optics</i> , 2018 , 23, 1-11	3.5	10
118	Confocal Raman microscopy combined with optical clearing for identification of inks in multicolored tattooed skin in vivo. <i>Analyst, The</i> , 2018 , 143, 4990-4999	5	18
117	Shifted excitation resonance Raman difference spectroscopy system suitable for the quantitative in vivo detection of carotenoids in human skin. <i>Laser Physics Letters</i> , 2018 , 15, 115601	1.5	5
116	In vivo optical imaging of the viable epidermis around the nailfold capillaries for the assessment of heart failure severity in humans. <i>Journal of Biophotonics</i> , 2018 , 11, e201800066	3.1	7
115	Hautkrebsprävention und Sonnenschutzcreme: ein Update. <i>Aktuelle Dermatologie</i> , 2018 , 44, 49-52	0.1	
114	Body regions have an impact on the collagen/elastin index of the skin measured by non-invasive in vivo vertical two-photon microscopy. <i>Experimental Dermatology</i> , 2017 , 26, 822-824	4	5
113	A comparative study of ex vivo skin optical clearing using two-photon microscopy. <i>Journal of Biophotonics</i> , 2017 , 10, 1115-1123	3.1	28
112	Depth-dependent autofluorescence photobleaching using 325, 473, 633, and 785nm of porcine ear skin ex vivo. <i>Journal of Biomedical Optics</i> , 2017 , 22, 91503	3.5	23

111	In vivo confocal Raman microscopic determination of depth profiles of the stratum corneum lipid organization influenced by application of various oils. <i>Journal of Dermatological Science</i> , 2017 , 87, 183-191	4.3	30
110	Confocal Raman microscopy supported by optical clearing treatment of the skin Influence on collagen hydration. <i>Journal Physics D: Applied Physics</i> , 2017 , 50, 285401	3	34
109	Radical-Scavenging Activity of a Sunscreen Enriched by Antioxidants Providing Protection in the Whole Solar Spectral Range. <i>Skin Pharmacology and Physiology</i> , 2017 , 30, 81-89	3	22
108	Multiple spatially resolved reflection spectroscopy to monitor cutaneous carotenoids during supplementation of fruit and vegetable extracts in vivo. <i>Skin Research and Technology</i> , 2017 , 23, 459-462	1.9	13
107	Investigation of the cutaneous penetration behavior of dexamethasone loaded to nano-sized lipid particles by EPR spectroscopy, and confocal Raman and laser scanning microscopy. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2017 , 116, 102-110	5.7	20
106	Influences of Orally Taken Carotenoid-Rich Curly Kale Extract on Collagen I/Elastin Index of the Skin. <i>Nutrients</i> , 2017 , 9,	6.7	15
105	Effects of glucocorticoids on stratum corneum lipids and function in human skin-A detailed lipidomic analysis. <i>Journal of Dermatological Science</i> , 2017 , 88, 330-338	4.3	18
104	A Randomized Controlled Trial of Green Tea Beverages on the in vivo Radical Scavenging Activity in Human Skin. <i>Skin Pharmacology and Physiology</i> , 2017 , 30, 225-233	3	24
103	In vivo characterization of structural changes after topical application of glucocorticoids in healthy human skin. <i>Journal of Biomedical Optics</i> , 2017 , 22, 76018	3.5	12
102	Two-photon autofluorescence lifetime imaging of human skin papillary dermis in vivo: assessment of blood capillaries and structural proteins localization. <i>Scientific Reports</i> , 2017 , 7, 1171	4.9	52
101	Impact of Body Site, Age, and Gender on the Collagen/Elastin Index by Noninvasive in vivo Vertical Two-Photon Microscopy. <i>Skin Pharmacology and Physiology</i> , 2017 , 30, 260-267	3	13
100	Keratin-water-NMF interaction as a three layer model in the human stratum corneum using in vivo confocal Raman microscopy. <i>Scientific Reports</i> , 2017 , 7, 15900	4.9	44
99	Surface determination of 3D confocal Raman microscopy imaging of the skin. <i>Laser Physics Letters</i> , 2017 , 14, 125601	1.5	5
98	Fluorescence detection of protein content in house dust: the possible role of keratin. <i>Indoor Air</i> , 2017 , 27, 377-385	5.4	14
97	Radical Production by Infrared Irradiation in Human Skin 2017 , 1051-1060		
96	Depth profiles of hydrogen bound water molecule types and their relation to lipid and protein interaction in the human stratum corneum in vivo. <i>Analyst, The</i> , 2016 , 141, 6329-6337	5	81
95	Comparison of different cutaneous carotenoid sensors and influence of age, skin type, and kinetic changes subsequent to intake of a vegetable extract. <i>Journal of Biomedical Optics</i> , 2016 , 21, 107002	3.5	11
94	Comment on Dengue viral infection monitoring from diagnostic to recovery using Raman spectroscopy <i>Laser Physics Letters</i> , 2016 , 13, 048001	1.5	

93	Influence of Topical, Systemic and Combined Application of Antioxidants on the Barrier Properties of the Human Skin. <i>Skin Pharmacology and Physiology</i> , 2016 , 29, 41-6	3	25
92	Triggered release of model drug from AuNP-doped BSA nanocarriers in hair follicles using IRA radiation. <i>Acta Biomaterialia</i> , 2016 , 30, 388-396	10.8	23
91	A depth-dependent profile of the lipid conformation and lateral packing order of the stratum corneum in vivo measured using Raman microscopy. <i>Analyst, The</i> , 2016 , 141, 1981-7	5	53
90	Ultrafast imaging Raman spectroscopy of large-area samples without stepwise scanning. <i>Journal of Sensors and Sensor Systems</i> , 2016 , 5, 261-271	1.6	11
89	Raman-Spektroskopie in der Dermatologie 2016 , 103-115		
88	Penetration of topically applied nanocarriers into the hair follicles of dog and rat dorsal skin and porcine ear skin. <i>Veterinary Dermatology</i> , 2016 , 27, 256-e60	1.8	11
87	Comparison of morphologic criteria for actinic keratosis and squamous cell carcinoma using in vivo multiphoton tomography. <i>Experimental Dermatology</i> , 2016 , 25, 218-22	4	21
86	Significance of the follicular pathway for dermal substance penetration quantified by laser Doppler flowmetry. <i>Journal of Biophotonics</i> , 2016 , 9, 276-81	3.1	9
85	Optimization of the measurement procedure during multiphoton tomography of human skin in vivo. <i>Skin Research and Technology</i> , 2016 , 22, 356-62	1.9	3
84	In vivo imaging for detection and discrimination of actinic keratosis and squamous cell carcinoma from healthy human skin using two-photon tomography 2016 ,		1
83	Multiple spatially resolved reflection spectroscopy for in vivo determination of carotenoids in human skin and blood. <i>Laser Physics Letters</i> , 2016 , 13, 095601	1.5	10
82	In vivo/ex vivo targeting of Langerhans cells after topical application of the immune response modifier TMX-202: confocal Raman microscopy and histology analysis. <i>Journal of Biomedical Optics</i> , 2016 , 21, 55004	3.5	4
81	Confocal Raman microscopy and multivariate statistical analysis for determination of different penetration abilities of caffeine and propylene glycol applied simultaneously in a mixture on porcine skin ex vivo. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2016 , 104, 51-8	5.7	48
80	Lipid organization and stratum corneum thickness determined in vivo in human skin analyzing lipid ceratin peak (2820-3030 cm ⁻¹) using confocal Raman microscopy. <i>Journal of Raman Spectroscopy</i> , 2016 , 47, 1327-1331	2.3	14
79	Influence of Chemotherapy on the Antioxidant Status of Human Skin. <i>Anticancer Research</i> , 2016 , 36, 4089-93	2.3	5
78	Evaluation of carotenoids and reactive oxygen species in human skin after UV irradiation: a critical comparison between in vivo and ex vivo investigations. <i>Experimental Dermatology</i> , 2015 , 24, 194-7	4	22
77	Confocal Raman microscopy for investigating the penetration of various oils into the human skin in vivo. <i>Journal of Dermatological Science</i> , 2015 , 79, 176-8	4.3	23
76	Technical parameters of vertical in vivo multiphoton microscopy: a critical evaluation of the flyscanning method. <i>Laser Physics Letters</i> , 2015 , 12, 085602	1.5	11

75	Impact of refractive index mismatches on coherent anti-Stokes Raman scattering and multiphoton autofluorescence tomography of human skin in vivo. <i>Physics in Medicine and Biology</i> , 2015 , 60, 6881-99	3.8	10
74	Influence of the Systemic Application of Blue-Green <i>Spirulina platensis</i> Algae on the Cutaneous Carotenoids and Elastic Fibers in Vivo. <i>Cosmetics</i> , 2015 , 2, 302-312	2.7	6
73	Determination of the Antioxidant Status of the Skin by In Vivo-Electron Paramagnetic Resonance (EPR) Spectroscopy. <i>Cosmetics</i> , 2015 , 2, 286-301	2.7	15
72	Blue-violet light irradiation dose dependently decreases carotenoids in human skin, which indicates the generation of free radicals. <i>Oxidative Medicine and Cellular Longevity</i> , 2015 , 2015, 579675	6.7	54
71	Experiences on the influence of different behaviors on antioxidants and reactive oxygen species in the human skin. <i>Photonics & Lasers in Medicine</i> , 2015 , 4,		1
70	Analysis of Human and Porcine Skin in vivo/ex vivo for Penetration of Selected Oils by Confocal Raman Microscopy. <i>Skin Pharmacology and Physiology</i> , 2015 , 28, 318-30	3	51
69	Non-invasive spectroscopic determination of the antioxidative status of gravidae and neonates. <i>Skin Pharmacology and Physiology</i> , 2015 , 28, 189-95	3	8
68	Penetration of silver nanoparticles into porcine skin ex vivo using fluorescence lifetime imaging microscopy, Raman microscopy, and surface-enhanced Raman scattering microscopy. <i>Journal of Biomedical Optics</i> , 2015 , 20, 051006	3.5	68
67	Radical Production by Infrared Irradiation in Human Skin 2015 , 1-10		
66	Molecular action mechanisms of solar infrared radiation and heat on human skin. <i>Ageing Research Reviews</i> , 2014 , 16, 1-11	12	95
65	Gaussian-function-based deconvolution method to determine the penetration ability of petrolatum oil into human skin using confocal Raman microscopy. <i>Laser Physics</i> , 2014 , 24, 105601	1.2	29
64	Spectroscopic biofeedback on cutaneous carotenoids as part of a prevention program could be effective to raise health awareness in adolescents. <i>Journal of Biophotonics</i> , 2014 , 7, 926-37	3.1	14
63	Interaction of dermatologically relevant nanoparticles with skin cells and skin. <i>Beilstein Journal of Nanotechnology</i> , 2014 , 5, 2363-73	3	42
62	Comparison of in vivo and ex vivo laser scanning microscopy and multiphoton tomography application for human and porcine skin imaging. <i>Quantum Electronics</i> , 2014 , 44, 646-651	1.8	38
61	Influence of sun exposure on the cutaneous collagen/elastin fibers and carotenoids: negative effects can be reduced by application of sunscreen. <i>Journal of Biophotonics</i> , 2014 , 7, 735-43	3.1	27
60	Cutaneous carotenoids: the mirror of lifestyle?. <i>Skin Pharmacology and Physiology</i> , 2014 , 27, 201	3	20
59	Efficient prevention strategy against the development of a palmar-plantar erythrodysesthesia during chemotherapy. <i>Skin Pharmacology and Physiology</i> , 2014 , 27, 66-70	3	14
58	Antioxidants in Asian-Korean and caucasian skin: the influence of nutrition and stress. <i>Skin Pharmacology and Physiology</i> , 2014 , 27, 293-302	3	15

57	In vivohistology: optical biopsies with chemical contrast using clinical multiphoton/coherent anti-Stokes Raman scattering tomography. <i>Laser Physics Letters</i> , 2014 , 11, 055601	1.5	43
56	Application of Laser Scanning Microscopy in Dermatology and Cutaneous Physiology 2014 , 101-113		1
55	Interaction Between Free Radicals and Antioxidants in Human Skin 2014 , 203-215		
54	Clinical coherent anti-Stokes Raman scattering and multiphoton tomography of human skin with a femtosecond laser and photonic crystal fiber. <i>Laser Physics Letters</i> , 2013 , 10, 025604	1.5	52
53	Optical methods for noninvasive determination of carotenoids in human and animal skin. <i>Journal of Biomedical Optics</i> , 2013 , 18, 61230	3.5	66
52	In vivo detection of basal cell carcinoma: comparison of a reflectance confocal microscope and a multiphoton tomograph. <i>Journal of Biomedical Optics</i> , 2013 , 18, 61229	3.5	33
51	Application of Optical Methods for Quality and Process Control of Topically Applied Actives in Cosmetics and Dermatology 2013 , 111		
50	Radical scavenging capacity in human skin before and after vitamin C uptake: an in vivo feasibility study using electron paramagnetic resonance spectroscopy. <i>Journal of Investigative Dermatology</i> , 2013 , 133, 1102-4	4.3	12
49	Influence of dietary carotenoids on radical scavenging capacity of the skin and skin lipids. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2013 , 84, 365-73	5.7	68
48	Case study: in vivo stress diagnostics by spectroscopic determination of the cutaneous carotenoid antioxidant concentration in midwives depending on shift work. <i>Laser Physics Letters</i> , 2013 , 10, 105701	1.5	2
47	Methods for the evaluation of the protective efficacy of sunscreen products. <i>Skin Pharmacology and Physiology</i> , 2013 , 26, 30-5	3	11
46	Alcohol consumption decreases the protection efficiency of the antioxidant network and increases the risk of sunburn in human skin. <i>Skin Pharmacology and Physiology</i> , 2013 , 26, 45-51	3	35
45	Dose-dependent vitamin C uptake and radical scavenging activity in human skin measured with in vivo electron paramagnetic resonance spectroscopy. <i>Skin Pharmacology and Physiology</i> , 2013 , 26, 147-54 ³		24
44	Application of multiphoton/CARS tomography for detecting early stages of chemotherapeutically induced dermal side effects.. <i>Journal of Clinical Oncology</i> , 2013 , 31, e20688-e20688	2.2	
43	Raman spectroscopic analysis of the carotenoid concentration in egg yolks depending on the feeding and housing conditions of the laying hens. <i>Journal of Biophotonics</i> , 2012 , 5, 33-9	3.1	11
42	In vivo methods for the analysis of the penetration of topically applied substances in and through the skin barrier. <i>International Journal of Cosmetic Science</i> , 2012 , 34, 551-9	2.7	36
41	Cutaneous radical scavenging effects of orally administered antioxidants measured by electron paramagnetic resonance spectroscopy. <i>E-SPEN Journal</i> , 2012 , 7, e160-e166		6
40	The influence of endurance exercise on the antioxidative status of human skin. <i>European Journal of Applied Physiology</i> , 2012 , 112, 3361-7	3.4	17

39	Photocatalytic activity of TiO ₂ nanoparticles: effect of thermal annealing under various gaseous atmospheres. <i>Nanotechnology</i> , 2012 , 23, 475711	3.4	31
38	Serial non-invasive measurements of dermal carotenoid concentrations in dairy cows following recovery from abomasal displacement. <i>PLoS ONE</i> , 2012 , 7, e47706	3.7	5
37	Comparison of two methods for noninvasive determination of carotenoids in human and animal skin: Raman spectroscopy versus reflection spectroscopy. <i>Journal of Biophotonics</i> , 2012 , 5, 550-8	3.1	34
36	In vivo skin treatment with tissue-tolerable plasma influences skin physiology and antioxidant profile in human stratum corneum. <i>Experimental Dermatology</i> , 2012 , 21, 130-4	4	77
35	In vivo investigations on the penetration of various oils and their influence on the skin barrier. <i>Skin Research and Technology</i> , 2012 , 18, 364-9	1.9	82
34	Analyses of the correlation between dermal and blood carotenoids in female cattle by optical methods. <i>Journal of Biomedical Optics</i> , 2012 , 18, 061219	3.5	3
33	Safety assessment by multiphoton fluorescence/second harmonic generation/hyper-Rayleigh scattering tomography of ZnO nanoparticles used in cosmetic products. <i>Skin Pharmacology and Physiology</i> , 2012 , 25, 219-26	3	79
32	Ethnic differences in skin physiology, hair follicle morphology and follicular penetration. <i>Skin Pharmacology and Physiology</i> , 2012 , 25, 182-91	3	19
31	Noninvasive measurements of carotenoids in bovine udder by reflection spectroscopy. <i>Journal of Biomedical Optics</i> , 2012 , 17, 101514	3.5	2
30	Application of an ointment with high radical protection factor as a prevention strategy against PPE.. <i>Journal of Clinical Oncology</i> , 2012 , 30, 5064-5064	2.2	6
29	Dermal carotenoid level and kinetics after topical and systemic administration of antioxidants: enrichment strategies in a controlled in vivo study. <i>Journal of Dermatological Science</i> , 2011 , 64, 53-8	4.3	42
28	Uptake of antioxidants by natural nutrition and supplementation: pros and cons from the dermatological point of view. <i>Skin Pharmacology and Physiology</i> , 2011 , 24, 269-73	3	32
27	The Role of Carotenoids in Human Skin. <i>Molecules</i> , 2011 , 16, 10491-10506	4.8	96
26	Carotenoids in human skin. <i>Experimental Dermatology</i> , 2011 , 20, 377-82	4	71
25	Topical beta-carotene protects against infra-red-light-induced free radicals. <i>Experimental Dermatology</i> , 2011 , 20, 125-9	4	57
24	Determination of the antioxidative capacity of the skin in vivo using resonance Raman and electron paramagnetic resonance spectroscopy. <i>Experimental Dermatology</i> , 2011 , 20, 483-7	4	62
23	Determination of the influence of IR radiation on the antioxidative network of the human skin. <i>Journal of Biophotonics</i> , 2011 , 4, 21-9	3.1	16
22	Interaction between carotenoids and free radicals in human skin. <i>Skin Pharmacology and Physiology</i> , 2011 , 24, 238-44	3	58

21	Kinetics of carotenoid distribution in human skin in vivo after exogenous stress: disinfectant and WIRA-induced carotenoid depletion recovers from outside to inside. <i>Journal of Biomedical Optics</i> , 2011 , 16, 035002	3.5	23
20	Antioxidants and Skin 2011 , 79-89		
19	Formation of free radicals in human skin during irradiation with infrared light. <i>Journal of Investigative Dermatology</i> , 2010 , 130, 629-31	4.3	77
18	Photobleaching as a method of increasing the accuracy in measuring carotenoid concentration in human skin by Raman spectroscopy. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2010 , 109, 205-210	0.7	26
17	Radical production by infrared A irradiation in human tissue. <i>Skin Pharmacology and Physiology</i> , 2010 , 23, 40-6	3	83
16	Bioavailability of natural carotenoids in human skin compared to blood. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2010 , 76, 269-74	5.7	93
15	Comparative study of carotenoids, catalase and radical formation in human and animal skin. <i>Skin Pharmacology and Physiology</i> , 2010 , 23, 306-12	3	44
14	Resonance Raman spectroscopy as an effective tool for the determination of antioxidative stability of cosmetic formulations. <i>Journal of Biophotonics</i> , 2010 , 3, 82-8	3.1	40
13	Raman spectroscopic analysis of the increase of the carotenoid antioxidant concentration in human skin after a 1-week diet with ecological eggs. <i>Journal of Biomedical Optics</i> , 2009 , 14, 024039	3.5	19
12	Influence of IR radiation on the carotenoid content in human skin. <i>Optics and Spectroscopy (English Translation of Optika i Spektroskopiya)</i> , 2009 , 107, 917-920	0.7	20
11	In vivo distribution of carotenoids in different anatomical locations of human skin: comparative assessment with two different Raman spectroscopy methods. <i>Experimental Dermatology</i> , 2009 , 18, 1060-3	4.3	65
10	Cutaneous lycopene and beta-carotene levels measured by resonance Raman spectroscopy: high reliability and sensitivity to oral lactycopene deprivation and supplementation. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2009 , 73, 187-94	5.7	57
9	Infrared radiation-induced matrix metalloproteinase in human skin: implications for protection. <i>Journal of Investigative Dermatology</i> , 2008 , 128, 2491-7	4.3	143
8	One-year study on the variation of carotenoid antioxidant substances in living human skin: influence of dietary supplementation and stress factors. <i>Journal of Biomedical Optics</i> , 2008 , 13, 044028	3.5	92
7	Cutaneous concentration of lycopene correlates significantly with the roughness of the skin. <i>European Journal of Pharmaceutics and Biopharmaceutics</i> , 2008 , 69, 943-7	5.7	92
6	In vivo Raman spectroscopic analysis of the influence of IR radiation on the carotenoid antioxidant substances beta-carotene and lycopene in the human skin. Formation of free radicals. <i>Laser Physics Letters</i> , 2007 , 4, 318-321	1.5	57
5	Resonance Raman spectroscopy for the detection of carotenoids in foodstuffs. Influence of the nutrition on the antioxidative potential of the skin. <i>Laser Physics Letters</i> , 2007 , 4, 452-456	1.5	48
4	Non-invasive in vivo detection of the carotenoid antioxidant substance lycopene in the human skin using the resonance Raman spectroscopy. <i>Laser Physics Letters</i> , 2006 , 3, 460-463	1.5	66

- 3 Effect of supplemented and topically applied antioxidant substances on human tissue. *Skin Pharmacology and Physiology*, **2006**, 19, 238-47 3 78
- 2 In vivo Raman spectroscopic analysis of the influence of UV radiation on carotenoid antioxidant substance degradation of the human skin. *Laser Physics*, **2006**, 16, 833-837 1.2 48
- 1 Non-invasive in vivo determination of the carotenoids beta-carotene and lycopene concentrations in the human skin using the Raman spectroscopic method. *Journal Physics D: Applied Physics*, **2005**, 38, 2696-2700⁹⁴