

Alexey N Bashkatov

List of Publications by Year in descending order

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125
papers

4,256
citations

218677

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189892

50
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docs citations

127
times ranked

4409
citing authors

#	ARTICLE	IF	CITATIONS
1	Impact of optical clearing on <i>ex vivo</i> human skin optical properties characterized by spatially resolved multimodal spectroscopy. Journal of Biophotonics, 2022, 15, e202100202.	2.3	4
2	Immersion optical clearing of adipose tissue in rats: ex vivo and in vivo studies. Journal of Biophotonics, 2022, 15, e202100393.	2.3	4
3	Glycerol effects on optical, weight and geometrical properties of skin tissue. Journal of Innovative Optical Health Sciences, 2021, 14, .	1.0	9
4	Optimized skin optical clearing for optical coherence tomography monitoring of encapsulated drug delivery through the hair follicles. Journal of Biophotonics, 2020, 13, e201960020.	2.3	16
5	Rapid Ultrasound Optical Clearing of Human Light and Dark Skin. IEEE Transactions on Medical Imaging, 2020, 39, 3198-3206.	8.9	13
6	Integrated effects of fractional laser microablation and sonophoresis on skin immersion optical clearing in vivo. Journal of Biophotonics, 2020, 13, e202000101.	2.3	2
7	Optical Clearing of Biological Tissues: Prospects of Application for Multimodal Malignancy Diagnostics. , 2020, , 107-131.		5
8	Malignant Tissue Optical Properties. , 2020, , 3-106.		2
9	Kinetics of Rat Skin Optical Clearing at Topical Application of 40%Glucose: <i>Ex Vivo</i> and <i>In Vivo</i> Studies. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-8.	2.9	10
10	Optical properties of brain tissues at the different stages of glioma development in rats: pilot study. Biomedical Optics Express, 2019, 10, 5182.	2.9	42
11	Exogenous agent diffusivity in tissues as a biomarker of diabetes mellitus pathology. , 2019, , .		0
12	Research and development of effective optical technologies for diagnostics in dermatology. , 2019, , .		1
13	Functional and morphological changes in the mother-placenta-fetus system during chronic hypoxia (experimental study). , 2019, , .		0
14	Effect of ethanol on the transport of methylene blue through the rat skin ex vivo. , 2019, , .		1
15	Gold Nanoparticle-Based Technologies in Photothermal/Photodynamic Treatment. , 2018, , 151-173.		3
16	Plasmonic photothermal therapy: Approaches to advanced strategy. Lasers in Surgery and Medicine, 2018, 50, 1025-1033.	2.1	22
17	Delivery and reveal of localization of upconversion luminescent microparticles and quantum dots in the skin in vivo by fractional laser microablation, multimodal imaging, and optical clearing. Journal of Biomedical Optics, 2018, 23, 1.	2.6	8
18	Measurement of tissue optical properties in the context of tissue optical clearing. Journal of Biomedical Optics, 2018, 23, 1.	2.6	90

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19	Corneal permeability for cement dust: prognosis for occupational safety. , 2018, , .		1
20	The inflammation markers in serum of tumor-bearing rats after plasmonic photothermal therapy. , 2018, , .		0
21	Model of optical phantoms thermal response upon irradiation with 975 nm dermatological laser. , 2018, , .		0
22	Investigation of change of tumor optical properties after laser-induced plasmon-resonant photothermal treatment of transplanted tumors in rats. , 2018, , .		0
23	Optical UV-VIS-NIR spectroscopy of benign, dysplastic and malignant cutaneous lesions ex vivo. , 2018, , .		1
24	The assesment of effectiveness of plasmonic resonance photothermal therapy in tumor-bearing rats after multiple intravenous administration of gold nanorods. Proceedings of SPIE, 2017, , .	0.8	1
25	Study of glycerol diffusion in skin and myocardium ex vivo under the conditions of developing alloxan-induced diabetes. Journal of Biomedical Photonics and Engineering, 2017, 3, 020302.	0.7	18
26	Quantification of tissue optical properties: perspectives for precise optical diagnostics, phototherapy and laser surgery. Journal Physics D: Applied Physics, 2016, 49, 501001.	2.8	8
27	In vivo optical monitoring of transcutaneous delivery of calcium carbonate microcontainers. Biomedical Optics Express, 2016, 7, 2082.	2.9	36
28	The morphological changes in transplanted tumors in rats at plasmonic photothermal therapy. Proceedings of SPIE, 2016, , .	0.8	0
29	Ex vivo investigation of glycerol diffusion in skin tissue. Journal of Biomedical Photonics and Engineering, 2016, 2, 010303-1-010303-5.	0.7	14
30	Adjunctive dental therapy via tooth plaque reduction and gingivitis treatment by blue light-emitting diodes tooth brushing. Journal of Biomedical Optics, 2015, 20, 128004.	2.6	20
31	Quantification of glucose and glycerol diffusion in myocardium. Journal of Innovative Optical Health Sciences, 2015, 08, 1541006.	1.0	8
32	<i>Ex vivo</i> optical measurements of glucose diffusion kinetics in native and diabetic mouse skin. Journal of Biophotonics, 2015, 8, 332-346.	2.3	44
33	Measurement of diffusion coefficient of propylene glycol in skin tissue. Proceedings of SPIE, 2015, , .	0.8	1
34	Optical clearing of biological tissues: prospects of application in medical diagnostics and phototherapy. Journal of Biomedical Photonics and Engineering, 2015, 1, 22-58.	0.7	81
35	OCT/LCT monitoring of drug action on the structure of the human cornea in vivo. Journal of Biomedical Photonics and Engineering, 2015, 1, 77-80.	0.7	1
36	Optical properties of parietal peritoneum in the spectral range 350-2500 nm. Proceedings of SPIE, 2014, , .	0.8	0

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37	Optical clearing of human skin for the enhancement of optical imaging of proximal interphalangeal joints. , 2014, , .		1
38	Gold nanorods with a hematoporphyrin-loaded silica shell for dual-modality photodynamic and photothermal treatment of tumors in vivo. Nano Research, 2014, 7, 325-337.	10.4	136
39	Dermal Componentâ€Based Optical Modeling of Skin Translucency: Impact on Skin Color. , 2014, , 25-61.		8
40	Optical coherence tomography monitoring of enhanced skin optical clearing in rats<i>in vivo</i>. Journal of Biomedical Optics, 2013, 19, 021109.	2.6	41
41	Transcutaneous delivery of micro- and nanoparticles with laser microporation. Journal of Biomedical Optics, 2013, 18, 111406.	2.6	30
42	Use of fractional laser microablation of skin for improvement of its immersion clearing. , 2013, , .		1
43	Enhanced biosensing based on chemical or mechanical optical clearing. , 2013, , .		0
44	The development of skin immersion clearing method for increasing of laser exposure efficiency on subcutaneous objects. , 2012, , .		3
45	Optical Clearing for OCT Image Enhancement and In-Depth Monitoring of Molecular Diffusion. IEEE Journal of Selected Topics in Quantum Electronics, 2012, 18, 1244-1259.	2.9	84
46	OPTICAL PROPERTIES OF SKIN, SUBCUTANEOUS, AND MUSCLE TISSUES: A REVIEW. Journal of Innovative Optical Health Sciences, 2011, 04, 9-38.	1.0	551
47	PHOTOTHERAPY OF GINGIVITIS: PILOT CLINICAL STUDY. Journal of Innovative Optical Health Sciences, 2011, 04, 437-446.	1.0	7
48	Tissue optical immersion clearing. Expert Review of Medical Devices, 2010, 7, 825-842.	2.8	195
49	COMPARATIVE TREATMENT OF ACNE VULGARIS USING PALOMAR LUX APPLIQUÃ‰ TECHNIQUE AND DIRECT INTRALESIONAL INJECTION. Journal of Innovative Optical Health Sciences, 2009, 02, 279-287.	1.0	0
50	Optical clearing of human eye sclera. Proceedings of SPIE, 2009, , .	0.8	5
51	Measurement of Retinalamin diffusion coefficient in human sclera by optical spectroscopy. Optics and Lasers in Engineering, 2008, 46, 915-920.	3.8	8
52	Effect of ethanol on the transport of methylene blue through stratum corneum. Medical Laser Application: International Journal for Laser Treatment and Research, 2008, 23, 31-38.	0.3	13
53	Optical Clearing of Cranial Bone. Advances in Optical Technologies, 2008, 2008, 1-8.	0.8	74
54	<title>Investigation of glucose-hemoglobin interaction by optical coherence tomography</title>. , 2007, , .		3

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55	Skin optical clearing for improvement of laser tattoo removal. , 2007, 6734, 164.		0
56	<title>Optical clearing of human eye sclera under the action of glucose solution</title>. , 2007, 6535, 365.		1
57	<title>Diffusion of <emph type="1">Cortixin</emph> and <emph type="1">Retinalamin</emph> in eye sclera</title>. , 2007, , .		0
58	Monte Carlo study of skin optical clearing to enhance light penetration in the tissue: implications for photodynamic therapy of acne vulgaris. Proceedings of SPIE, 2007, , .	0.8	8
59	<title>Optical properties of human stomach mucosa in the spectral range from 400 to 2000 nm</title>. , 2007, , .		0
60	<title>Monte Carlo modeling of eye iris color</title>. , 2007, , .		5
61	<title>Monte Carlo study of skin optical clearing to enhance light penetration in the tissue</title>. , 2007, , .		1
62	Optical properties of human stomach mucosa in the spectral range from 400 to 2000 nm. Proceedings of SPIE, 2007, , .	0.8	0
63	Estimation of melanin content in iris of human eye: prognosis for glaucoma diagnostics. , 2007, , .		0
64	<title>Investigation of skin water loss and glycerol delivery through <emph type="1">stratum corneum</emph></title>. , 2007, , .		3
65	<title>In vitro study of indocyanine green solution interaction with skin</title>. , 2007, , .		3
66	<title>Mathematical modeling of clearing liquid drop diffusion after intradermal injection</title>. , 2007, , .		0
67	<title>Mathematical modeling of clearing liquid penetration into the skin</title>. , 2007, , .		2
68	Monte Carlo study of skin optical clearing to enhance light penetration in the tissue. , 2007, , .		5
69	Optical properties of human stomach mucosa in the spectral range from 400 to 2000nm: Prognosis for gastroenterology. Medical Laser Application: International Journal for Laser Treatment and Research, 2007, 22, 95-104.	0.3	69
70	<title>Optical properties of human cranial bone in the spectral range from 800 to 2000 nm</title>. , 2006, , .		57
71	Estimation of melanin content in iris of human eye: Prognosis for glaucoma diagnostics. , 2006, , .		4
72	<title>Optical clearing of skin tissue produced by application of glucose solution: in vivo study</title>. , 2006, , .		4

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73	<title>Optical clearing of human cranial bone by administration of immersion agents</title>. , 2006, , .		3
74	<title>Melanin spatial distribution in the iris of the human eye</title>. , 2006, , .		0
75	<title>Laser therapy of acute and chronic maxillary sinusitis</title>. , 2006, , .		2
76	Optical clearing of the eye sclerain vivocaused by glucose. Quantum Electronics, 2006, 36, 1119-1124.	1.0	41
77	Methylene blue laser therapy for the treatment of chronic maxillary sinusitis. , 2005, , .		0
78	Optical properties of human maxillary sinus mucosa and estimation of Methylene Blue diffusion coefficient in the tissue. , 2005, , .		7
79	Estimation of melanin content in iris of human eye. , 2005, 5688, 302.		16
80	Optical clearing of human dura mater. Optics and Spectroscopy (English Translation of Optika I) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 4	0.6	40
81	Immersion Clearing of Human Blood in the Visible and Near-Infrared Spectral Regions. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2005, 98, 638.	0.6	40
82	Optical Properties of the Subcutaneous Adipose Tissue in the Spectral Range 400â€“2500 nm. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2005, 99, 836.	0.6	107
83	Indocyanine green-laser thermolysis of acne vulgaris. , 2005, , .		1
84	Optical properties of human skin, subcutaneous and mucous tissues in the wavelength range from 400 to 2000â€“nm. Journal Physics D: Applied Physics, 2005, 38, 2543-2555.	2.8	1,340
85	Low-intensity indocyanine-green laser phototherapy of acne vulgaris: Pilot study. Journal of Biomedical Optics, 2004, 9, 828.	2.6	86
86	<title>Methylene blue diffusion in skin tissue</title>. , 2004, , .		5
87	Optical properties of mucous membrane in the spectral range 350â€“2000 nm. Optics and Spectroscopy (English Translation of Optika I Spektroskopiya), 2004, 97, 978-983.	0.6	19
88	<title>Influence of clearing solutions osmolarity on the optical properties of RBC</title>. , 2004, , .		8
89	Theoretical study of immersion optical clearing of blood in vessels at local hemolysis. Optics Express, 2004, 12, 2966.	3.4	49
90	ICG laser therapy of acne vulgaris. , 2004, 5319, 363.		4

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91	<title>Optical immersion of erythrocytes in blood: a theoretical modeling</title> . , 2004, 5486, 339.		1
92	A pilot study of ICG laser therapy of acne vulgaris: Photodynamic and photothermolysis treatment. Lasers in Surgery and Medicine, 2003, 33, 296-310.	2.1	114
93	Glucose and Mannitol Diffusion in Human Dura Mater. Biophysical Journal, 2003, 85, 3310-3318.	0.5	142
94	Reflectance, transmittance, and polarization of light interacting with immersed tissue: in vitro and in vivo study. , 2003, 4829, 1032.		0
95	Special training laboratory on optical biophysics. , 2002, , .		1
96	Study of the possibility of increasing the probing depth by the method of reflection confocal microscopy upon immersion clearing of near-surface human skin layers. Quantum Electronics, 2002, 32, 875-882.	1.0	52
97	<title>Influence of glycerol on the transport of light in the skin</title> . , 2002, , .		18
98	<title>Scleral tissue clearing effects</title> . , 2002, , .		3
99	In vitro and in vivo study of dye diffusion into the human skin and hair follicles. Journal of Biomedical Optics, 2002, 7, 471.	2.6	66
100	<title>In-vitro study of methylene blue diffusion through the skin tissue</title> . , 2002, 4609, 29.		5
101	<title>Optical properties of hair shafts estimated using the digital video microscopic system and inverse Monte Carlo method</title> . , 2002, 4609, 1.		4
102	<title>Experimental study of concentration effects in tissue phantoms</title> . , 2001, , .		0
103	<title>Light-scattering properties for spherical and cylindrical particles: a simple approximation derived from Mie calculations</title> . , 2001, 4241, 247.		6
104	<title>In vivo and in vitro study of immersion clearing dynamics of the skin</title> . , 2001, , .		0
105	RGB video microscopic system for in-vitro monitoring of optical properties of hair shaft and follicle. , 2001, , .		1
106	Spatially resolved microspectrophotometry for hair optical properties and geometry studies: CCD hair tester. , 2001, , .		0
107	In vivo investigation of the immersion-liquid-induced human skin clearing dynamics. Technical Physics Letters, 2001, 27, 489-490.	0.7	62
108	The interaction of indocyanine green dye with the human epidermis studied in vivo. Technical Physics Letters, 2001, 27, 602-604.	0.7	9

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109	<title>In-vivo and in-vitro study of control of rat skin optical properties by action of 40%-glucose solution</title>. , 2001, , .		17
110	<title>Diffusion of glucose solution through fibrous tissues: in-vitro optical and weight measurements</title>. , 2000, 4001, 255.		4
111	<title>Mathematical modeling of changes in the optical properties of epidermis due to UV-induced melanogenesis</title>. , 2000, , .		1
112	<title>In-vitro study of control of human dura mater optical properties by acting of osmotical liquids</title>. , 2000, , .		9
113	<title>In-vitro study of penetration of magnetic particles into the human skin</title>. , 2000, 4224, 312.		3
114	<title>In-vitro and in-vivo study of dye diffusion into the human skin and hair follicles</title>. , 2000, , .		9
115	<title>Effects of scattering particle concentration on light propagation through turbid media</title>. , 2000, , .		4
116	<title>In-vivo and in-vitro study of control of rat skin optical properties by action of osmotical liquid</title>. , 2000, 4224, 300.		34
117	<title>Estimation of glucose diffusion coefficient in scleral tissue</title>. , 2000, 4001, 345.		9
118	<title>Optical properties of melanin in the skin and skinlike phantoms</title>. , 2000, , .		33
119	<title>Estimation of wavelength dependence of refractive index of collagen fibers of scleral tissue</title>. Proceedings of SPIE, 2000, , .	0.8	39
120	<title>Osmotical liquid diffusion within sclera</title>. , 2000, , .		12
121	Human sclera dynamic spectra: in-vitro and in-vivo measurements. , 1999, , .		25
122	Influence of osmotically active chemical agents on the transport of light in scleral tissue. , 1999, 3726, 403.		2
123	<title>Spectral and spatial light absorption by chromophores: skin and phantom</title>. , 1995, , .		0
124	Upper epidermis autofluorescence dynamics under laser UV irradiation. , 1994, 2100, 233.		1
125	<title>Fluorescence dynamics of upper layer of human skin under UV laser irradiation</title>. , 1994, , .		1