

Krishna K Mahato

List of Publications by Year in descending order

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Version: 2024-02-01

97
papers

1,415
citations

304602

22
h-index

395590

33
g-index

97
all docs

97
docs citations

97
times ranked

1325
citing authors

#	ARTICLE	IF	CITATIONS
1	The revolution of PDMS microfluidics in cellular biology. <i>Critical Reviews in Biotechnology</i> , 2023, 43, 465-483.	5.1	24
2	Photobiomodulation invigorating collagen deposition, proliferating cell nuclear antigen and Ki67 expression during dermal wound repair in mice. <i>Lasers in Medical Science</i> , 2022, 37, 171-180.	1.0	13
3	Light emitting diodes (LEDs) in fluorescence-based analytical applications: a review. <i>Applied Spectroscopy Reviews</i> , 2022, 57, 1-38.	3.4	19
4	The Molecular Mechanisms of Action of Photobiomodulation Against Neurodegenerative Diseases: A Systematic Review. <i>Cellular and Molecular Neurobiology</i> , 2022, 42, 955-971.	1.7	35
5	Investigation of structural and physico-chemical properties of rice starch with varied amylose content: A combined microscopy, spectroscopy, and thermal study. <i>Food Hydrocolloids</i> , 2022, 122, 107093.	5.6	59
6	Preparation and characterization of citric acid crosslinked starch based bioplastic. <i>Materials Today: Proceedings</i> , 2022, 55, 26-30.	0.9	2
7	A comprehensive review on LED-induced fluorescence in diagnostic pathology. <i>Biosensors and Bioelectronics</i> , 2022, 209, 114230.	5.3	3
8	Spectroscopic methods for assessment of hand sanitizers. <i>Chemical Papers</i> , 2022, , 1-12.	1.0	4
9	Probing nonenzymatic glycation of proteins by deep ultraviolet light emitting diode induced autofluorescence. <i>International Journal of Biological Macromolecules</i> , 2022, 213, 279-296.	3.6	4
10	Red laser-mediated alterations in seed germination, growth, pigments and withanolide content of Ashwagandha [<i>Withania somnifera</i> (L.) Dunal]. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2021, 216, 112144.	1.7	10
11	Machine-learning-based classification of Stokes-Mueller polarization images for tissue characterization. <i>Journal of Physics: Conference Series</i> , 2021, 1859, 012045.	0.3	4
12	Exploring photoacoustic spectroscopy-based machine learning together with metabolomics to assess breast tumor progression in a xenograft model ex vivo. <i>Laboratory Investigation</i> , 2021, 101, 952-965.	1.7	13
13	He-Ne laser accelerates seed germination by modulating growth hormones and reprogramming metabolism in brinjal. <i>Scientific Reports</i> , 2021, 11, 7948.	1.6	11
14	Effects of Hydrothermal Treatments on Physicochemical Properties and In Vitro Digestion of Starch. <i>Food Biophysics</i> , 2021, 16, 544-554.	1.4	10
15	Fluorescence and Photoacoustic Spectroscopy-Based Assessment of Mitochondrial Dysfunction in Oral Cancer Together with Machine Learning: A Pilot Study. <i>Analytical Chemistry</i> , 2021, 93, 16520-16527.	3.2	7
16	Detecting Breast Tumor by Photoacoustic Spectroscopy Integrated Machine Learning: A Comparison of Statistical and Algorithm Based Features. , 2021, , .		2
17	Microscopic and spectroscopic characterization of rice and corn starch. <i>Microscopy Research and Technique</i> , 2020, 83, 490-498.	1.2	10
18	Deciphering biophysical signatures for microbiological applications. <i>Lasers in Medical Science</i> , 2020, 35, 1493-1501.	1.0	5

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19	Development and characterization of portable smartphone-based imaging device. <i>Microscopy Research and Technique</i> , 2020, 83, 1336-1344.	1.2	14
20	An overview of conventional and fluorescence spectroscopy tools in oral cancer diagnosis. <i>Lasers in Dental Science</i> , 2020, 4, 167-179.	0.3	1
21	Design and Fabrication of Low-cost Microfluidic Channel for Biomedical Application. <i>Scientific Reports</i> , 2020, 10, 9215.	1.6	36
22	Detection of mitochondrial dysfunction in vitro by laser-induced autofluorescence. <i>Journal of Biophotonics</i> , 2019, 12, e201900056.	1.1	6
23	Effects of 7.5 MeV electron beam irradiation on optical properties of Eu ³⁺ -doped zinc sodium bismuth borate glasses. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2019, 446, 5-9.	0.6	2
24	Polarization-resolved Stokes-Mueller imaging: a review of technology and applications. <i>Lasers in Medical Science</i> , 2019, 34, 1283-1293.	1.0	37
25	Effects of high dose gamma irradiation on the optical properties of Eu ³⁺ doped zinc sodium bismuth borate glasses for red LEDs. <i>Journal of Luminescence</i> , 2019, 207, 288-300.	1.5	21
26	Photoemission and thermoluminescence characteristics of Dy ³⁺ -doped zinc sodium bismuth borate glasses. <i>Solid State Sciences</i> , 2019, 89, 130-138.	1.5	28
27	Assessing Mitochondria by Laser Induced Autofluorescence and Photoacoustic Measurements: A Preliminary In Vitro Study. , 2019, , .		0
28	Action of He-Ne laser on wounded human skin fibroblast cells. , 2019, , .		0
29	Design and fabrication of screen printed microheater. <i>Microsystem Technologies</i> , 2018, 24, 3273-3281.	1.2	14
30	Probing endogenous collagen by laser-induced autofluorescence in burn wound biopsies: A pilot study. <i>Journal of Biophotonics</i> , 2018, 11, e201700394.	1.1	4
31	Interrogation of an autofluorescence-based method for protein fingerprinting. <i>Journal of Biophotonics</i> , 2018, 11, e201700393.	1.1	9
32	Laser-induced autofluorescence-based objective evaluation of burn tissue repair in mice. <i>Lasers in Medical Science</i> , 2018, 33, 699-707.	1.0	12
33	Photoluminescence and thermally stimulated luminescence properties of Pr ³⁺ -doped zinc sodium bismuth borate glasses. <i>Optical Materials</i> , 2018, 84, 268-277.	1.7	35
34	Purity Analysis of Adulterated Vegetable Oils by Raman and FTIR Spectroscopy. , 2018, , .		1
35	Development of Four Channel Based Linear Stokes-Mueller Polarization Microscope For Tissue Characterization. , 2018, , .		0
36	Red light emission from europium doped zinc sodium bismuth borate glasses. <i>Physica B: Condensed Matter</i> , 2017, 527, 35-43.	1.3	45

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37	In vitro culture responses, callus growth and organogenetic potential of brinjal (Solanum) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 174, 333-341.	1.7	12
38	Identification of protein secondary structures by laser induced autofluorescence: A study of urea and GnHCl induced protein denaturation. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2017, 174, 44-53.	2.0	9
39	Advanced microscopy techniques for revealing molecular structure of starch granules. , 2017, , .		1
40	Photo-bio modulatory response of platelets to low power laser - A pilot study. , 2017, , .		0
41	Regulation of cellular marker modulated upon irradiation of low power laser light in burn injured mice. , 2016, , .		0
42	Photo-biomodulatory response of low-power laser irradiation on burn tissue repair in mice. Lasers in Medical Science, 2016, 31, 1741-1750.	1.0	35
43	Responses of He-Ne laser irradiation on agronomical characters and chlorogenic acid content of brinjal (Solanum melongena L.) var. Mattu Gulla. Journal of Photochemistry and Photobiology B: Biology, 2016, 164, 182-190.	1.7	16
44	Photoacoustic spectroscopy based investigatory approach to discriminate breast cancer from normal: a pilot study. , 2016, , .		2
45	Fluorescence based assessment of SDS induced hydrophobic collapse in globular proteins. Proceedings of SPIE, 2016, , .	0.8	0
46	Photobiomodulatory effects of He- Ne laser on Wounded Human Skin Fibroblasts. , 2016, , .		0
47	Laser induced autofluorescence in the monitoring of I ² -mercaptoethanol mediated photo induced proton coupled electron transfer in proteins. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2015, 149, 607-614.	2.0	12
48	Predictive potential of photoacoustic spectroscopy in breast tumor detection based on xenograft serum profiles. , 2015, , .		0
49	Photoacoustic spectroscopy based evaluation of breast cancer condition. , 2015, , .		1
50	Autofluorescence based visualization of proteins from unstained native-PAGE. Proceedings of SPIE, 2015, , .	0.8	0
51	Low power laser irradiation stimulates cell proliferation via proliferating cell nuclear antigen and Ki-67 expression during tissue repair. , 2015, , .		1
52	Monitoring breast tumor progression by photoacoustic measurements: a xenograft mice model study. Journal of Biomedical Optics, 2015, 20, 105002.	1.4	10
53	Objective Assessment of Endogenous Collagen In Vivo during Tissue Repair by Laser Induced Fluorescence. PLoS ONE, 2014, 9, e98609.	1.1	26
54	Alterations in cell migration and cell viability of wounded human skin fibroblasts following visible red light exposure. , 2014, , .		0

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55	Photoacoustic spectroscopy in the monitoring of breast tumor development: a pre-clinical study. , 2014, , .		1
56	Prognostic prospective of laser induced fluorescence as an objective tool to evaluate collagen deposition in thermal wounds: anex vivostudy. , 2014, , .		0
57	Efficacy of multiple exposure with low level He-Ne laser dose on acute wound healing: a pre-clinical study. Proceedings of SPIE, 2014, , .	0.8	0
58	Nature of autofluorescence in human serum albumin under its native, unfolding and digested forms. , 2014, , .		0
59	Does ozone enhance the remineralizing potential of nanohydroxyapatite on artificially demineralized enamel? A laser induced fluorescence study. , 2014, , .		1
60	Effect of limited access dressing on hydroxyproline and enzymatic antioxidant status in nonhealing chronic ulcers. Indian Journal of Plastic Surgery, 2014, 47, 216-220.	0.2	8
61	Prediction of absorption coefficients by pulsed laser induced photoacoustic measurements. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2014, 127, 85-90.	2.0	9
62	Non-invasive, in vivo fluorescence technique as an objective tool for monitoring wound healing following low level laser therapy. , 2013, , .		1
63	Optical properties of Eu ₂ O ₃ doped lead fluoroborate glass. , 2012, , .		0
64	Spectroscopic and histological evaluation of wound healing progression following Low Level Laser Therapy (LLLT). Journal of Biophotonics, 2012, 5, 168-184.	1.1	43
65	Influence of Helium-Neon Laser Irradiation on Seed Germination <i>In Vitro</i> and Physico-Biochemical Characters in Seedlings of Brinjal (<i>Solanum melongena</i> L.) var. Mattu Gulla. Photochemistry and Photobiology, 2012, 88, 1227-1235.	1.3	26
66	Effect of Laser Dose and Treatment Schedule on Excision Wound Healing in Diabetic Mice. Photochemistry and Photobiology, 2011, 87, 1433-1441.	1.3	24
67	Photobiomodulatory effects of He-Ne laser on excision wounds. , 2011, , .		1
68	Photoacoustic spectroscopy of ovarian normal, benign, and malignant tissues: a pilot study. Journal of Biomedical Optics, 2011, 16, 067001.	1.4	18
69	Autofluorescence of Osteoporotic Mouse Femur Bones: A Pilot Study. Photomedicine and Laser Surgery, 2011, 29, 227-232.	2.1	1
70	Development and evaluation of an optical fibre-based helium-neon laser irradiation system for tissue regeneration: A pilot study. Pramana - Journal of Physics, 2010, 75, 1287-1293.	0.9	2
71	Development and Evaluation of Fiber Optic Probe-based Helium-Neon Low-level Laser Therapy System for Tissue Regeneration An <i>In Vivo</i> Experimental Study. Photochemistry and Photobiology, 2010, 86, 1364-1372.	1.3	24
72	Principal Component Analysis (PCA)-Based k-Nearest Neighbor (k-NN) Analysis of Colonic Mucosal Tissue Fluorescence Spectra. Photomedicine and Laser Surgery, 2009, 27, 659-668.	2.1	12

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73	Autofluorescence of Normal, Benign, and Malignant Ovarian Tissues: A Pilot Study. <i>Photomedicine and Laser Surgery</i> , 2009, 27, 325-335.	2.1	29
74	Autofluorescence of Breast Tissues: Evaluation of Discriminating Algorithms for Diagnosis of Normal, Benign, and Malignant Conditions. <i>Photomedicine and Laser Surgery</i> , 2009, 27, 241-252.	2.1	18
75	A pilot study on colonic mucosal tissues by fluorescence spectroscopy technique: Discrimination by principal component analysis (PCA) and artificial neural network (ANN) analysis. <i>Journal of Chemometrics</i> , 2008, 22, 408-416.	0.7	9
76	Dynamics of L-tryptophan in aqueous solution by simultaneous laser induced fluorescence (LIF) and photoacoustic spectroscopy (PAS). <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2008, 70, 187-194.	2.0	12
77	Serum protein profile study of normal and cervical cancer subjects by high performance liquid chromatography with laser-induced fluorescence. <i>Journal of Biomedical Optics</i> , 2008, 13, 054062.	1.4	14
78	Optical pathology using oral tissue fluorescence spectra: classification by principal component analysis and k-means nearest neighbor analysis. <i>Journal of Biomedical Optics</i> , 2007, 12, 014028.	1.4	45
79	Protein profile study of breast cancer tissues using HPLC-LIF: a pilot study. , 2007, , .		3
80	Protein profile study of Pap smear and tissue of cervix by high performance liquid chromatography: laser induced fluorescence. , 2007, , .		0
81	Principal component analysis and artificial neural network analysis of oral tissue fluorescence spectra: Classification of normal premalignant and malignant pathological conditions. <i>Biopolymers</i> , 2006, 82, 152-166.	1.2	61
82	Protein profile study of the cervical cancer using HPLC-LIF. , 2006, , .		7
83	Optical properties of Dy ³⁺ doped in oxyfluoroborate glass. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2005, 61, 431-436.	2.0	60
84	Frequency upconversion involving quartets of ions in a Pr ³⁺ /Eu ³⁺ oxyfluoroborate glass. <i>Chemical Physics Letters</i> , 2005, 414, 222-225.	1.2	3
85	Optical studies of Eu ³⁺ doped oxyfluoroborate glass. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2004, 60, 979-985.	2.0	59
86	Osteoradionecrosis (ORN) of the Mandible: A Laser Raman Spectroscopic Study. <i>Applied Spectroscopy</i> , 2003, 57, 1100-1116.	1.2	51
87	Conformations of indan and 2-indanol: A combined study by UV laser spectroscopy and quantum chemistry calculation. <i>Journal of Chemical Physics</i> , 2003, 119, 2523-2530.	1.2	37
88	Rotational Isomers of 1-Methoxynaphthalene: A Combined Study by Ultraviolet Laser Spectroscopy in a Supersonic Jet and ab Initio Theoretical Calculation. <i>Journal of Physical Chemistry A</i> , 2002, 106, 12058-12063.	1.1	9
89	Exciplex emission from the mixed dimer of naphthalene and 2-cyanonaphthalene in a supersonic jet. <i>Physical Chemistry Chemical Physics</i> , 2002, 4, 2162-2168.	1.3	5
90	Excimer formation in the mixed dimers of naphthalene and 1-methoxynaphthalene in a supersonic jet. <i>Physical Chemistry Chemical Physics</i> , 2001, 3, 1813-1818.	1.3	6

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91	Excimer formation in jet-cooled 2-methoxynaphthalene clusters. <i>Chemical Physics Letters</i> , 2001, 341, 115-121.	1.2	3
92	Jet spectroscopy of van der Waals dimers of 1-methoxynaphthalene: A laser induced fluorescence study. <i>Journal of Chemical Physics</i> , 2001, 114, 8310-8315.	1.2	16
93	Observation of exciplex emission from the mixed dimer of naphthalene and 2-methoxynaphthalene: A laser-induced fluorescence study in supersonic jet. <i>Journal of Chemical Physics</i> , 2001, 114, 6107-6111.	1.2	23
94	Laser spectroscopic studies of Tb ³⁺ -doped oxyfluoroborate glass. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2000, 56, 2333-2340.	2.0	26
95	Optical Studies of Pr ³⁺ Doped Oxyfluoroborate Glass. <i>Physica Status Solidi A</i> , 1999, 174, 277-289.	1.7	22
96	Optical studies of Sm ³⁺ doped oxyfluoroborate glass. <i>Solid State Communications</i> , 1998, 108, 671-676.	0.9	100
97	DESIGN AND SIMULATION OF PARALLEL MICROHEATER. <i>Frontiers in Heat and Mass Transfer</i> , 0, 10, .	0.1	1