

Santhosh Chidangil

List of Publications by Year in descending order

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Version: 2024-02-01

98
papers

1,542
citations

361045

20
h-index

377514

34
g-index

99
all docs

99
docs citations

99
times ranked

1635
citing authors

#	ARTICLE	IF	CITATIONS
1	Laser induced graphene with biopolymer electrolyte for supercapacitor applications. <i>Materials Today: Proceedings</i> , 2022, 48, 365-370.	0.9	7
2	Facile fabrication of plasmonic wettability contrast paper surface for droplet array-based SERS sensing. <i>Applied Surface Science</i> , 2022, 571, 151188.	3.1	13
3	Red blood cells under externally induced stressors probed by micro-Raman spectroscopy. , 2022, , 141-165.		0
4	Recent Progress in the Fabrication and Optical Properties of Nanoporous Anodic Alumina. <i>Nanomaterials</i> , 2022, 12, 444.	1.9	14
5	Facile fabrication of superhydrophobic gold loaded nanoporous anodic alumina as surface-enhanced Raman spectroscopy substrates. <i>Journal of Optics (United Kingdom)</i> , 2022, 24, 044002.	1.0	1
6	Microwave-assisted synthesis and upconversion luminescence of NaYF ₄ :Yb, Gd, Er and NaYF ₄ :Yb, Gd, Tm nanorods. <i>Methods and Applications in Fluorescence</i> , 2022, 10, 024004.	1.1	5
7	Laser induced fluorescence of cervical tissues: an in-vitro study for the diagnosis of cervical cancer from the cervicitis. <i>Journal of Optics (United Kingdom)</i> , 2022, 24, 054002.	1.0	7
8	Post-COVID syndrome screening through breath analysis using electronic nose technology. <i>Analytical and Bioanalytical Chemistry</i> , 2022, 414, 3617-3624.	1.9	15
9	Refractive index sensitivity of Au nanostructures in solution and on the substrate. <i>Journal of Materials Science: Materials in Electronics</i> , 2022, 33, 4011-4024.	1.1	6
10	A micro-Raman spectroscopy study of inflammatory condition of human cervix: Probing of Tissues and blood plasma samples. <i>Photodiagnosis and Photodynamic Therapy</i> , 2022, , 102948.	1.3	3
11	Fluorescence-based detection of mercury ions using carbon dots: role of synthesis route. <i>Materials Technology</i> , 2022, 37, 2893-2906.	1.5	4
12	Micro-Raman spectroscopy study of blood samples from myocardial infarction patients. <i>Lasers in Medical Science</i> , 2022, 37, 3451-3460.	1.0	10
13	UV laser-based photoacoustic breath analysis for the diagnosis of respiratory diseases: Detection of Asthma. <i>Sensors and Actuators B: Chemical</i> , 2022, 370, 132367.	4.0	12
14	Hybrid LIBS-Raman-LIF systems for multi-modal spectroscopic applications: a topical review. <i>Applied Spectroscopy Reviews</i> , 2021, 56, 463-491.	3.4	23
15	A broadband optical pH sensor using upconversion luminescence. <i>Journal of Materials Chemistry C</i> , 2021, 9, 8606-8614.	2.7	14
16	Development and performance evaluation of a multi-modal optical spectroscopic sensor. <i>Journal of Analytical Atomic Spectrometry</i> , 2021, 36, 2391-2403.	1.6	6
17	A review on human body fluids for the diagnosis of viral infections: scope for rapid detection of COVID-19. <i>Expert Review of Molecular Diagnostics</i> , 2021, 21, 31-42.	1.5	18
18	Optical Trapping and Micro-Raman Spectroscopy of Functional Red Blood Cells Using Vortex Beam for Cell Membrane Studies. <i>Analytical Chemistry</i> , 2021, 93, 5484-5493.	3.2	7

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19	Optical technologies for the detection of viruses like COVID-19: Progress and prospects. <i>Biosensors and Bioelectronics</i> , 2021, 178, 113004.	5.3	71
20	Laser-induced assembly of biological cells and colloids onto a candle soot coated substrate. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2021, 616, 126357.	2.3	6
21	Human tear fluid analysis for clinical applications: progress and prospects. <i>Expert Review of Molecular Diagnostics</i> , 2021, 21, 767-787.	1.5	14
22	Photonics of human saliva: potential optical methods for the screening of abnormal health conditions and infections. <i>Biophysical Reviews</i> , 2021, 13, 359-385.	1.5	11
23	Single cell spectroscopy of red blood cells in intravenous crystalloid fluids. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2021, 257, 119726.	2.0	4
24	Review of synthesis and sensing applications of anisotropic silver and gold nanostructures. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2021, 39, 050801.	0.6	1
25	Effect of OH substitution in 3-benzylchroman-4-ones: crystallographic, CSD, DFT, FTIR, Hirshfeld surface, and energy framework analysis. <i>RSC Advances</i> , 2021, 11, 20123-20136.	1.7	0
26	Refractive index and formaldehyde sensing with silver nanocubes. <i>RSC Advances</i> , 2021, 11, 8042-8050.	1.7	14
27	Breath analysis for the screening and diagnosis of diseases. <i>Applied Spectroscopy Reviews</i> , 2021, 56, 702-732.	3.4	23
28	Development of a spectroscopic technique that enables the saliva based detection of COVID-19 at safe distances. <i>Results in Chemistry</i> , 2021, 3, 100210.	0.9	5
29	Design and development of a photoacoustic set up for breath analysis: a preliminary study. , 2021, , .		0
30	Synthesis and Characterization of Reduced Graphene Oxide for Supercapacitor Application with a Biodegradable Electrolyte. <i>Journal of Electronic Materials</i> , 2020, 49, 985-994.	1.0	19
31	Influence of static electric field on Raman polarizability of optically trapped polystyrene beads. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2020, 228, 117726.	2.0	1
32	Micro-Raman Spectroscopy Analysis of Optically Trapped Erythrocytes in Jaundice. <i>Frontiers in Physiology</i> , 2020, 11, 821.	1.3	5
33	Human red blood cell behaviour in hydroxyethyl starch: probed by single cell spectroscopy. <i>RSC Advances</i> , 2020, 10, 31453-31462.	1.7	3
34	Plasma spectroscopy + chemometrics: An ideal approach for the spectrochemical analysis of iron phosphate glass samples. <i>Journal of Chemometrics</i> , 2020, 34, e3310.	0.7	2
35	Refractive index sensitivity of triangular Ag nanoplates in solution and on glass substrate. <i>Sensors and Actuators A: Physical</i> , 2020, 305, 111948.	2.0	12
36	Thermal Energy Electrons and OH-Radicals Induce Strand Breaks in DNA in an Aqueous Environment: Some Salts Offer Protection Against Strand Breaks. <i>Journal of Physical Chemistry A</i> , 2020, 124, 1508-1514.	1.1	2

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37	Probing Nanoparticle-Cell Interaction Using Micro-Raman Spectroscopy: Silver and Gold Nanoparticle-Induced Stress Effects on Optically Trapped Live Red Blood Cells. ACS Omega, 2020, 5, 1439-1447.	1.6	26
38	Red blood cells under varying extracellular tonicity conditions: an optical tweezers combined with micro-Raman study. Biomedical Physics and Engineering Express, 2020, 6, 015036.	0.6	8
39	A chemometric study combined with spectroscopy for the quantification of secondary structure of flagellar-associated protein 174 (FAP174). Journal of Chemometrics, 2020, 34, e3221.	0.7	3
40	Optical Biopsy and Optical Pathology: Affordable Health Care Under Low-Resource Settings. Journal of Biomedical Photonics and Engineering, 2020, 6, .	0.4	8
41	Laser Raman tweezer spectroscopy to explore the bisphenol A-induced changes in human erythrocytes. RSC Advances, 2019, 9, 15933-15940.	1.7	7
42	Optical tweezers combined with micro-Raman investigation of alcohol-induced changes on single, live red blood cells in blood plasma. Journal of Raman Spectroscopy, 2019, 50, 1367-1374.	1.2	8
43	Post annealing induced manipulation of phase and upconversion luminescence of Cr ³⁺ doped NaYF ₄ :Yb,Er crystals. RSC Advances, 2019, 9, 9364-9372.	1.7	18
44	Normal saline-induced deoxygenation of red blood cells probed by optical tweezers combined with the micro-Raman technique. RSC Advances, 2019, 9, 7878-7884.	1.7	20
45	Strong Strand Breaks in DNA Induced by Thermal Energy Particles and Their Electrostatic Inhibition by Na ⁺ Nanostructures. Journal of Physical Chemistry A, 2019, 123, 3241-3247.	1.1	2
46	A micro-Raman and chemometric study of urinary tract infection-causing bacterial pathogens in mixed cultures. Analytical and Bioanalytical Chemistry, 2019, 411, 3165-3177.	1.9	29
47	Luminomagnetic Nd ³⁺ doped fluorapatite coated Fe ₃ O ₄ nanostructures for biomedical applications. Journal of the American Ceramic Society, 2019, 102, 2558-2568.	1.9	5
48	Minireview: Laser-Induced Formation of Microbubbles—Biomedical Implications. Langmuir, 2019, 35, 10139-10150.	1.6	15
49	Dual functionalized, stable and water dispersible CdTe quantum dots: Facile, one-pot aqueous synthesis, optical tuning and energy transfer applications. Materials Research Bulletin, 2019, 110, 57-66.	2.7	22
50	Surface-enhanced Raman spectroscopy study of red blood cells and platelets. Journal of Biomolecular Structure and Dynamics, 2019, 37, 1090-1098.	2.0	9
51	Laser-Assisted Tailoring of Surface Wettability - Fundamentals and Applications: A Critical Review. Reviews of Adhesion and Adhesives, 2019, 7, 331-366.	3.3	16
52	A laser Raman tweezers study of eryptosis. Journal of Raman Spectroscopy, 2018, 49, 1155-1164.	1.2	13
53	Cr-doped ZnAl ₂ O ₄ : Microwave solution route for ceramic nanoparticles from metalorganic complexes in minutes. Journal of the American Ceramic Society, 2018, 101, 800-811.	1.9	27
54	Effect of biocompatible nucleants in rapid crystallization of natural amino acids using a CW Nd:YAG laser. Scientific Reports, 2018, 8, 16018.	1.6	4

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55	Sensitive detection of mercury using the fluorescence resonance energy transfer between CdTe/CdS quantum dots and Rhodamine 6G. <i>Journal of Nanoparticle Research</i> , 2018, 20, 1.	0.8	20
56	Flexible superhydrophobic SERS substrates fabricated by in situ reduction of Ag on femtosecond laser-written hierarchical surfaces. <i>Sensors and Actuators B: Chemical</i> , 2018, 272, 485-493.	4.0	63
57	Real-time and rapid detection of <i>Salmonella</i> Typhimurium using an inexpensive lab-built surface plasmon resonance setup. <i>Laser Physics Letters</i> , 2018, 15, 075701.	0.6	11
58	Recent Progress in Fabricating Superaerophobic and Superaerophilic Surfaces. <i>Advanced Materials Interfaces</i> , 2017, 4, 1601088.	1.9	96
59	A study on air bubble wetting: Role of surface wettability, surface tension, and ionic surfactants. <i>Applied Surface Science</i> , 2017, 410, 117-125.	3.1	29
60	Microwave solution route to ceramic ZnAl ₂ O ₄ nanoparticles in 10 minutes: inversion and photophysical changes with thermal history. <i>New Journal of Chemistry</i> , 2017, 41, 5420-5428.	1.4	37
61	Effect of infrared light on live blood cells: Role of β^2 -carotene. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2017, 171, 104-116.	1.7	16
62	Effect of nucleants in photothermally assisted crystallization. <i>Photochemical and Photobiological Sciences</i> , 2017, 16, 870-882.	1.6	4
63	Micro-Raman spectroscopy for identification and classification of UTI bacteria. , 2017, , ,		0
64	Structural features of FAP174, a MYCBP-1 orthologue from <i>Chlamydomonas reinhardtii</i> , revealed by computational and experimental analyses. <i>RSC Advances</i> , 2017, 7, 51391-51402.	1.7	2
65	Zone Plate Fabrication Using a Low Power Femtosecond Laser. <i>Advanced Science Letters</i> , 2017, 23, 1745-1748.	0.2	0
66	Raman tweezers spectroscopy study of free radical induced oxidative stress leading to eryptosis. , 2016, , ,		1
67	Microfabrication of Fresnel zone plates by laser induced solid ablation. <i>Journal of Optics (United Kingdom)</i> 17, 0784314. doi:10.1088/1751-8758/17/7/0784314	1.0	7
68	Optical Interferometric Properties of Porous Anodic Alumina Nanostructures. <i>Materials Today: Proceedings</i> , 2016, 3, 2443-2449.	0.9	5
69	Performance evaluation of Laser Induced Breakdown Spectroscopy (LIBS) for quantitative analysis of rare earth elements in phosphate glasses. <i>Optical Materials</i> , 2016, 52, 32-37.	1.7	31
70	Self-cleaning superhydrophobic surfaces with underwater superaerophobicity. <i>Materials and Design</i> , 2016, 100, 8-18.	3.3	51
71	Conditions Leading to Eryptosis in Erythrocytes: A Raman Tweezers Study. , 2016, , ,		1
72	Micro-patterning of Indium thin film for generation of micron and submicron particles using femtosecond laser-induced forward transfer. <i>Laser and Particle Beams</i> , 2015, 33, 449-454.	0.4	3

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73	Ultra-sensitive high performance liquid chromatographyâ€”laser-induced fluorescence based proteomics for clinical applications. <i>Journal of Proteomics</i> , 2015, 127, 202-210.	1.2	12
74	Probing differentiation in cancer cell lines by single-cell micro-Raman spectroscopy. <i>Journal of Biomedical Optics</i> , 2015, 20, 085001.	1.4	24
75	Early diagnosis of tongue malignancy using laser induced fluorescence spectroscopy technique. <i>Proceedings of SPIE</i> , 2015, , .	0.8	0
76	Opto-mechanical door locking system. <i>Proceedings of SPIE</i> , 2015, , .	0.8	0
77	A Comparison of Protein Profiles of Cervical Tissue Homogenate, Exfoliated Cells from Cervix and Serum in Normal and Cervical Malignancy Conditions. <i>Journal of Chromatographic Science</i> , 2015, 53, 167-176.	0.7	4
78	Early Diagnosis of Tongue Malignancy Using Laser Induced Fluorescence Spectroscopy Technique. , 2015, , .		0
79	A Micro-Raman Study of Live, Single Red Blood Cells (RBCs) Treated with AgNO ₃ Nanoparticles. <i>PLoS ONE</i> , 2014, 9, e103493.	1.1	40
80	Femtosecond laser induced forward transfer of indium thin films. <i>Laser and Particle Beams</i> , 2014, 32, 55-61.	0.4	3
81	Biomedical and environmental applications of laser-induced breakdown spectroscopy. <i>Pramana - Journal of Physics</i> , 2014, 82, 397-401.	0.9	21
82	Deposition and alignment of cells on laser-patterned quartz. <i>Applied Surface Science</i> , 2014, 305, 375-381.	3.1	19
83	Salivary protein markers: a noninvasive protein profile-based method for the early diagnosis of oral premalignancy and malignancy. <i>Journal of Biomedical Optics</i> , 2013, 18, 101317.	1.4	19
84	Calibration-free laser-induced breakdown spectroscopy for quantitative elemental analysis of materials. <i>Pramana - Journal of Physics</i> , 2012, 79, 299-310.	0.9	48
85	Micro-Raman Spectroscopy of Silver Nanoparticle Induced Stress on Optically-Trapped Stem Cells. <i>PLoS ONE</i> , 2012, 7, e35075.	1.1	26
86	Application of HPLC Combined with Laser Induced Fluorescence for Protein Profile Analysis of Tissue Homogenates in Cervical Cancer. <i>Scientific World Journal</i> , The, 2012, 2012, 1-7.	0.8	9
87	Surface Enhanced Fluorescence of Tryptophan by Silver-Nano-particles. , 2011, , .		0
88	Laser Induced Fluorescence Spectroscopy of Soft Tissues of the Oral Cavity. <i>AIP Conference Proceedings</i> , 2011, , .	0.3	1
89	Objective Diagnosis of Cervical Cancer by Tissue Protein Profile Analysis. <i>AIP Conference Proceedings</i> , 2011, , .	0.3	1
90	Measurements of plasma temperature and electron density in laser-induced copper plasma by time-resolved spectroscopy of neutral atom and ion emissions. <i>Pramana - Journal of Physics</i> , 2010, 74, 983-993.	0.9	117

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91	Protein profile analysis of cellular samples from the cervix for the objective diagnosis of cervical cancer using HPLC-LIF. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2010, 878, 3225-3230.	1.2	14
92	Evaluation of high-performance liquid chromatography laser-induced fluorescence for serum protein profiling for early diagnosis of oral cancer. Journal of Biomedical Optics, 2010, 15, 067007.	1.4	18
93	Raman Tweezers Spectroscopy of Live, Single Red and White Blood Cells. PLoS ONE, 2010, 5, e10427.	1.1	134
94	Protein profile study of clinical samples using laser induced fluorescence as the detection method: case of malignant and normal cervical tissues. Proceedings of SPIE, 2009, , .	0.8	0
95	Role of cation-π interactions in single chain α~all-alpha~™ proteins. Journal of Theoretical Biology, 2008, 250, 655-662.	0.8	17
96	Serum protein profile study of normal and cervical cancer subjects by high performance liquid chromatography with laser-induced fluorescence. Journal of Biomedical Optics, 2008, 13, 054062.	1.4	14
97	Suppression of ultrafast supercontinuum generation in a salivary protein. Journal of Biomedical Optics, 2007, 12, 020510.	1.4	18
98	Optical Screening of Oral Cancer: Technology for Emerging Markets. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 2807-10.	0.5	4