Ramachandram Badugu

List of Publications by Year
in descending order

77 papers	3,592 citations	117625 34 h-index	133252 59 g-index
78 all docs	78 docs citations	78 times ranked	3839 citing authors

#	Article	IF	Citations
1	Enhanced Fluorescence Cyanide Detection at Physiologically Lethal Levels:Â Reduced ICT-Based Signal Transduction. Journal of the American Chemical Society, 2005, 127, 3635-3641.	13.7	382
2	Advances in Surface-Enhanced Fluorescence. Journal of Fluorescence, 2004, 14, 425-441.	2.5	293
3	Metal-Enhanced Fluorescence from CdTe Nanocrystals:Â A Single-Molecule Fluorescence Study. Journal of the American Chemical Society, 2006, 128, 8998-8999.	13.7	264
4	Noninvasive Continuous Monitoring of Physiological Glucose Using a Monosaccharide-Sensing Contact Lens. Analytical Chemistry, 2004, 76, 610-618.	6.5	142
5	Polyelectrolyte Layer-by-Layer Assembly To Control the Distance between Fluorophores and Plasmonic Nanostructures. Chemistry of Materials, 2007, 19, 5902-5909.	6.7	133
6	Distance-Dependent Metal-Enhanced Fluorescence from Langmuirâ˜Blodgett Monolayers of Alkyl-NBD Derivatives on Silver Island Films. Langmuir, 2006, 22, 8374-8378.	3.5	120
7	Cyanide-sensitive fluorescent probes. Dyes and Pigments, 2005, 64, 49-55.	3.7	110
8	A Glucose Sensing Contact Lens: A Non-Invasive Technique for Continuous Physiological Glucose Monitoring. Journal of Fluorescence, 2003, 13, 371-374.	2.5	102
9	A glucose-sensing contact lens: from bench top to patient. Current Opinion in Biotechnology, 2005, 16, 100-107.	6.6	93
10	Ophthalmic Glucose Monitoring Using Disposable Contact Lensesâ€”A Review. Journal of Fluorescence, 2004, 14, 617-633.	2.5	83
11	Excitation and emission wavelength ratiometric cyanide-sensitive probes for physiological sensing. Analytical Biochemistry, 2004, 327, 82-90.	2.4	81
12	Directing Fluorescence with Plasmonic and Photonic Structures. Accounts of Chemical Research, 2015, 48, 2171-2180.	15.6	79
13	Boronic acid fluorescent sensors for monosaccharide signaling based on the 6-methoxyquinolinium heterocyclic nucleus: progress toward noninvasive and continuous glucose monitoring. Bioorganic and Medicinal Chemistry, 2005, 13, 113-119.	3.0	76
14	Fluorescence sensors for monosaccharides based on the 6-methylquinolinium nucleus and boronic acid moiety: potential application to ophthalmic diagnostics. Talanta, 2005, 65, 762-768.	5.5	76
15	Radiative decay engineering 6: Fluorescence on one-dimensional photonic crystals. Analytical Biochemistry, 2013, 442, 83-96.	2.4	71
16	A wavelength?ratiometric fluoride-sensitive probe based on the quinolinium nucleus and boronic acid moiety. Sensors and Actuators B: Chemical, 2005, 104, 103-110.	7.8	66
17	Fluorescence intensity and lifetime-based cyanide sensitive probes for physiological safeguard. Analytica Chimica Acta, 2004, 522, 9-17.	5.4	63
18	Radiative decay engineering 7: Tamm state-coupled emission using a hybrid plasmonicâ€“photonic structure. Analytical Biochemistry, 2014, 445, 1-13.	2.4	58

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19	Sulforhodamine Adsorbed Langmuirâ˜Blodgett Layers on Silver Island Films:â€‰ Effect of Probe Distance on the Metal-Enhanced Fluorescence. Journal of Physical Chemistry C, 2007, 111, 7091-7097.	3.1	56
20	Metal-Enhanced Fluorescence from Plastic Substrates. Journal of Fluorescence, 2005, 15, 99-104.	2.5	54
21	Fluorescence Sensor Design for Transition Metal Ions: The Role of the PIET Interaction Efficiency. Journal of Fluorescence, 2005, 15, 71-83.	2.5	53
22	Fluorescence Quenching of CdTe Nanocrystals by Bound Gold Nanoparticles in Aqueous Solution. Plasmonics, 2008, 3, 3-11.	3.4	52
23	Diffraction-Free Bloch Surface Waves. ACS Nano, 2017, 11, 5383-5390.	14.6	52
24	Bloch surface waves confined in one dimension with a single polymeric nanofibre. Nature Communications, 2017, 8, 14330.	12.8	49
25	Extending the Propagation Distance of a Silver Nanowire Plasmonic Waveguide with a Dielectric Multilayer Substrate. Nano Letters, 2018, 18, 1152-1158.	9.1	47
26	Contact lens to measure individual ion concentrations in tears and applications to dry eye disease. Analytical Biochemistry, 2018, 542, 84-94.	2.4	46
27	Silverâ€“Gold Nanocomposite Substrates for Metal-Enhanced Fluorescence: Ensemble and Single-Molecule Spectroscopic Studies. Journal of Physical Chemistry C, 2012, 116, 5042-5048.	3.1	45
28	Bloch Surface Wave-Coupled Emission at Ultraviolet Wavelengths. Journal of Physical Chemistry C, 2016, 120, 28727-28734.	3.1	41
29	Ophthalmic glucose sensing: a novel monosaccharide sensing disposable and colorless contact lens. Analyst, The, 2004, 129, 516.	3.5	40
30	Selective and sensitive detection of MiRNA-21 based on gold-nanorod functionalized polydiacetylene microtube waveguide. Biosensors and Bioelectronics, 2016, 85, 198-204.	10.1	40
31	Anion Sensing Using Quinolinium Based Boronic Acid Probes. Current Analytical Chemistry, 2005, 1, 157-170.	1.2	40
32	Glucose-sensitive silicone hydrogel contact lens toward tear glucose monitoring. Journal of Biomedical Optics, 2018, 23, 1.	2.6	39
33	Back focal plane imaging of directional emission from dye molecules coupled to one-dimensional photonic crystals. Nanotechnology, 2014, 25, 145202.	2.6	38
34	Tamm plasmon- and surface plasmon-coupled emission from hybrid plasmonicâ€“photonic structures. Optica, 2014, 1, 407.	9.3	36
35	Metalâ€“Dielectric Waveguides for High-Efficiency Coupled Emission. ACS Photonics, 2015, 2, 810-815.	6.6	33
36	Development and application of an excitation ratiometric optical pH sensor for bioprocess monitoring. Biotechnology Progress, 2008, 24, 1393-1401.	2.6	32

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37	Tuning Fluorescence Direction with Plasmonic Metalâ€“Dielectricâ€“Metal Substrates. Journal of Physical Chemistry Letters, 2013, 4, 227-232.	4.6	31
38	Wavelengthâ€“Ratiometric Probes for the Selective Detection of Fluoride Based on the 6-Aminoquinolinium Nucleus and Boronic Acid Moiety. Journal of Fluorescence, 2004, 14, 693-703.	2.5	30
39	Fabrication and Characterization of Planar Plasmonic Substrates with High Fluorescence Enhancement. Journal of Physical Chemistry C, 2010, 114, 21142-21149.	3.1	30
40	Wavelength-ratiometric near-physiological pH sensors based on 6-aminoquinolinium boronic acid probes. Talanta, 2005, 66, 569-574.	5.5	25
41	Effect of metal film thickness on Tamm plasmon-coupled emission. Physical Chemistry Chemical Physics, 2014, 16, 25523-25530.	2.8	25
42	Langmuirâ’Blodgett Monolayers of Long-Chain NBD Derivatives on Silver Island Films:â€‰ Well-Organized Probe Layer for the Metal-Enhanced Fluorescence Studies. Journal of Physical Chemistry B, 2006, 110, 13499-13507.	2.6	23
43	A wavelength-ratiometric pH sensitive probe based on the boronic acid moiety and suppressed sugar response. Dyes and Pigments, 2004, 61, 227-234.	3.7	22
44	Steering Fluorescence Emission with Metal-Dielectric-Metal Structures of Au, Ag, and Al. Journal of Physical Chemistry C, 2013, 117, 15798-15807.	3.1	22
45	Tamm State-Coupled Emission: Effect of Probe Location and Emission Wavelength. Journal of Physical Chemistry C, 2014, 118, 21558-21571.	3.1	21
46	Large Fluorescence Enhancements of Fluorophore Ensembles with Multilayer Plasmonic Substrates: Comparison of Theory and Experimental Results. Journal of Physical Chemistry C, 2012, 116, 21563-21571.	3.1	20
47	Wavelength-ratiometric and colorimetric probes for glucose determination. Dyes and Pigments, 2006, 68, 159-163.	3.7	18
48	Back focal plane imaging of Tamm plasmons and their coupled emission. Laser and Photonics Reviews, 2014, 8, 933-940.	8.7	18
49	Fluorescence Spectroscopy with Metalâ€“Dielectric Waveguides. Journal of Physical Chemistry C, 2015, 119, 16245-16255.	3.1	18
50	Selectable Surface and Bulk Fluorescence Imaging with Plasmon-Coupled Waveguides. Journal of Physical Chemistry C, 2015, 119, 22131-22136.	3.1	17
51	Silver Nanowires for Reconfigurable Bloch Surface Waves. ACS Nano, 2017, 11, 10446-10451.	14.6	17
52	Bloch surface wave-coupled emission from quantum dots by ensemble and single molecule spectroscopy. RSC Advances, 2015, 5, 54403-54411.	3.6	16
53	Surface-plasmon induced polarized emission from Eu(iii) â€“ a class of luminescent lanthanide ions. Chemical Communications, 2014, 50, 9010.	4.1	15
54	Coupling of Fluorophores in Single Nanoapertures with Tamm Plasmon Structures. Journal of Physical Chemistry C, 2019, 123, 1413-1420.	3.1	15

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55	Active Polymer Microfiber with Controlled Polarization Sensitivity. Advanced Optical Materials, 2016, 4, 371-377.	7.3	13
56	Fluorescent contact lens for continuous non-invasive measurements of sodium and chloride ion concentrations in tears. Analytical Biochemistry, 2020, 608, 113902.	2.4	12
57	Directional Emission from Metalâ€“Dielectricâ€“Metal Structures: Effect of Mixed Metal Layers, Dye Location, and Dielectric Thickness. Journal of Physical Chemistry C, 2015, 119, 3302-3311.	3.1	11
58	Metalâ€“Dielectric Waveguides for High Efficiency Fluorescence Imaging. Journal of Physical Chemistry C, 2015, 119, 24081-24085.	3.1	11
59	Manipulating Propagation Constants of Silver Nanowire Plasmonic Waveguide Modes Using a Dielectric Multilayer Substrate. Applied Sciences (Switzerland), 2018, 8, 144.	2.5	10
60	Nanoscaled ZnO films used as enhanced substrates for fluorescence detection of dyes. Chinese Physics B, 2012, 21, 037803.	1.4	9
61	Radiative decay engineering 8: Coupled emission microscopy for lens-free high-throughput fluorescence detection. Analytical Biochemistry, 2017, 531, 20-36.	2.4	9
62	Sodium-sensitive contact lens for diagnostics of ocular pathologies. Sensors and Actuators B: Chemical, 2021, 331, 129434.	7.8	9
63	Polymer-loaded propagating modes on a one-dimensional photonic crystal. Applied Physics Letters, 2014, 104, 061115.	3.3	7
64	Fluorophore Coupling to Internal Modes of Bragg Gratings. Journal of Physical Chemistry C, 2020, 124, 22743-22752.	3.1	6
65	Extracting surface wave-coupled emission with subsurface dielectric gratings. Optics Letters, 2014, 39, 4341.	3.3	5
66	Fluorescence coupling to internal modes of 1D photonic crystals characterized by back focal plane imaging. Journal of Optics (United Kingdom), 2021, 23, 035001.	2.2	5
67	Development of Efficient Fluorosensors for the Transition Metal Ions by Tuning of Photoinduced Intramolecular Electron Transfer (PIET) Communication between the Components. Chemistry Letters, 2002, 31, 52-53.	1.3	3
68	Out-of-focal plane imaging by leakage radiation microscopy. Journal of Optics (United Kingdom), 2017, 19, 095004.	2.2	3
69	Editorial: Progress in Glucose Sensing. Journal of Fluorescence, 2004, 14, 475.	2.5	2
70	Ophthalmic Glucose Monitoring Using Disposable Contact Lenses. , 2005, 2005, 363-397.		2
71	Celebrating 15 years of publishing excellence: No. 3. Journal of Fluorescence, 2006, 16, 1-1.	2.5	2
72	Imaging optical fields below metal films and metal-dielectric waveguides by a scanning microscope. Journal of Applied Physics, 2017, 122, 113101.	2.5	2

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73	Metal-Ion Induced Intramolecular Charge-Transfer Fluorescence ofp-Pentamethyldisilanylacetophenone. Chemistry Letters, 2002, 31, 242-243.	1.3	1
74	Conversion of isotropic fluorescence into a long-range non-diverging beam. Methods and Applications in Fluorescence, 2018, 6, 024003.	2.3	1
75	Converting the guided modes of Bloch surface waves with the surface pattern. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1579.	2.1	1
76	Advances in Anion Sensing. Journal of Fluorescence, 2004, 14, 665.	2.5	0
77	Analytical techniques. Current Opinion in Chemical Biology, 2005, 9, 488.	6.1	0