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	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
2	Sodium-sensitive contact lens for diagnostics of ocular pathologies. Sensors and Actuators B: Chemical, 2021, 331, 129434.	7.8	9
3	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
4	Fluorophore Coupling to Internal Modes of Bragg Gratings. Journal of Physical Chemistry C, 2020, 124, 22743-22752.	3.1	6
5	Fluorescent contact lens for continuous non-invasive measurements of sodium and chloride ion concentrations in tears. Analytical Biochemistry, 2020, 608, 113902.	2.4	12
6	Coupling of Fluorophores in Single Nanoapertures with Tamm Plasmon Structures. Journal of Physical Chemistry C, 2019, 123, 1413-1420.	3.1	15
7	Extending the Propagation Distance of a Silver Nanowire Plasmonic Waveguide with a Dielectric Multilayer Substrate. Nano Letters, 2018, 18, 1152-1158.	9.1	47
8	Contact lens to measure individual ion concentrations in tears and applications to dry eye disease. Analytical Biochemistry, 2018, 542, 84-94.	2.4	46
9	Conversion of isotropic fluorescence into a long-range non-diverging beam. Methods and Applications in Fluorescence, 2018, 6, 024003.	2.3	1
10	Manipulating Propagation Constants of Silver Nanowire Plasmonic Waveguide Modes Using a Dielectric Multilayer Substrate. Applied Sciences (Switzerland), 2018, 8, 144.	2.5	10
11	Glucose-sensitive silicone hydrogel contact lens toward tear glucose monitoring. Journal of Biomedical Optics, 2018, 23, 1.	2.6	39
12	Bloch surface waves confined in one dimension with a single polymeric nanofibre. Nature Communications, 2017, 8, 14330.	12.8	49
13	Diffraction-Free Bloch Surface Waves. ACS Nano, 2017, 11, 5383-5390.	14.6	52
14	Radiative decay engineering 8: Coupled emission microscopy for lens-free high-throughput fluorescence detection. Analytical Biochemistry, 2017, 531, 20-36.	2.4	9
15	Out-of-focal plane imaging by leakage radiation microscopy. Journal of Optics (United Kingdom), 2017, 19, 095004.	2.2	3
16	Silver Nanowires for Reconfigurable Bloch Surface Waves. ACS Nano, 2017, 11, 10446-10451.	14.6	17
17	Imaging optical fields below metal films and metal-dielectric waveguides by a scanning microscope. Journal of Applied Physics, 2017, 122, 113101.	2.5	2
18	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

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19	Bloch Surface Wave-Coupled Emission at Ultraviolet Wavelengths. Journal of Physical Chemistry C, 2016, 120, 28727-28734.	3.1	41
20	Active Polymer Microfiber with Controlled Polarization Sensitivity. Advanced Optical Materials, 2016, 4, 371-377.	7.3	13
21	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
22	Metalâ€“Dielectric Waveguides for High-Efficiency Coupled Emission. ACS Photonics, 2015, 2, 810-815.	6.6	33
23	Fluorescence Spectroscopy with Metalâ€“Dielectric Waveguides. Journal of Physical Chemistry C, 2015, 119, 16245-16255.	3.1	18
24	Bloch surface wave-coupled emission from quantum dots by ensemble and single molecule spectroscopy. RSC Advances, 2015, 5, 54403-54411.	3.6	16
25	Directing Fluorescence with Plasmonic and Photonic Structures. Accounts of Chemical Research, 2015, 48, 2171-2180.	15.6	79
26	Selectable Surface and Bulk Fluorescence Imaging with Plasmon-Coupled Waveguides. Journal of Physical Chemistry C, 2015, 119, 22131-22136.	3.1	17
27	Metalâ€“Dielectric Waveguides for High Efficiency Fluorescence Imaging. Journal of Physical Chemistry C, 2015, 119, 24081-24085.	3.1	11
28	Tamm plasmon- and surface plasmon-coupled emission from hybrid plasmonicâ€“photonic structures. Optica, 2014, 1, 407.	9.3	36
29	Polymer-loaded propagating modes on a one-dimensional photonic crystal. Applied Physics Letters, 2014, 104, 061115.	3.3	7
30	Radiative decay engineering 7: Tamm state-coupled emission using a hybrid plasmonicâ€“photonic structure. Analytical Biochemistry, 2014, 445, 1-13.	2.4	58
31	Back focal plane imaging of Tamm plasmons and their coupled emission. Laser and Photonics Reviews, 2014, 8, 933-940.	8.7	18
32	Effect of metal film thickness on Tamm plasmon-coupled emission. Physical Chemistry Chemical Physics, 2014, 16, 25523-25530.	2.8	25
33	Surface-plasmon induced polarized emission from Eu(iii) â€“ a class of luminescent lanthanide ions. Chemical Communications, 2014, 50, 9010.	4.1	15
34	Back focal plane imaging of directional emission from dye molecules coupled to one-dimensional photonic crystals. Nanotechnology, 2014, 25, 145202.	2.6	38
35	Extracting surface wave-coupled emission with subsurface dielectric gratings. Optics Letters, 2014, 39, 4341.	3.3	5
36	Tamm State-Coupled Emission: Effect of Probe Location and Emission Wavelength. Journal of Physical Chemistry C, 2014, 118, 21558-21571.	3.1	21

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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	Radiative decay engineering 6: Fluorescence on one-dimensional photonic crystals. Analytical Biochemistry, 2013, 442, 83-96.	2.4	71
39	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
40	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
41	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
42	Nanoscaled ZnO films used as enhanced substrates for fluorescence detection of dyes. Chinese Physics B, 2012, 21, 037803.	1.4	9
43	Fabrication and Characterization of Planar Plasmonic Substrates with High Fluorescence Enhancement. Journal of Physical Chemistry C, 2010, 114, 21142-21149.	3.1	30
44	Fluorescence Quenching of CdTe Nanocrystals by Bound Gold Nanoparticles in Aqueous Solution. Plasmonics, 2008, 3, 3-11.	3.4	52
45	Development and application of an excitation ratiometric optical pH sensor for bioprocess monitoring. Biotechnology Progress, 2008, 24, 1393-1401.	2.6	32
46	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
47	Polyelectrolyte Layer-by-Layer Assembly To Control the Distance between Fluorophores and Plasmonic Nanostructures. Chemistry of Materials, 2007, 19, 5902-5909.	6.7	133
48	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
49	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
50	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
51	Celebrating 15 years of publishing excellence: No. 3. Journal of Fluorescence, 2006, 16, 1-1.	2.5	2
52	Wavelength-ratiometric and colorimetric probes for glucose determination. Dyes and Pigments, 2006, 68, 159-163.	3.7	18
53	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
54	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

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55	Analytical techniques. Current Opinion in Chemical Biology, 2005, 9, 488.	6.1	0
56	A glucose-sensing contact lens: from bench top to patient. Current Opinion in Biotechnology, 2005, 16, 100-107.	6.6	93
57	Cyanide-sensitive fluorescent probes. Dyes and Pigments, 2005, 64, 49-55.	3.7	110
58	Fluorescence Sensor Design for Transition Metal Ions: The Role of the PIET Interaction Efficiency. Journal of Fluorescence, 2005, 15, 71-83.	2.5	53
59	Metal-Enhanced Fluorescence from Plastic Substrates. Journal of Fluorescence, 2005, 15, 99-104.	2.5	54
60	Ophthalmic Glucose Monitoring Using Disposable Contact Lenses. , 2005, 2005, 363-397.		2
61	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
62	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
63	Wavelength-ratiometric near-physiological pH sensors based on 6-aminoquinolinium boronic acid probes. Talanta, 2005, 66, 569-574.	5.5	25
64	Anion Sensing Using Quinolinium Based Boronic Acid Probes. Current Analytical Chemistry, 2005, 1, 157-170.	1.2	40
65	Ophthalmic glucose sensing: a novel monosaccharide sensing disposable and colorless contact lens. Analyst, The, 2004, 129, 516.	3.5	40
66	Advances in Surface-Enhanced Fluorescence. Journal of Fluorescence, 2004, 14, 425-441.	2.5	293
67	Ophthalmic Glucose Monitoring Using Disposable Contact Lensesâ€"A Review. Journal of Fluorescence, 2004, 14, 617-633.	2.5	83
68	Editorial: Progress in Glucose Sensing. Journal of Fluorescence, 2004, 14, 475.	2.5	2
69	Advances in Anion Sensing. Journal of Fluorescence, 2004, 14, 665.	2.5	0
70	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
71	Excitation and emission wavelength ratiometric cyanide-sensitive probes for physiological sensing. Analytical Biochemistry, 2004, 327, 82-90.	2.4	81
72	Fluorescence intensity and lifetime-based cyanide sensitive probes for physiological safeguard. Analytica Chimica Acta, 2004, 522, 9-17.	5.4	63

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73	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
74	Noninvasive Continuous Monitoring of Physiological Glucose Using a Monosaccharide-Sensing Contact Lens. Analytical Chemistry, 2004, 76, 610-618.	6.5	142
75	A Glucose Sensing Contact Lens: A Non-Invasive Technique for Continuous Physiological Glucose Monitoring. Journal of Fluorescence, 2003, 13, 371-374.	2.5	102
76	Metal-Ion Induced Intramolecular Charge-Transfer Fluorescence ofp-Pentamethyldisilanylacetophenone. Chemistry Letters, 2002, 31, 242-243.	1.3	1
77	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