Anuj Sharma

List of Publications by Year
in descending order

98 papers	3,432 citations	218677 26 h-index	144013 57 g-index
99 all docs	99 docs citations	99 times ranked	2288 citing authors

#	Article	IF	Citations
1	Tunable and enhanced performance of graphene-assisted plasmonic sensor with photonic spin Hall effect in near infrared: analysis founded on grapheneâ€™s chemical potential and components of light polarization. Journal Physics D: Applied Physics, 2022, 55, 095102.	2.8	5
2	On the application of MoS2 monolayer for enhanced performance in metallic grating based plasmonic sensor structure. Optical and Quantum Electronics, 2022, 54, 1.	3.3	4
3	Graphene-Based Plasmonic Sensor at THz Frequency with Photonic Spin Hall Effect Assisted by Magneto-optic Phenomenon. Plasmonics, 2022, 17, 957-963.	3.4	8
4	Graphene-Based Plasmonic Detection of Magnetic Field and Gaseous Medium with Photonic Spin Hall Effect in a Broad Terahertz Region. Journal of Electronic Materials, 2022, 51, 2889-2899.	2.2	4
5	Plasmonics-based gas sensor with photonic spin hall effect in broad terahertz frequency range under variable chemical potential of graphene. Optical and Quantum Electronics, 2022, 54, 328.	3.3	3
6	On the Application of Stacked Periodic Tungsten Grating Nanostructure in Wide-Range Plasmonic Sensing and Other Photonic Devices. Plasmonics, 2021, 16, 9-17.	3.4	12
7	Resonant interaction between a core mode and two complementary supermodes in a honeycomb PCF reflector-based SPR sensor. Optik, 2021, 227, 166121.	2.9	7
8	Fiber optic biosensors with enhanced performance assisted by two-dimensional (2D) materials. , 2021, , 429-447.		0
9	Blue phosphorene/two-dimensional material heterostructure: Properties and refractive index sensing perspectives. , 2021, , 3-14.		1
10	Magnetic field sensor with truncated honeycomb photonic crystal fiber: analysis under the variations in magnetic fluid composition and temperature for high performance in near infrared. Optical and Quantum Electronics, 2021, 53, 1.	3.3	10
11	Advancements in Grating Nanostructure Based Plasmonic Sensors in Last Two Decades: A Review. IEEE Sensors Journal, 2021, 21, 12633-12644.	4.7	11
12	On the sensitivity-enhancement in plasmonic biosensor with photonic spin Hall effect at visible wavelength. Chemical Physics Letters, 2021, 774, 138613.	2.6	32
13	Plasmonic sensor for magnetic field detection with chalcogenide glass and ferrofluid materials under thermal variation in near infrared. Optical Materials, 2021, 117, 111175.	3.6	5
14	On the sensing performance enhancement in SPR-based Biosensor using specific two-dimensional materials (Borophene and Antimonene). Optical Materials, 2021, 119, 111355.	3.6	26
15	Theoretical analysis of sensitivity enhancement of surface plasmon resonance biosensor with zinc oxide and blue phosphorus/MoS2 heterostructure. Optik, 2021, 244, 167618.	2.9	30
16	Highly Sensitive Magnetic Field Detection in Infrared Region With Photonic Spin Hall Effect in Silicon Waveguide Plasmonic Sensor. IEEE Transactions on Magnetics, 2021, 57, 1-10.	2.1	12
17	Metal Oxide Grating Based Plasmonic Refractive Index Sensor With Si Layer in Optical Communication Band. IEEE Sensors Journal, 2020, 20, 1275-1282.	4.7	19
18	New Plasmonic Biosensors for Determination of Human Hemoglobin Concentration in Blood. Sensing and Imaging, 2020, 21, 1.	1.5	5

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19	Simulation and analysis of 2D material/metal carbide based fiber optic SPR probe for ultrasensitive cortisol detection. Optik, 2020, 218, 164891.	2.9	23
20	On the role of different 2D materials/heterostructures in fiber-optic SPR humidity sensor in visible spectral region. Optical Materials, 2020, 102, 109824.	3.6	22
21	Au grating on SiC substrate: simulation of high performance plasmonic Schottky barrier photodetector in visible and NIR regions. Journal Physics D: Applied Physics, 2020, 53, 175103.	2.8	11
22	On The Application of SiO2/SiC Grating on Ag for High-Performance Fiber Optic Plasmonic Sensing of Cortisol Concentration. Materials, 2020, 13, 1623.	2.9	38
23	Simulation study on fluoride fiber SPR sensor with multilayer arrangements of graphene under thermal variation of radiation damping in NIR. , 2020, , .		2
24	Schottky barrier photodetector utilizing tungsten grating nanostructure. Journal of Nanophotonics, 2020, 14, .	1.0	2
25	Simulation and Comprehensive Analysis of Fluoride Fiber SPR Sensor With Multilayer Variants of 2D Materials (Graphene and MoS₂) Under Optimum Radiation Damping in NIR. IEEE Sensors Journal, 2019, 19, 8775-8780.	4.7	4
26	SPR Sensing Enhancement with Dynamic Radiative Damping Stimulated by Graphene Conductivity Under Temperature Variation in NIR. Plasmonics, 2019, 14, 1839-1842.	3.4	1
27	Simulation and analysis of different approaches towards fiber optic plasmonic sensing for detection of human-liver tissues. Optical and Quantum Electronics, 2019, 51, 1.	3.3	4
28	Fluoride Fiber Sensor With Huge Performance Enhancement via Optimum Radiative Damping at Agâ€“Al₂O₃â€“Graphene Heterojunction on Silicon. Journal of Lightwave Technology, 2019, 37, 5641-5646.	4.6	10
29	Simulation of Multilayered Heterojunction-Based Chalcogenide Fiber SPR Sensor With Ultrahigh Figure of Merit in Near Infrared. IEEE Sensors Journal, 2019, 19, 4074-4078.	4.7	10
30	Evanescent absorption based fluoride fiber sensing enhancement led by doped grapheneâ€™s thermo-optic dispersion in NIR. Optical and Quantum Electronics, 2019, 51, 1.	3.3	1
31	Design and analysis of plasmonic sensor in communication band with gold grating on nitride substrate. Superlattices and Microstructures, 2019, 130, 369-376.	3.1	32
32	Fluoride Fiber-Based Plasmonic Biosensor with Two-Dimensional Material Heterostructures: Enhancement of Overall Figure-of-Merit via Optimization of Radiation Damping in Near Infrared Region. Materials, 2019, 12, 1542.	2.9	16
33	Design and Performance Perspectives on Fiber Optic Sensors With Plasmonic Nanostructures and Gratings: A Review. IEEE Sensors Journal, 2019, 19, 7168-7178.	4.7	80
34	Multilayered evanescent wave absorption based fluoride fiber sensor with 2D material and amorphous silicon layers for enhanced sensitivity and resolution in near infrared. Optical Fiber Technology, 2019, 50, 277-283.	2.7	6
35	Fiber optic evanescent wave absorption-based sensors: A detailed review of advancements in the last decade (2007â€“18). Optik, 2019, 183, 1008-1025.	2.9	43
36	Fluoride fiber plasmonic sensor with multilayer variants of tungsten disulfide (WS2): Seeking enhanced figure-of-merit via thermo-optic tuning of radiation damping. Optical Fiber Technology, 2019, 53, 102037.	2.7	3

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37	SPR-based fiber optic sensor in NIR region. , 2019, , .		1
38	Simulation study on comprehensive sensing enhancement of BlueP/MoS₂- and BlueP/WS₂-based fluoride fiber surface plasmon resonance sensors: analysis founded on damping, field, and optical power. Applied Optics, 2019, 58, 4518.	1.8	10
39	Self-referenced plasmonic sensor with TiO₂ grating on thin Au layer: simulated performance analysis in optical communication band. Journal of the Optical Society of America B: Optical Physics, 2019, 36, F25.	2.1	39
40	Blue Phosphorene/MoS₂Heterostructure Based SPR Sensor With Enhanced Sensitivity. IEEE Photonics Technology Letters, 2018, 30, 595-598.	2.5	73
41	Graphene based chalcogenide fiber-optic evanescent wave sensor for detection of hemoglobin in human blood. Optical Fiber Technology, 2018, 41, 125-130.	2.7	30
42	Influence of Chemical Potential on Graphene-Based SPR Sensorâ€™s Performance. IEEE Photonics Technology Letters, 2018, 30, 95-98.	2.5	24
43	Simulation and analysis of Au-MgF2 structure in plasmonic sensor in near infrared spectral region. Optics and Laser Technology, 2018, 101, 491-498.	4.6	11
44	Simulation and analysis of plasmonic sensor in NIR with fluoride glass and graphene layer. Photonics and Nanostructures - Fundamentals and Applications, 2018, 28, 94-99.	2.0	39
45	Fiber Optic Sensorâ€™s Performance Enhancement by Tuning NIR Wavelength, Polarization, and 2D Material. IEEE Photonics Technology Letters, 2018, 30, 1087-1090.	2.5	6
46	A Review of advancements (2007â€“2017) in plasmonics-based optical fiber sensors. Optical Fiber Technology, 2018, 43, 20-34.	2.7	150
47	Analyzing the effect of graphene's chemical potential on the performance of a plasmonic sensor in infrared. Solid State Communications, 2018, 275, 58-62.	1.9	7
48	Fluoride Fiber-Optic SPR Sensor With Graphene and NaF Layers: Analysis of Accuracy, Sensitivity, and Specificity in Near Infrared. IEEE Sensors Journal, 2018, 18, 4053-4058.	4.7	19
49	Analyzing the application of siliconâ€“silverâ€“2D nanomaterialâ€“Al2O3 heterojunction in plasmonic sensor and its performance evaluation. Optics Communications, 2018, 410, 75-82.	2.1	12
50	Simulation and performance evaluation of fiber optic sensor for detection of hepatic malignancies in human liver tissues. Optics and Laser Technology, 2018, 98, 291-297.	4.6	10
51	Simulation and analysis of 2D material (MoS2/MoSe2) based plasmonic sensor for measurement of organic compounds in infrared. Optik, 2018, 157, 161-169.	2.9	19
52	Coordinated Tuning of Grapheneâ€™s Chemical Potential With NIR Wavelength and Temperature Under Kubo Framework for Enhanced Performance of SPR-Based Chemical Sensor. IEEE Sensors Journal, 2018, 18, 9207-9213.	4.7	0
53	Fiber Optic SPR Sensing Enhancement in NIR via Optimum Radiation Damping Catalyzed by 2D Materials. IEEE Photonics Technology Letters, 2018, 30, 2021-2024.	2.5	15
54	Plasmonic Biosensor in NIR with Chalcogenide Glass Material: On the Role of Probe Geometry, Wavelength, and 2D Material. Sensing and Imaging, 2018, 19, 1.	1.5	8

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55	Fluoride fiber optic SPR sensor with enhanced performance: Simulation and analysis within the framework of Kubo formulation for graphene. Optical Fiber Technology, 2018, 45, 405-410.	2.7	1
56	Chalcogenide fiber-optic SPR chemical sensor with MoS2 monolayer, polymer clad, and polythiophene layer in NIR using selective ray launching. Optical Fiber Technology, 2018, 43, 163-168.	2.7	28
57	Enhancement in performance of an evanescent wave fiber optic sensor in the near-infrared region by grapheneâ€™s chemical potential. Photonics and Nanostructures - Fundamentals and Applications, 2018, 31, 147-153.	2.0	10
58	Resonant interaction between two core modes in a plasmonic biosensor based on a birefringent solid-core microstructured optical fiber. OSA Continuum, 2018, 1, 496.	1.8	1
59	Fluoride glass-based surface plasmon resonance sensor in infrared region: performance evaluation. Journal Physics D: Applied Physics, 2017, 50, 185103.	2.8	18
60	Characteristics of heterojunction phototransistors with Ge<inf>1â^'x</inf>Sn<inf>x</inf> multiple quantum wells in the base. , 2017, , .		0
61	On the performance of graphene based plasmonic biosensor with bimetallic combination on 2S2G prism. , 2016, , .		1
62	Investigation of CaF<inf>2</inf> substrate based plasmonic gas sensor in IR. , 2016, , .		1
63	Simulated characteristics of a heterojunction phototransistor with Ge_{1-x}Sn_x alloy as base. Optical Engineering, 2016, 55, 127103.	1.0	11
64	Investigating the use of AlN substrate in plasmon-based optical sensor: performance evaluation. Optical and Quantum Electronics, 2016, 48, 1.	3.3	1
65	Plasmonic optical sensor for determination of refractive index of human skin tissues. Sensors and Actuators B: Chemical, 2016, 226, 312-317.	7.8	13
66	AlN substrate based plasmonic sensor for saline water temperature determination. , 2016, , .		0
67	Co-creation as a risk-sharing strategy for the development of innovative EUV lithography technology in the semiconductor industry. Technology Analysis and Strategic Management, 2015, 27, 1097-1113.	3.5	6
68	Model of a Plasmonic Phase Interrogation Probe for Optical Sensing of Hemoglobin in Blood Samples. Sensing and Imaging, 2015, 16, 1.	1.5	3
69	Improving unsustainable livelihood through marketing interventions. Journal of Management Development, 2014, 33, 107-118.	2.1	1
70	Design of a silicon-based plasmonic optical sensor for magnetic field monitoring in the infrared. Applied Physics B: Lasers and Optics, 2014, 117, 363-368.	2.2	13
71	Plasmonic biosensor for detection of hemoglobin concentration in human blood: Design considerations. Journal of Applied Physics, 2013, 114, .	2.5	45
72	Design of a plasmonic optical sensor probe for humidity-monitoring. Sensors and Actuators B: Chemical, 2013, 188, 867-871.	7.8	19

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73	Design considerations for plasmonic-excitation based optical detection of liquid and gas media in infrared. Sensors and Actuators A: Physical, 2011, 165, 271-275.	4.1	12
74	Design of a silicon-based plasmonic biosensor chip for human blood-group identification. Sensors and Actuators B: Chemical, 2010, 145, 200-204.	7.8	22
75	Design considerations for surface plasmon resonance based detection of human blood group in near infrared. Journal of Applied Physics, 2010, 107, .	2.5	27
76	On the Application of Different Bimetallic Alloy Nanoparticle Combinations in Fiber Optic Surface Plasmon Resonance Salinity Sensor and Its Performance Optimization Against Thermal Effects. Journal of Nanoscience and Nanotechnology, 2010, 10, 3145-3154.	0.9	8
77	Highly accurate surface plasmon resonance based fiber optic sensor as a human blood group identifier. , 2010, , .		1
78	Surface plasmon resonance-based gas sensor with chalcogenide glass and bimetallic alloy nanoparticle layer. Journal of Applied Physics, 2009, 106, .	2.5	24
79	Design considerations for surface plasmon resonance-based fiber-optic detection of human blood group. Journal of Biomedical Optics, 2009, 14, 064041.	2.6	19
80	High-performance sensor based on surface plasmon resonance with chalcogenide prism and aluminum for detection in infrared. Optics Letters, 2009, 34, 749.	3.3	134
81	On the temperature sensing capability of a fibre optic SPR mechanism based on bimetallic alloy nanoparticles. Journal Physics D: Applied Physics, 2009, 42, 045104.	2.8	14
82	Chalcogenide glass prism based SPR sensor with Agâ€“Au bimetallic nanoparticle alloy in infrared wavelength region. Journal of Optics, 2009, 11, 045502.	1.5	86
83	Surface plasmon resonance based tapered fiber optic sensor with different taper profiles. Optics Communications, 2008, 281, 1486-1491.	2.1	165
84	Theoretical understanding of an alternating dielectric multilayer-based fiber optic SPR sensor and its application to gas sensing. New Journal of Physics, 2008, 10, 023039.	2.9	25
85	On the performance of surface plasmon resonance based fibre optic sensor with different bimetallic nanoparticle alloy combinations. Journal Physics D: Applied Physics, 2008, 41, 055106.	2.8	78
86	Sensitivity Enhancement of a SPR Based Fiber Optic Sensor by using a Tapered Probe. , 2008, , .		0
87	Influence of skew rays on the sensitivity and signal-to-noise ratio of a fiber-optic surface-plasmon-resonance sensor: a theoretical study. Applied Optics, 2007, 46, 4563.	2.1	40
88	On the performance of different bimetallic combinations in surface plasmon resonance based fiber optic sensors. Journal of Applied Physics, 2007, 101, 093111.	2.5	276
89	Metalâ€“semiconductor nanocomposite layer based optical fibre surface plasmon resonance sensor. Journal of Optics, 2007, 9, 180-185.	1.5	26
90	Modeling of Tapered Fiber-Optic Surface Plasmon Resonance Sensor With Enhanced Sensitivity. IEEE Photonics Technology Letters, 2007, 19, 1786-1788.	2.5	62

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91	Fibre optic sensor based on long-range surface plasmon resonance: a theoretical analysis. Journal of Optics, 2007, 9, 682-687.	1.5	31
92	Fiber-Optic Sensors Based on Surface Plasmon Resonance: A Comprehensive Review. IEEE Sensors Journal, 2007, 7, 1118-1129.	4.7	824
93	Influence of dopants on the performance of a fiber optic surface plasmon resonance sensor. Optics Communications, 2007, 274, 320-326.	2.1	90
94	Comparison of Performance Parameters of Conventional and Nano-plasmonic Fiber Optic Sensors. Plasmonics, 2007, 2, 51-54.	3.4	26
95	Fibre-optic sensor based on surface plasmon resonance with Agâ€“Au alloy nanoparticle films. Nanotechnology, 2006, 17, 124-131.	2.6	133
96	Influence of temperature on the sensitivity and signal-to-noise ratio of a fiber-optic surface-plasmon resonance sensor. Applied Optics, 2006, 45, 151.	2.1	69
97	Theoretical model of a fiber optic remote sensor based on surface plasmon resonance for temperature detection. Optical Fiber Technology, 2006, 12, 87-100.	2.7	91
98	Fiber Optic Temperature Sensor Based On Surface Plasmon Resonance. , 2006, , .		0