

Jiri Homola

List of Publications by Year in descending order

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221
papers

24,928
citations

14655

66
h-index

6836

155
g-index

226
all docs

226
docs citations

226
times ranked

17447
citing authors

#	ARTICLE	IF	CITATIONS
1	Surface plasmon resonance sensors: review. <i>Sensors and Actuators B: Chemical</i> , 1999, 54, 3-15.	7.8	4,817
2	Surface Plasmon Resonance Sensors for Detection of Chemical and Biological Species. <i>Chemical Reviews</i> , 2008, 108, 462-493.	47.7	3,658
3	Present and future of surface plasmon resonance biosensors. <i>Analytical and Bioanalytical Chemistry</i> , 2003, 377, 528-539.	3.7	1,966
4	Surface plasmon resonance (SPR) sensors: approaching their limits?. <i>Optics Express</i> , 2009, 17, 16505.	3.4	601
5	Surface plasmon resonance sensors based on diffraction gratings and prism couplers: sensitivity comparison. <i>Sensors and Actuators B: Chemical</i> , 1999, 54, 16-24.	7.8	574
6	Ultralow Fouling and Functionalizable Surface Chemistry Based on a Zwitterionic Polymer Enabling Sensitive and Specific Protein Detection in Undiluted Blood Plasma. <i>Analytical Chemistry</i> , 2008, 80, 7894-7901.	6.5	381
7	On the sensitivity of surface plasmon resonance sensors with spectral interrogation. <i>Sensors and Actuators B: Chemical</i> , 1997, 41, 207-211.	7.8	334
8	Advances and applications of nanophotonic biosensors. <i>Nature Nanotechnology</i> , 2022, 17, 5-16.	31.5	308
9	Spectral surface plasmon resonance biosensor for detection of staphylococcal enterotoxin B in milk. <i>International Journal of Food Microbiology</i> , 2002, 75, 61-69.	4.7	301
10	Optical Biosensors Based on Plasmonic Nanostructures: A Review. <i>Proceedings of the IEEE</i> , 2016, 104, 2380-2408.	21.3	297
11	Quantitative and simultaneous detection of four foodborne bacterial pathogens with a multi-channel SPR sensor. <i>Biosensors and Bioelectronics</i> , 2006, 22, 752-758.	10.1	274
12	Detection of foodborne pathogens using surface plasmon resonance biosensors. <i>Sensors and Actuators B: Chemical</i> , 2001, 74, 100-105.	7.8	261
13	Long-range surface plasmons for high-resolution surface plasmon resonance sensors. <i>Sensors and Actuators B: Chemical</i> , 2001, 74, 145-151.	7.8	258
14	Surface plasmon resonance biosensor based on integrated optical waveguide. <i>Sensors and Actuators B: Chemical</i> , 2001, 76, 8-12.	7.8	250
15	Ultrahigh resolution long range surface plasmon-based sensor. <i>Sensors and Actuators B: Chemical</i> , 2007, 123, 10-12.	7.8	248
16	Novel spectral fiber optic sensor based on surface plasmon resonance. <i>Sensors and Actuators B: Chemical</i> , 2001, 74, 106-111.	7.8	230
17	Surface plasmon resonance sensing of nucleic acids: A review. <i>Analytica Chimica Acta</i> , 2013, 773, 9-23.	5.4	228
18	Surface plasmon resonance sensor based on a single-mode polarization-maintaining optical fiber. <i>Sensors and Actuators B: Chemical</i> , 2003, 90, 236-242.	7.8	226

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19	High-throughput SPR sensor for food safety. <i>Biosensors and Bioelectronics</i> , 2009, 24, 1399-1404.	10.1	211
20	Optical fiber sensor based on surface plasmon excitation. <i>Sensors and Actuators B: Chemical</i> , 1995, 29, 401-405.	7.8	195
21	Low-fouling surface plasmon resonance biosensor for multi-step detection of foodborne bacterial pathogens in complex food samples. <i>Biosensors and Bioelectronics</i> , 2016, 80, 84-90.	10.1	190
22	Surface Plasmon Resonance Biosensor for Rapid Label-Free Detection of Microribonucleic Acid at Subfemtomole Level. <i>Analytical Chemistry</i> , 2010, 82, 10110-10115.	6.5	188
23	Multi-analyte surface plasmon resonance biosensing. <i>Methods</i> , 2005, 37, 26-36.	3.8	183
24	Surface Plasmon Resonance Biosensing. <i>Methods in Molecular Biology</i> , 2009, 503, 65-88.	0.9	172
25	Functionalizable surface platform with reduced nonspecific protein adsorption from full blood plasma—Material selection and protein immobilization optimization. <i>Biosensors and Bioelectronics</i> , 2009, 24, 1924-1930.	10.1	170
26	Single-mode optical fiber surface plasmon resonance sensor. <i>Sensors and Actuators B: Chemical</i> , 1999, 54, 74-79.	7.8	168
27	A label-free and portable multichannel surface plasmon resonance immunosensor for on site analysis of antibiotics in milk samples. <i>Biosensors and Bioelectronics</i> , 2010, 26, 1231-1238.	10.1	166
28	A miniature fiber optic surface plasmon resonance sensor for fast detection of staphylococcal enterotoxin B. <i>Biosensors and Bioelectronics</i> , 2002, 17, 591-595.	10.1	164
29	A new surface plasmon resonance sensor for high-throughput screening applications. <i>Biosensors and Bioelectronics</i> , 2005, 20, 2104-2110.	10.1	161
30	DNA Directed Protein Immobilization on Mixed ssDNA/Oligo(ethylene glycol) Self-Assembled Monolayers for Sensitive Biosensors. <i>Analytical Chemistry</i> , 2004, 76, 6967-6972.	6.5	148
31	Data analysis for optical sensors based on spectroscopy of surface plasmons. <i>Measurement Science and Technology</i> , 2002, 13, 2038-2046.	2.6	146
32	Rich information format surface plasmon resonance biosensor based on array of diffraction gratings. <i>Sensors and Actuators B: Chemical</i> , 2005, 107, 154-161.	7.8	139
33	Functionalizable low-fouling coatings for label-free biosensing in complex biological media: advances and applications. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 3927-3953.	3.7	137
34	DNA-Directed Protein Immobilization on Mixed Self-Assembled Monolayers via a Streptavidin Bridge. <i>Langmuir</i> , 2004, 20, 8090-8095.	3.5	130
35	Ultrasensitive Broadband Probing of Molecular Vibrational Modes with Multifrequency Optical Antennas. <i>ACS Nano</i> , 2013, 7, 669-675.	14.6	125
36	Surface plasmon resonance biosensor for parallelized detection of protein biomarkers in diluted blood plasma. <i>Biosensors and Bioelectronics</i> , 2010, 26, 1656-1661.	10.1	124

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37	Multichannel surface plasmon resonance biosensor with wavelength division multiplexing. <i>Sensors and Actuators B: Chemical</i> , 2005, 108, 758-764.	7.8	123
38	A novel multichannel surface plasmon resonance biosensor. <i>Sensors and Actuators B: Chemical</i> , 2001, 76, 403-410.	7.8	122
39	Enhancing Sensitivity of Surface Plasmon Resonance Biosensors by Functionalized Gold Nanoparticles: Size Matters. <i>Analytical Chemistry</i> , 2014, 86, 10350-10356.	6.5	122
40	Long-range surface plasmons for sensitive detection of bacterial analytes. <i>Sensors and Actuators B: Chemical</i> , 2009, 139, 59-63.	7.8	118
41	Surface functionalization for self-referencing surface plasmon resonance (SPR) biosensors by multi-step self-assembly. <i>Sensors and Actuators B: Chemical</i> , 2003, 90, 22-30.	7.8	116
42	Miniaturization of fiber optic surface plasmon resonance sensor. <i>Sensors and Actuators B: Chemical</i> , 1998, 51, 311-315.	7.8	115
43	Detection of low-molecular-weight domoic acid using surface plasmon resonance sensor. <i>Sensors and Actuators B: Chemical</i> , 2005, 107, 193-201.	7.8	111
44	Comparison of E. coli O157:H7 preparation methods used for detection with surface plasmon resonance sensor. <i>Sensors and Actuators B: Chemical</i> , 2005, 107, 202-208.	7.8	111
45	Label-free detection of cancer biomarker candidates using surface plasmon resonance imaging. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 393, 1157-1163.	3.7	104
46	Compact and low-cost biosensor based on novel approach to spectroscopy of surface plasmons. <i>Biosensors and Bioelectronics</i> , 2009, 24, 3430-3435.	10.1	104
47	High-resolution biosensor based on localized surface plasmons. <i>Optics Express</i> , 2012, 20, 672.	3.4	99
48	Ultra-low fouling and functionalizable zwitterionic coatings grafted onto SiO ₂ via a biomimetic adhesive group for sensing and detection in complex media. <i>Biosensors and Bioelectronics</i> , 2010, 25, 2276-2282.	10.1	95
49	Electromagnetic Theory of Surface Plasmons. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2006, , 3-44.	0.5	94
50	Theory and modelling of optical waveguide sensors utilising surface plasmon resonance. <i>Sensors and Actuators B: Chemical</i> , 1999, 54, 66-73.	7.8	92
51	Surface plasmon resonance biosensor for direct detection of antibody against Epstein-Barr virus. <i>Biosensors and Bioelectronics</i> , 2007, 22, 1020-1026.	10.1	89
52	A surface plasmon resonance based integrated optical sensor. <i>Sensors and Actuators B: Chemical</i> , 1997, 39, 286-290.	7.8	88
53	Rapid and sensitive detection of multiple microRNAs in cell lysate by low-fouling surface plasmon resonance biosensor. <i>Biosensors and Bioelectronics</i> , 2015, 70, 226-231.	10.1	84
54	Biofunctionalized gold nanoparticles for SPR-biosensor-based detection of CEA in blood plasma. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 404, 2869-2875.	3.7	82

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55	Advances in Surface Plasmon Resonance Imaging and Microscopy and Their Biological Applications. Annual Review of Analytical Chemistry, 2019, 12, 151-176.	5.4	81
56	Functionalized ultra-low fouling carboxy- and hydroxy-functional surface platforms: functionalization capacity, biorecognition capability and resistance to fouling from undiluted biological media. Biosensors and Bioelectronics, 2014, 51, 150-157.	10.1	78
57	Local refractive index sensitivity of plasmonic nanoparticles. Optics Express, 2011, 19, 9213.	3.4	77
58	Multiple surface plasmon spectroscopy for study of biomolecular systems. Sensors and Actuators B: Chemical, 2006, 113, 774-781.	7.8	76
59	Optical sensors based on spectroscopy of localized surface plasmons on metallic nanoparticles: Sensitivity considerations. Biointerphases, 2008, 3, FD4-FD11.	1.6	73
60	An SPR biosensor for the detection of microcystins in drinking water. Analytical and Bioanalytical Chemistry, 2010, 398, 2625-2634.	3.7	73
61	Surface plasmon resonance sensor based on an array of diffraction gratings for highly parallelized observation of biomolecular interactions. Sensors and Actuators B: Chemical, 2008, 129, 303-310.	7.8	71
62	Plasmonic Nanoantennas for Multispectral Surface-Enhanced Spectroscopies. Journal of Physical Chemistry C, 2013, 117, 18620-18626.	3.1	71
63	Label-free slot-waveguide biosensor for the detection of DNA hybridization. Applied Optics, 2012, 51, 8195.	1.8	68
64	Surface plasmon resonance biosensors for detection of Alzheimer disease biomarker. Sensors and Actuators B: Chemical, 2009, 139, 69-73.	7.8	66
65	Effect of the immobilisation of DNA aptamers on the detection of thrombin by means of surface plasmon resonance. Analytical and Bioanalytical Chemistry, 2008, 391, 1861-1869.	3.7	65
66	Fibre-optic sensor based on surface plasmon resonance. Electronics Letters, 1996, 32, 480.	1.0	59
67	Title is missing!. Optical and Quantum Electronics, 1997, 29, 301-311.	3.3	58
68	High-performance compact SPR sensor for multi-analyte sensing. Sensors and Actuators B: Chemical, 2010, 148, 544-549.	7.8	58
69	Multichannel SPR biosensor for detection of endocrine-disrupting compounds. Analytical and Bioanalytical Chemistry, 2007, 389, 1841-1847.	3.7	56
70	Towards parallelized surface plasmon resonance sensor platform for sensitive detection of oligonucleotides. Sensors and Actuators B: Chemical, 2007, 121, 187-193.	7.8	55
71	Shielding effect of monovalent and divalent cations on solid-phase DNA hybridization: surface plasmon resonance biosensor study. Nucleic Acids Research, 2010, 38, 7343-7351.	14.5	55
72	Compact surface plasmon-enhanced fluorescence biochip. Optics Express, 2013, 21, 10121.	3.4	54

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73	Advanced biosensing using simultaneous excitation of short and long range surface plasmons. <i>Measurement Science and Technology</i> , 2006, 17, 932-938.	2.6	53
74	Surface plasmon resonance biosensor for the detection of VEGFR-1â€™a protein marker of myelodysplastic syndromes. <i>Analytical and Bioanalytical Chemistry</i> , 2012, 402, 381-387.	3.7	53
75	A Route to Superior Performance of a Nanoplasmonic Biosensor: Consideration of Both Photonic and Mass Transport Aspects. <i>ACS Photonics</i> , 2018, 5, 1019-1025.	6.6	53
76	Protein contact printing for a surface plasmon resonance biosensor with on-chip referencing. <i>Sensors and Actuators B: Chemical</i> , 2001, 74, 91-99.	7.8	52
77	Theoretical analysis of a fiber optic surface plasmon resonance sensor utilizing a Bragg grating. <i>Optics Express</i> , 2009, 17, 23254.	3.4	52
78	Sensing properties of lattice resonances of 2D metal nanoparticle arrays: An analytical model. <i>Optics Express</i> , 2013, 21, 27490.	3.4	52
79	Flexible method based on four-beam interference lithography for fabrication of large areas of perfectly periodic plasmonic arrays. <i>Optics Express</i> , 2014, 22, 18778.	3.4	51
80	Tuning of spectral operation range of a waveguide surface plasmon resonance sensor. <i>Electronics Letters</i> , 1997, 33, 1246.	1.0	50
81	Novel concept of multi-channel fiber optic surface plasmon resonance sensor. <i>Sensors and Actuators B: Chemical</i> , 2009, 139, 199-203.	7.8	50
82	Surface plasmon resonance sensor with dispersionless microfluidics for direct detection of nucleic acids at the low femtomole level. <i>Sensors and Actuators B: Chemical</i> , 2010, 145, 588-591.	7.8	50
83	Novel polarization control scheme for spectral surface plasmon resonance sensors. <i>Sensors and Actuators B: Chemical</i> , 1998, 51, 331-339.	7.8	49
84	Dual-channel surface plasmon resonance sensor with spectral discrimination of sensing channels using dielectric overlayer. <i>Electronics Letters</i> , 1999, 35, 1105.	1.0	49
85	Functional gold nanoparticles for optical affinity biosensing. <i>Analytical and Bioanalytical Chemistry</i> , 2017, 409, 4087-4097.	3.7	48
86	Hybrid Surface Platform for the Simultaneous Detection of Proteins and DNAs Using a Surface Plasmon Resonance Imaging Sensor. <i>Analytical Chemistry</i> , 2008, 80, 4231-4236.	6.5	47
87	Ultralow-Fouling Behavior of Biorecognition Coatings Based on Carboxy-Functional Brushes of Zwitterionic Homo- and Copolymers in Blood Plasma: Functionalization Matters. <i>Analytical Chemistry</i> , 2017, 89, 3524-3531.	6.5	47
88	Detection of bisphenol A using a novel surface plasmon resonance biosensor. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 1963-1966.	3.7	46
89	Tailoring Plasmonic Nanostructures for Optimal SERS Sensing of Small Molecules and Large Microorganisms. <i>Small</i> , 2011, 7, 371-376.	10.0	46
90	Nanoplasmonic ruler to measure lipid vesicle deformation. <i>Chemical Communications</i> , 2016, 52, 76-79.	4.1	46

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91	New approach to spectroscopy of surface plasmons. <i>Optics Letters</i> , 2006, 31, 3339.	3.3	44
92	Enhancement of affinity-based biosensors: effect of sensing chamber geometry on sensitivity. <i>Lab on a Chip</i> , 2013, 13, 1413.	6.0	43
93	Copolymer Brush-Based Ultralow-Fouling Biorecognition Surface Platform for Food Safety. <i>Analytical Chemistry</i> , 2016, 88, 10533-10539.	6.5	43
94	Understanding the effects of dielectric medium, substrate, and depth on electric fields and SERS of quasi-3D plasmonic nanostructures. <i>Optics Express</i> , 2011, 19, 20493.	3.4	42
95	Peptide Functionalization of Gold Nanoparticles for the Detection of Carcinoembryonic Antigen in Blood Plasma via SPR-Based Biosensor. <i>Frontiers in Chemistry</i> , 2019, 7, 40.	3.6	42
96	Investigating oligonucleotide hybridization at subnanomolar level by surface plasmon resonance biosensor method. <i>Biopolymers</i> , 2006, 82, 394-398.	2.4	40
97	Configuration-controlled Au nanocluster arrays on inverse micelle nano-patterns: versatile platforms for SERS and SPR sensors. <i>Nanoscale</i> , 2013, 5, 12261.	5.6	40
98	Detecting the Adsorption of Dye Molecules in Homogeneous Poly(propylene imine) Dendrimer Monolayers by Surface Plasmon Resonance Sensor. <i>Journal of the American Chemical Society</i> , 2002, 124, 3395-3401.	13.7	39
99	The influence of intrinsic coagulation pathway on blood platelets activation by oxidized cellulose. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 82A, 274-280.	4.0	38
100	Label-Free Biosensing in Complex Media: A Referencing Approach. <i>Analytical Chemistry</i> , 2013, 85, 5637-5640.	6.5	38
101	Self-referencing SPR imaging for most demanding high-throughput screening applications. <i>Sensors and Actuators B: Chemical</i> , 2008, 134, 353-355.	7.8	37
102	Surface plasmon resonance sensor for detection of bisphenol A in drinking water. <i>Sensors and Actuators B: Chemical</i> , 2010, 151, 177-179.	7.8	37
103	Interaction between fiber modes and surface plasmon waves: spectral properties. <i>Optics Letters</i> , 1997, 22, 1403.	3.3	36
104	Real-time monitoring of biomolecular interactions in blood plasma using a surface plasmon resonance biosensor. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 398, 1955-1961.	3.7	35
105	Surface plasmon-coupled emission on plasmonic Bragg gratings. <i>Optics Express</i> , 2012, 20, 14042.	3.4	35
106	Detection of botulinum neurotoxins in buffer and honey using a surface plasmon resonance (SPR) sensor. <i>Sensors and Actuators B: Chemical</i> , 2008, 130, 129-134.	7.8	34
107	Light Transmission and Surface-Enhanced Raman Scattering of Quasi-3D Plasmonic Nanostructure Arrays with Deep and Shallow Fabry-Pérot Nanocavities. <i>Journal of Physical Chemistry C</i> , 2011, 115, 10996-11002.	3.1	34
108	Surface plasmon resonance optical cavity enhanced refractive index sensing. <i>Optics Letters</i> , 2013, 38, 1951.	3.3	34

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109	Biosensing enhancement using passive mixing structures for microarray-based sensors. <i>Biosensors and Bioelectronics</i> , 2014, 54, 506-514.	10.1	34
110	Real-time label-free monitoring of the cellular response to osmotic stress using conventional and long-range surface plasmons. <i>Biosensors and Bioelectronics</i> , 2013, 40, 417-421.	10.1	32
111	Surface plasmon resonance biosensor for the detection of tau-amyloid β complex. <i>Sensors and Actuators B: Chemical</i> , 2020, 316, 128146.	7.8	32
112	Molecular arrangement of adsorbed fibrinogen molecules characterized by specific monoclonal antibodies and a surface plasmon resonance sensor. <i>Sensors and Actuators B: Chemical</i> , 1998, 51, 268-272.	7.8	31
113	Optical multilayers for LED-based surface plasmon resonance sensors. <i>Applied Optics</i> , 2006, 45, 3752.	2.1	31
114	Human interleukin-23 receptor antagonists derived from an albumin-binding domain scaffold inhibit IL-23-dependent <i>ex vivo</i> expansion of IL-17-producing T cells. <i>Proteins: Structure, Function and Bioinformatics</i> , 2014, 82, 975-989.	2.6	31
115	Novel high-affinity binders of human interferon gamma derived from albumin-binding domain of protein C. <i>Proteins: Structure, Function and Bioinformatics</i> , 2012, 80, 774-789.	2.6	30
116	Advanced data processing for SPR biosensors. <i>Sensors and Actuators B: Chemical</i> , 2005, 107, 162-169.	7.8	29
117	Enhanced levels of mitochondrial enzyme 17 β -hydroxysteroid dehydrogenase type 10 in patients with Alzheimer disease and multiple sclerosis. <i>Molecular BioSystems</i> , 2009, 5, 1174.	2.9	29
118	SURFACE PLASMON RESONANCE BIOSENSORS. , 2008, , 185-242.		28
119	Surface interactions of oxidized cellulose with fibrin(ogen) and blood platelets. <i>Sensors and Actuators B: Chemical</i> , 2003, 90, 243-249.	7.8	27
120	Surface plasmon resonance biosensor based on engineered proteins for direct detection of interferon-gamma in diluted blood plasma. <i>Sensors and Actuators B: Chemical</i> , 2012, 174, 306-311.	7.8	27
121	Surface plasmon resonance biosensor for the ultrasensitive detection of bisphenol A. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 5655-5658.	3.7	27
122	Simultaneous excitation of long and short range surface plasmons in an asymmetric structure. <i>Optics Communications</i> , 2006, 259, 507-512.	2.1	25
123	Antibody networks for surface plasmon resonance immunosensors. <i>Sensors and Actuators B: Chemical</i> , 1999, 54, 132-136.	7.8	24
124	Surface Plasmon Resonance Biosensors. , 2002, , 207-251.		24
125	Biosensor Enhancement Using Grooved Micromixers: Part II, Experimental Studies. <i>Analytical Chemistry</i> , 2015, 87, 5524-5530.	6.5	24
126	Surface plasmon resonance biosensor for detection of pregnancy associated plasma protein A2 in clinical samples. <i>Analytical and Bioanalytical Chemistry</i> , 2016, 408, 7265-7269.	3.7	24

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127	Actuated plasmonic nanohole arrays for sensing and optical spectroscopy applications. <i>Nanoscale</i> , 2020, 12, 9756-9768.	5.6	23
128	(Bio)Sensing Using Nanoparticle Arrays: On the Effect of Analyte Transport on Sensitivity. <i>Analytical Chemistry</i> , 2016, 88, 12145-12151.	6.5	22
129	Testing gold nanostructures fabricated by hole-mask colloidal lithography as potential substrates for SERS sensors: sensitivity, signal variability, and the aspect of adsorbate deposition. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 19613-19620.	2.8	21
130	Surface Plasmon Resonance (SPR) Sensors for the Detection of Bacterial Pathogens. , 2008, , 83-108.		20
131	5'-O-Methylphosphonate nucleic acids: new modified DNAs that increase the Escherichia coli RNase H cleavage rate of hybrid duplexes. <i>Nucleic Acids Research</i> , 2014, 42, 5378-5389.	14.5	20
132	The Scavenger Receptor SSc5D Physically Interacts with Bacteria through the SRCR-Containing N-Terminal Domain. <i>Frontiers in Immunology</i> , 2016, 7, 416.	4.8	19
133	Surface-Enhanced Raman Scattering on Gold Nanohole Arrays in Symmetrical Dielectric Environments Exhibiting Electric Field Extension. <i>Journal of Physical Chemistry C</i> , 2016, 120, 25519-25529.	3.1	19
134	SPR Sensor Instrumentation. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2006, , 95-116.	0.5	18
135	Toward single-molecule detection with sensors based on propagating surface plasmons. <i>Optics Letters</i> , 2012, 37, 163.	3.3	18
136	Diffraction grating-coupled surface plasmon resonance sensor based on spectroscopy of long-range and short-range surface plasmons. , 2007, , .		17
137	Multiple beam interference lithography: A tool for rapid fabrication of plasmonic arrays of arbitrary shaped nanomotifs. <i>Optics Express</i> , 2016, 24, 15656.	3.4	17
138	Grafting density and antifouling properties of poly[N-(2-hydroxypropyl) methacrylamide] brushes prepared by α -grafting to and α -grafting from. <i>Polymer Chemistry</i> , 2022, 13, 3815-3826.	3.9	17
139	Biosensor Enhancement Using Grooved Micromixers: Part I, Numerical Studies. <i>Analytical Chemistry</i> , 2015, 87, 5516-5523.	6.5	16
140	Nanoplasmonic Ruler for Measuring Separation Distance between Supported Lipid Bilayers and Oxide Surfaces. <i>Analytical Chemistry</i> , 2018, 90, 12503-12511.	6.5	16
141	Portable Surface Plasmon Resonance Biosensor for Detection of Nucleic Acids. <i>Procedia Engineering</i> , 2011, 25, 148-151.	1.2	15
142	Protein β_2 -Mediated Effects on Rat Hippocampal Choline Transporters CHT1 and β_2 -Amyloid β^2 Interactions. <i>Neurochemical Research</i> , 2013, 38, 1949-1959.	3.3	15
143	Surface plasmon resonance sensor based on planar light pipe: theoretical optimization analysis. <i>Sensors and Actuators B: Chemical</i> , 1996, 37, 145-150.	7.8	14
144	Novel approach to surface plasmon resonance multichannel sensing. , 2001, 4416, 86.		14

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145	Spectroscopy of Bragg-scattered surface plasmons for characterization of thin biomolecular films. <i>Optics Letters</i> , 2007, 32, 2903.	3.3	14
146	Streptavidin-enhanced assay for sensitive and specific detection of single nucleotide polymorphism in TP53. <i>Analytical and Bioanalytical Chemistry</i> , 2011, 399, 2343-2350.	3.7	14
147	Analytical Value of Detecting an Individual Molecular Binding Event: The Case of the Surface Plasmon Resonance Biosensor. <i>Analytical Chemistry</i> , 2012, 84, 30-33.	6.5	14
148	Surface plasmon resonance study on HIV-1 integrase strand transfer activity. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 393, 1165-1172.	3.7	13
149	Biomolecular charges influence the response of surface plasmon resonance biosensors through electronic and ionic mechanisms. <i>Biosensors and Bioelectronics</i> , 2019, 126, 365-372.	10.1	13
150	Detecting attomolar concentrations of microRNA related to myelodysplastic syndromes in blood plasma using a novel sandwich assay with nanoparticle release. <i>Biosensors and Bioelectronics</i> , 2021, 194, 113613.	10.1	13
151	Optical sensing of the initial stages in the growth and development of fibrin clot. <i>Sensors and Actuators B: Chemical</i> , 2001, 74, 69-73.	7.8	12
152	Surface plasmon resonance biosensors. <i>Proceedings of SPIE</i> , 2007, 6619, 68.	0.8	12
153	Surface Plasmon Resonance Biosensor for Determination of Tetrodotoxin: Prevalidation Study. <i>Journal of AOAC INTERNATIONAL</i> , 2011, 94, 596-604.	1.5	12
154	Surface-plasmon optical-heterodyne clock biosensor. <i>Sensors and Actuators B: Chemical</i> , 2018, 273, 336-341.	7.8	12
155	<title>Novel surface plasmon resonance sensor based on single-mode optical fiber</title> , 1997, , .		11
156	Molecularly Imprinted Polymer Waveguides for Direct Optical Detection of Low Molecular Weight Analytes. <i>Macromolecular Chemistry and Physics</i> , 2014, 215, 2295-2304.	2.2	11
157	Monitoring RAYT activity by surface plasmon resonance biosensor. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 3985-3993.	3.7	11
158	Plasmonic biosensor based on a gold nanostripe array for detection of microRNA related to myelodysplastic syndromes. <i>Sensors and Actuators B: Chemical</i> , 2021, 347, 130629.	7.8	11
159	Surface Plasmon Resonance Biosensors for Food Safety. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2004, , 145-172.	0.5	11
160	SPR Biosensors for Medical Diagnostics. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2006, , 229-247.	0.5	10
161	Novel polarization control for high-throughput surface plasmon resonance sensors. , 2007, , .		10
162	SPR Biosensors for Detection of Biological and Chemical Analytes. <i>Springer Series on Chemical Sensors and Biosensors</i> , 2006, , 177-190.	0.5	9

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163	A dual surface plasmon resonance assay for the determination of ribonuclease H activity. <i>Biosensors and Bioelectronics</i> , 2010, 26, 1605-1611.	10.1	9
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