Jiri Homola

List of Publications by Year in Descending Order

211 papers	20,130 citations	59 h-index	140 g-index
226 ext. papers	22,733 ext. citations	6.7 avg, IF	7.38 L-index

#	Paper	IF	Citations
211	Advances and applications of nanophotonic biosensors.. *Nature Nanotechnology*, **2022**, 17, 5-16	28.7	38
210	Performance of label-free optical biosensors: What is figure of merit (not) telling us?. *Biosensors and Bioelectronics*, **2022**, 212, 114426	11.8	0
209	Anchored linear oligonucleotides: the effective tool for the real-time measurement of uracil DNA glycosylase activity. *Open Biology*, **2021**, 11, 210136	7	1
208	Interaction of Tris with DNA molecules and carboxylic groups on self-assembled monolayers of alkanethiols measured with surface plasmon resonance. *Applied Surface Science*, **2021**, 546, 148984	6.7	3
207	Plasmonic biosensor based on a gold nanostripe array for detection of microRNA related to myelodysplastic syndromes. *Sensors and Actuators B: Chemical*, **2021**, 347, 130629	8.5	4
206	Detecting attomolar concentrations of microRNA related to myelodysplastic syndromes in blood plasma using a novel sandwich assay with nanoparticle release. *Biosensors and Bioelectronics*, **2021**, 194, 113613	11.8	4
205	Actuated plasmonic nanohole arrays for sensing and optical spectroscopy applications. *Nanoscale*, **2020**, 12, 9756-9768	7.7	11
204	Surface plasmon resonance biosensor for the detection of tau-amyloid complex. *Sensors and Actuators B: Chemical*, **2020**, 316, 128146	8.5	16
203	Interactions of 17-Hydroxysteroid Dehydrogenase Type 10 and Cyclophilin D in Alzheimer's Disease. *Neurochemical Research*, **2020**, 45, 915-927	4.6	5
202	Study of Biomolecular Interactions of Mitochondrial Proteins Related to Alzheimer's Disease: Toward Multi-Interaction Biomolecular Processes. *Biomolecules*, **2020**, 10,	5.9	1
201	Ionic Environment Affects Biomolecular Interactions of Amyloid- SPR Biosensor Study. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	1
200	A New Approach for the Diagnosis of Myelodysplastic Syndrome Subtypes Based on Protein Interaction Analysis. *Scientific Reports*, **2019**, 9, 12647	4.9	6
199	Peptide Functionalization of Gold Nanoparticles for the Detection of Carcinoembryonic Antigen in Blood Plasma via SPR-Based Biosensor. *Frontiers in Chemistry*, **2019**, 7, 40	5	21
198	Advances in Surface Plasmon Resonance Imaging and Microscopy and Their Biological Applications. *Annual Review of Analytical Chemistry*, **2019**, 12, 151-176	12.5	46
197	Surface plasmon resonance biosensor for the ultrasensitive detection of bisphenol A. *Analytical and Bioanalytical Chemistry*, **2019**, 411, 5655-5658	4.4	15
196	In vitro study of interaction of 17-hydroxysteroid dehydrogenase type 10 and cyclophilin D and its potential implications for Alzheimer's disease. *Scientific Reports*, **2019**, 9, 16700	4.9	4
195	Hsp70 Trap Assay for Detection of Misfolded Subproteome Related to Myelodysplastic Syndromes. *Analytical Chemistry*, **2019**, 91, 14226-14230	7.8	1

194	High-performance biosensor exploiting a light guidance in sparse arrays of metal nanoparticles. *Optics Letters*, **2019**, 44, 1568-1571	3	4
193	Analyte transport to micro- and nano-plasmonic structures. *Lab on A Chip*, **2019**, 19, 4117-4127	7.2	5
192	Biomolecular charges influence the response of surface plasmon resonance biosensors through electronic and ionic mechanisms. *Biosensors and Bioelectronics*, **2019**, 126, 365-372	11.8	9
191	A Route to Superior Performance of a Nanoplasmonic Biosensor: Consideration of Both Photonic and Mass Transport Aspects. *ACS Photonics*, **2018**, 5, 1019-1025	6.3	38
190	Microfluidic Analyte Transport to Nanorods for Photonic and Electrochemical Sensing Applications. *Chemistry - A European Journal*, **2018**, 24, 12031-12036	4.8	3
189	Surface-plasmon optical-heterodyne clock biosensor. *Sensors and Actuators B: Chemical*, **2018**, 273, 336-345	6.5	12
188	Nanoplasmonic Ruler for Measuring Separation Distance between Supported Lipid Bilayers and Oxide Surfaces. *Analytical Chemistry*, **2018**, 90, 12503-12511	7.8	13
187	Ultralow-Fouling Behavior of Biorecognition Coatings Based on Carboxy-Functional Brushes of Zwitterionic Homo- and Copolymers in Blood Plasma: Functionalization Matters. *Analytical Chemistry*, **2017**, 89, 3524-3531	7.8	35
186	Functional gold nanoparticles for optical affinity biosensing. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 4087-4097	4.4	34
185	Pregnancy-Associated Plasma Protein A2 in Hemodialysis Patients: Significance for Prognosis. *Kidney and Blood Pressure Research*, **2017**, 42, 509-518	3.1	3
184	Optical Biosensors Based on Plasmonic Nanostructures: A Review. *Proceedings of the IEEE*, **2016**, 104, 2380-2408	14.3	225
183	Multiple beam interference lithography: A tool for rapid fabrication of plasmonic arrays of arbitrary shaped nanomotifs. *Optics Express*, **2016**, 24, 15656-65	3.3	14
182	Copolymer Brush-Based Ultralow-Fouling Biorecognition Surface Platform for Food Safety. *Analytical Chemistry*, **2016**, 88, 10533-10539	7.8	32
181	Surface-Enhanced Raman Scattering on Gold Nanohole Arrays in Symmetrical Dielectric Environments Exhibiting Electric Field Extension. *Journal of Physical Chemistry C*, **2016**, 120, 25519-25529	3.8	14
180	(Bio)Sensing Using Nanoparticle Arrays: On the Effect of Analyte Transport on Sensitivity. *Analytical Chemistry*, **2016**, 88, 12145-12151	7.8	19
179	Surface plasmon resonance biosensor for detection of pregnancy associated plasma protein A2 in clinical samples. *Analytical and Bioanalytical Chemistry*, **2016**, 408, 7265-9	4.4	19
178	Testing gold nanostructures fabricated by hole-mask colloidal lithography as potential substrates for SERS sensors: sensitivity, signal variability, and the aspect of adsorbate deposition. *Physical Chemistry Chemical Physics*, **2016**, 18, 19613-20	3.6	18
177	Low-fouling surface plasmon resonance biosensor for multi-step detection of foodborne bacterial pathogens in complex food samples. *Biosensors and Bioelectronics*, **2016**, 80, 84-90	11.8	141

176	Nanoplasmonic ruler to measure lipid vesicle deformation. *Chemical Communications*, **2016**, 52, 76-9	5.8	41
175	The Potential Prognostic Markers for Myelodysplatic Syndromes Studied By Surface Plasmon Resonance Imaging and Mass Spectrometry. *Blood*, **2016**, 128, 5510-5510	2.2	
174	The 70-KDa Heat Shock Protein Surface Plasmon Resonance Biosensor for Examination of Blood Plasma Proteome in Myelodysplastic Syndromes Subgroups. *Blood*, **2016**, 128, 5521-5521	2.2	
173	The Scavenger Receptor SSc5D Physically Interacts with Bacteria through the SRCR-Containing N-Terminal Domain. *Frontiers in Immunology*, **2016**, 7, 416	8.4	12
172	Rapid and sensitive detection of multiple microRNAs in cell lysate by low-fouling surface plasmon resonance biosensor. *Biosensors and Bioelectronics*, **2015**, 70, 226-31	11.8	71
171	Monitoring RAYT activity by surface plasmon resonance biosensor. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 3985-93	4.4	10
170	Direct optical detection. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 3881-2	4.4	4
169	Biosensor enhancement using grooved micromixers: part I, numerical studies. *Analytical Chemistry*, **2015**, 87, 5516-23	7.8	11
168	Biosensor Enhancement Using Grooved Micromixers: Part II, Experimental Studies. *Analytical Chemistry*, **2015**, 87, 5524-30	7.8	18
167	Functionalizable low-fouling coatings for label-free biosensing in complex biological media: advances and applications. *Analytical and Bioanalytical Chemistry*, **2015**, 407, 3927-53	4.4	103
166	Ambiguous Refractive Index Sensitivity of Fano Resonance on an Array of Gold Nanoparticles. *Plasmonics*, **2014**, 9, 729-735	2.4	7
165	Biosensing enhancement using passive mixing structures for microarray-based sensors. *Biosensors and Bioelectronics*, **2014**, 54, 506-14	11.8	26
164	Human interleukin-23 receptor antagonists derived from an albumin-binding domain scaffold inhibit IL-23-dependent ex vivo expansion of IL-17-producing T-cells. *Proteins: Structure, Function and Bioinformatics*, **2014**, 82, 975-89	4.2	27
163	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, 150-7	11.8	69
162	Cavity-enhanced surface-plasmon resonance sensing: modeling and performance. *Measurement Science and Technology*, **2014**, 25, 015205	2	2
161	5TO-Methylphosphonate nucleic acids--new modified DNAs that increase the Escherichia coli RNase H cleavage rate of hybrid duplexes. *Nucleic Acids Research*, **2014**, 42, 5378-89	20.1	18
160	Flexible method based on four-beam interference lithography for fabrication of large areas of perfectly periodic plasmonic arrays. *Optics Express*, **2014**, 22, 18778-89	3.3	41
159	Molecularly Imprinted Polymer Waveguides for Direct Optical Detection of Low-Molecular-Weight Analytes. *Macromolecular Chemistry and Physics*, **2014**, 215, 2295-2304	2.6	8

158	Enhancing sensitivity of surface plasmon resonance biosensors by functionalized gold nanoparticles: size matters. *Analytical Chemistry*, **2014**, 86, 10350-6	7.8	98
157	Convenient Method of Micrometer-Scale Excitation of Propagating Surface Plasmons by a Focused Laser Beam. *Plasmonics*, **2014**, 9, 737-739	2.4	1
156	Rapid Simultaneous Detection of Multiple Micro-Ribonucleic Acids By Surface Plasmon Resonance Array in Cell Lysates of Myelodysplastic Syndromes Patients. *Blood*, **2014**, 124, 5605-5605	2.2	
155	Protein-Protein Interaction Analysis in Blood Plasma of Patients with Myelodysplastic Syndromes By Surface Plasmon Resonance Imaging and Mass Spectrometry. *Blood*, **2014**, 124, 5623-5623	2.2	
154	Protein mediated effects on rat hippocampal choline transporters CHT1 and amyloid interactions. *Neurochemical Research*, **2013**, 38, 1949-59	4.6	15
153	Plasmonic Nanoantennas for Multispectral Surface-Enhanced Spectroscopies. *Journal of Physical Chemistry C*, **2013**, 117, 18620-18626	3.8	56
152	Configuration-controlled Au nanocluster arrays on inverse micelle nano-patterns: versatile platforms for SERS and SPR sensors. *Nanoscale*, **2013**, 5, 12261-71	7.7	38
151	Ultrasensitive broadband probing of molecular vibrational modes with multifrequency optical antennas. *ACS Nano*, **2013**, 7, 669-75	16.7	106
150	Surface plasmon resonance sensing of nucleic acids: a review. *Analytica Chimica Acta*, **2013**, 773, 9-23	6.6	194
149	Label-free biosensing in complex media: a referencing approach. *Analytical Chemistry*, **2013**, 85, 5637-40	7.8	34
148	Enhancement of affinity-based biosensors: effect of sensing chamber geometry on sensitivity. *Lab on A Chip*, **2013**, 13, 1413-21	7.2	39
147	Real-time label-free monitoring of the cellular response to osmotic stress using conventional and long-range surface plasmons. *Biosensors and Bioelectronics*, **2013**, 40, 417-21	11.8	28
146	Compact surface plasmon-enhanced fluorescence biochip. *Optics Express*, **2013**, 21, 10121-32	3.3	46
145	Sensing properties of lattice resonances of 2D metal nanoparticle arrays: an analytical model. *Optics Express*, **2013**, 21, 27490-502	3.3	42
144	Surface plasmon resonance optical cavity enhanced refractive index sensing. *Optics Letters*, **2013**, 38, 1951-3	3	28
143	Neuroinflammation and complexes of 17hydroxysteroid dehydrogenase type 10--amyloid in Alzheimer's disease. *Current Alzheimer Research*, **2013**, 10, 165-73	3	7
142	Surface plasmon resonance biosensor for the detection of VEGFR-1--a protein marker of myelodysplastic syndromes. *Analytical and Bioanalytical Chemistry*, **2012**, 402, 381-7	4.4	46
141	Surface plasmon resonance biosensor based on engineered proteins for direct detection of interferon-gamma in diluted blood plasma. *Sensors and Actuators B: Chemical*, **2012**, 174, 306-311	8.5	23

140	Surface Plasmons for Biodetection **2012**, 1-58		
139	Analytical value of detecting an individual molecular binding event: the case of the surface plasmon resonance biosensor. *Analytical Chemistry*, **2012**, 84, 30-3	7.8	13
138	Biofunctionalized gold nanoparticles for SPR-biosensor-based detection of CEA in blood plasma. *Analytical and Bioanalytical Chemistry*, **2012**, 404, 2869-75	4.4	60
137	Novel high-affinity binders of human interferon gamma derived from albumin-binding domain of protein G. *Proteins: Structure, Function and Bioinformatics*, **2012**, 80, 774-89	4.2	28
136	Label-free slot-waveguide biosensor for the detection of DNA hybridization. *Applied Optics*, **2012**, 51, 8195-202	1.7	50
135	High-resolution biosensor based on localized surface plasmons. *Optics Express*, **2012**, 20, 672-80	3.3	85
134	Surface plasmon-coupled emission on plasmonic Bragg gratings. *Optics Express*, **2012**, 20, 14042-53	3.3	35
133	Toward single-molecule detection with sensors based on propagating surface plasmons. *Optics Letters*, **2012**, 37, 163-5	3	16
132	Consideration of photonic and mass-transfer aspects on the performance of a biosensor based on localized surface plasmons on an array of gold cylinders **2012**,		1
131	Portable Surface Plasmon Resonance Biosensor for Detection of Nucleic Acids. *Procedia Engineering*, **2011**, 25, 148-151		14
130	Sensitive Detection of Interferon-Gamma with Engineered Proteins and Surface Plasmon Resonance Biosensor. *Procedia Engineering*, **2011**, 25, 940-943		4
129	Local refractive index sensitivity of plasmonic nanoparticles. *Optics Express*, **2011**, 19, 9213-20	3.3	59
128	Understanding the effects of dielectric medium, substrate, and depth on electric fields and SERS of quasi-3D plasmonic nanostructures. *Optics Express*, **2011**, 19, 20493-505	3.3	36
127	Surface Plasmon Resonance Biosensor for Determination of Tetrodotoxin: Prevalidation Study. *Journal of AOAC INTERNATIONAL*, **2011**, 94, 596-604	1.7	10
126	Fabrication of nanoplasmonic arrays with square symmetry using spin-coating method. *Journal of Nanoscience and Nanotechnology*, **2011**, 11, 2528-32	1.3	4
125	Streptavidin-enhanced assay for sensitive and specific detection of single nucleotide polymorphism in TP53. *Analytical and Bioanalytical Chemistry*, **2011**, 399, 2343-50	4.4	14
124	Tailoring plasmonic nanostructures for optimal SERS sensing of small molecules and large microorganisms. *Small*, **2011**, 7, 371-6	11	46
123	Light Transmission and Surface-Enhanced Raman Scattering of Quasi-3D Plasmonic Nanostructure Arrays with Deep and Shallow Fabry-Pérot Nanocavities. *Journal of Physical Chemistry C*, **2011**, 115, 10996-11002	3.8	29

122	Comparison of 2D planar approximation and rigorous 3D theoretical analysis of a fiber optic surface plasmon resonance sensor utilizing a Bragg grating **2010**,		2
121	Shielding effect of monovalent and divalent cations on solid-phase DNA hybridization: surface plasmon resonance biosensor study. *Nucleic Acids Research*, **2010**, 38, 7343-51	20.1	46
120	Surface plasmon resonance biosensor for rapid label-free detection of microribonucleic acid at subfemtomole level. *Analytical Chemistry*, **2010**, 82, 10110-5	7.8	161
119	An SPR biosensor for the detection of microcystins in drinking water. *Analytical and Bioanalytical Chemistry*, **2010**, 398, 2625-34	4.4	62
118	Detection of bisphenol A using a novel surface plasmon resonance biosensor. *Analytical and Bioanalytical Chemistry*, **2010**, 398, 1963-6	4.4	44
117	Real-time monitoring of biomolecular interactions in blood plasma using a surface plasmon resonance biosensor. *Analytical and Bioanalytical Chemistry*, **2010**, 398, 1955-61	4.4	31
116	A label-free and portable multichannel surface plasmon resonance immunosensor for on site analysis of antibiotics in milk samples. *Biosensors and Bioelectronics*, **2010**, 26, 1231-8	11.8	131
115	A dual surface plasmon resonance assay for the determination of ribonuclease H activity. *Biosensors and Bioelectronics*, **2010**, 26, 1605-11	11.8	8
114	High-performance compact SPR sensor for multi-analyte sensing. *Sensors and Actuators B: Chemical*, **2010**, 148, 544-549	8.5	46
113	Surface plasmon resonance sensor with dispersionless microfluidics for direct detection of nucleic acids at the low femtomole level. *Sensors and Actuators B: Chemical*, **2010**, 145, 588-591	8.5	43
112	Surface plasmon resonance sensor for detection of bisphenol A in drinking water. *Sensors and Actuators B: Chemical*, **2010**, 151, 177-179	8.5	36
111	Ultra-low fouling and functionalizable zwitterionic coatings grafted onto SiO2 via a biomimetic adhesive group for sensing and detection in complex media. *Biosensors and Bioelectronics*, **2010**, 25, 2276-82	11.8	88
110	Surface plasmon resonance biosensor for parallelized detection of protein biomarkers in diluted blood plasma. *Biosensors and Bioelectronics*, **2010**, 26, 1656-61	11.8	111
109	Surface plasmon resonance biosensing **2009**,		1
108	Long-range surface plasmons for sensitive detection of bacterial analytes. *Sensors and Actuators B: Chemical*, **2009**, 139, 59-63	8.5	98
107	High-throughput SPR sensor for food safety. *Biosensors and Bioelectronics*, **2009**, 24, 1399-404	11.8	163
106	Label-free detection of cancer biomarker candidates using surface plasmon resonance imaging. *Analytical and Bioanalytical Chemistry*, **2009**, 393, 1157-63	4.4	86
105	Surface plasmon resonance study on HIV-1 integrase strand transfer activity. *Analytical and Bioanalytical Chemistry*, **2009**, 393, 1165-72	4.4	13

104	Novel concept of multi-channel fiber optic surface plasmon resonance sensor. *Sensors and Actuators B: Chemical*, **2009**, 139, 199-203	8.5	43
103	Surface plasmon resonance biosensors for detection of Alzheimer disease biomarker. *Sensors and Actuators B: Chemical*, **2009**, 139, 69-73	8.5	54
102	Functionalizable surface platform with reduced nonspecific protein adsorption from full blood plasma--material selection and protein immobilization optimization. *Biosensors and Bioelectronics*, **2009**, 24, 1924-30	11.8	147
101	Compact and low-cost biosensor based on novel approach to spectroscopy of surface plasmons. *Biosensors and Bioelectronics*, **2009**, 24, 3430-5	11.8	89
100	Modelling and characterisation of surface plasmon based sensors for the detection of E. coli. *Journal of Modern Optics*, **2009**, 56, 564-571	1.1	2
99	Surface plasmon resonance (SPR) sensors: approaching their limits?. *Optics Express*, **2009**, 17, 16505-17	3.3	491
98	Theoretical analysis of a fiber optic surface plasmon resonance sensor utilizing a Bragg grating. *Optics Express*, **2009**, 17, 23254-64	3.3	47
97	Surface plasmon resonance biosensors: advances and applications **2009**,		3
96	Surface plasmon resonance biosensing. *Methods in Molecular Biology*, **2009**, 503, 65-88	1.4	130
95	Surface plasmon resonance biosensors for detection of foodborne pathogens and toxins **2009**,		3
94	Enhanced levels of mitochondrial enzyme 17beta-hydroxysteroid dehydrogenase type 10 in patients with Alzheimer disease and multiple sclerosis. *Molecular BioSystems*, **2009**, 5, 1174-9		26
93	Surface plasmon resonance imaging for parallelized detection of protein biomarkers **2009**,		1
92	Compact multi-channel high-sensitivity biosensor based on spectroscopy of surface plasmons **2009**,		1
91	Optical sensors based on spectroscopy of localized surface plasmons on metallic nanoparticles: sensitivity considerations. *Biointerphases*, **2008**, 3, FD4-11	1.8	65
90	Hybrid surface platform for the simultaneous detection of proteins and DNAs using a surface plasmon resonance imaging sensor. *Analytical Chemistry*, **2008**, 80, 4231-6	7.8	43
89	Surface plasmon resonance sensors for detection of chemical and biological species. *Chemical Reviews*, **2008**, 108, 462-93	68.1	2982
88	Surface Plasmon Resonance (SPR) Sensors for the Detection of Bacterial Pathogens **2008**, 83-108		13
87	Ultralow fouling and functionalizable surface chemistry based on a zwitterionic polymer enabling sensitive and specific protein detection in undiluted blood plasma. *Analytical Chemistry*, **2008**, 80, 7894-901	7.8	337

86	Comparative surface plasmon spectroscopy for characterisation of thin films. *Electronics Letters*, **2008**, 44, 1085	1.1	
85	SURFACE PLASMON RESONANCE BIOSENSORS **2008**, 185-242		21
84	Detection of botulinum neurotoxins in buffer and honey using a surface plasmon resonance (SPR) sensor. *Sensors and Actuators B: Chemical*, **2008**, 130, 129-134	8.5	31
83	Effect of the immobilisation of DNA aptamers on the detection of thrombin by means of surface plasmon resonance. *Analytical and Bioanalytical Chemistry*, **2008**, 391, 1861-9	4.4	59
82	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	8.5	59
81	Self-referencing SPR imaging for most demanding high-throughput screening applications. *Sensors and Actuators B: Chemical*, **2008**, 134, 353-355	8.5	33
80	Novel polarization control for high-throughput surface plasmon resonance sensors **2007**,		6
79	The influence of intrinsic coagulation pathway on blood platelets activation by oxidized cellulose. *Journal of Biomedical Materials Research - Part A*, **2007**, 82, 274-80	5.4	28
78	Surface plasmon resonance biosensor for direct detection of antibody against Epstein-Barr virus. *Biosensors and Bioelectronics*, **2007**, 22, 1020-6	11.8	80
77	Ultrahigh resolution long range surface plasmon-based sensor. *Sensors and Actuators B: Chemical*, **2007**, 123, 10-12	8.5	207
76	Towards parallelized surface plasmon resonance sensor platform for sensitive detection of oligonucleotides. *Sensors and Actuators B: Chemical*, **2007**, 121, 187-193	8.5	52
75	Multichannel SPR biosensor for detection of endocrine-disrupting compounds. *Analytical and Bioanalytical Chemistry*, **2007**, 389, 1841-7	4.4	45
74	Surface plasmon resonance biosensors **2007**, 6619, 68		1
73	SPR sensor based on a bi-diffractive grating **2007**,		4
72	Spectroscopy of Bragg-scattered surface plasmons for characterization of thin biomolecular films. *Optics Letters*, **2007**, 32, 2903-5	3	13
71	Diffraction grating-coupled surface plasmon resonance sensor based on spectroscopy of long-range and short-range surface plasmons **2007**,		15
70	Investigating oligonucleotide hybridization at subnanomolar level by surface plasmon resonance biosensor method. *Biopolymers*, **2006**, 82, 394-8	2.2	38
69	SPR Biosensors for Food Safety. *Springer Series on Chemical Sensors and Biosensors*, **2006**, 207-227	2	3

68	SURFACE PLASMON RESONANCE (SPR) BIOSENSORS AND THEIR APPLICATIONS IN FOOD SAFETY AND SECURITY **2006**, 101-118		5
67	Electromagnetic Theory of Surface Plasmons. *Springer Series on Chemical Sensors and Biosensors*, **2006**, 3-44	2	65
66	Surface Plasmon Resonance Based Sensors. *Springer Series on Chemical Sensors and Biosensors*, **2006**,	2	521
65	Advanced biosensing using simultaneous excitation of short and long range surface plasmons. *Measurement Science and Technology*, **2006**, 17, 932-938	2	48
64	SPR Biosensors for Detection of Biological and Chemical Analytes. *Springer Series on Chemical Sensors and Biosensors*, **2006**, 177-190	2	8
63	SPR Biosensors for Environmental Monitoring. *Springer Series on Chemical Sensors and Biosensors*, **2006**, 191-206	2	4
62	SPR Biosensors for Medical Diagnostics. *Springer Series on Chemical Sensors and Biosensors*, **2006**, 229-247	2	7
61	Molecular Interactions in SPR Sensors. *Springer Series on Chemical Sensors and Biosensors*, **2006**, 69-91	2	8
60	SPR Sensor Instrumentation. *Springer Series on Chemical Sensors and Biosensors*, **2006**, 95-116	2	11
59	New approach to spectroscopy of surface plasmons. *Optics Letters*, **2006**, 31, 3339-41	3	36
58	Surface Plasmon Resonance (SPR) Sensors. *Springer Series on Chemical Sensors and Biosensors*, **2006**, 45-67	2	128
57	Optical multilayers for LED-based surface plasmon resonance sensors. *Applied Optics*, **2006**, 45, 3752-9	1.7	23
56	Quantitative and simultaneous detection of four foodborne bacterial pathogens with a multi-channel SPR sensor. *Biosensors and Bioelectronics*, **2006**, 22, 752-8	11.8	246
55	Multiple surface plasmon spectroscopy for study of biomolecular systems. *Sensors and Actuators B: Chemical*, **2006**, 113, 774-781	8.5	57
54	Simultaneous excitation of long and short range surface plasmons in an asymmetric structure. *Optics Communications*, **2006**, 259, 507-512	2	22
53	SENSORS BASED ON SPECTROSCOPY OF GUIDED WAVES **2006**, 179-192		1
52	Multi-analyte surface plasmon resonance biosensing. *Methods*, **2005**, 37, 26-36	4.6	162
51	Rich information format surface plasmon resonance biosensor based on array of diffraction gratings. *Sensors and Actuators B: Chemical*, **2005**, 107, 154-161	8.5	117

50	Advanced data processing for SPR biosensors. *Sensors and Actuators B: Chemical*, **2005**, 107, 162-169	8.5	23
49	Detection of low-molecular-weight domoic acid using surface plasmon resonance sensor. *Sensors and Actuators B: Chemical*, **2005**, 107, 193-201	8.5	99
48	Comparison of E. coli O157:H7 preparation methods used for detection with surface plasmon resonance sensor. *Sensors and Actuators B: Chemical*, **2005**, 107, 202-208	8.5	105
47	A new surface plasmon resonance sensor for high-throughput screening applications. *Biosensors and Bioelectronics*, **2005**, 20, 2104-10	11.8	147
46	Multichannel surface plasmon resonance biosensor with wavelength division multiplexing. *Sensors and Actuators B: Chemical*, **2005**, 108, 758-764	8.5	98
45	DNA-directed protein immobilization on mixed self-assembled monolayers via a streptavidin bridge. *Langmuir*, **2004**, 20, 8090-5	4	117
44	DNA directed protein immobilization on mixed ssDNA/oligo(ethylene glycol) self-assembled monolayers for sensitive biosensors. *Analytical Chemistry*, **2004**, 76, 6967-72	7.8	140
43	Surface Plasmon Resonance Biosensors for Food Safety **2004**, 145-172		8
42	Present and future of surface plasmon resonance biosensors. *Analytical and Bioanalytical Chemistry* , **2003**, 377, 528-39	4.4	1617
41	Surface plasmon resonance sensor based on a single-mode polarization-maintaining optical fiber. *Sensors and Actuators B: Chemical*, **2003**, 90, 236-242	8.5	179
40	Surface functionalization for self-referencing surface plasmon resonance (SPR) biosensors by multi-step self-assembly. *Sensors and Actuators B: Chemical*, **2003**, 90, 22-30	8.5	102
39	Surface interactions of oxidized cellulose with fibrin(ogen) and blood platelets. *Sensors and Actuators B: Chemical*, **2003**, 90, 243-249	8.5	24
38	Surface Plasmon Resonance Biosensors **2002**, 207-251		19
37	Spectral surface plasmon resonance biosensor for detection of staphylococcal enterotoxin B in milk. *International Journal of Food Microbiology*, **2002**, 75, 61-9	5.8	261
36	A miniature fiber optic surface plasmon resonance sensor for fast detection of Staphylococcal enterotoxin B. *Biosensors and Bioelectronics*, **2002**, 17, 591-5	11.8	142
35	Detecting the adsorption of dye molecules in homogeneous poly(propylene imine) dendrimer monolayers by surface plasmon resonance sensor. *Journal of the American Chemical Society*, **2002**, 124, 3395-401	16.4	38
34	Data analysis for optical sensors based on spectroscopy of surface plasmons. *Measurement Science and Technology*, **2002**, 13, 2038-2046	2	123
33	Reference-compensated surface plasmon resonance biosensor for detection of foodborne pathogens **2001**,		1

32	Novel approach to surface plasmon resonance multichannel sensing **2001**, 4416, 86		11
31	Optical sensing of the initial stages in the growth and development of fibrin clot. *Sensors and Actuators B: Chemical*, **2001**, 74, 69-73	8.5	8
30	Protein contact printing for a surface plasmon resonance biosensor with on-chip referencing. *Sensors and Actuators B: Chemical*, **2001**, 74, 91-99	8.5	50
29	Detection of foodborne pathogens using surface plasmon resonance biosensors. *Sensors and Actuators B: Chemical*, **2001**, 74, 100-105	8.5	223
28	Novel spectral fiber optic sensor based on surface plasmon resonance. *Sensors and Actuators B: Chemical*, **2001**, 74, 106-111	8.5	200
27	Long-range surface plasmons for high-resolution surface plasmon resonance sensors. *Sensors and Actuators B: Chemical*, **2001**, 74, 145-151	8.5	229
26	A novel multichannel surface plasmon resonance biosensor. *Sensors and Actuators B: Chemical*, **2001**, 76, 403-410	8.5	101
25	Surface plasmon resonance biosensor based on integrated optical waveguide. *Sensors and Actuators B: Chemical*, **2001**, 76, 8-12	8.5	192
24	Advances in development of miniature fiber optic surface plasmon resonance sensors **2001**,		2
23	Dual-channel surface plasmon resonance sensor with spectral discrimination of sensing channels using dielectric overlayer. *Electronics Letters*, **1999**, 35, 1105	1.1	44
22	Novel approach to multichannel SPR sensing **1999**, 3857, 198		2
21	Single-mode optical fiber surface plasmon resonance sensor. *Sensors and Actuators B: Chemical*, **1999**, 54, 74-79	8.5	143
20	Surface plasmon resonance sensors: review. *Sensors and Actuators B: Chemical*, **1999**, 54, 3-15	8.5	3875
19	Surface plasmon resonance sensors based on diffraction gratings and prism couplers: sensitivity comparison. *Sensors and Actuators B: Chemical*, **1999**, 54, 16-24	8.5	459
18	Antibody networks for surface plasmon resonance immunosensors. *Sensors and Actuators B: Chemical*, **1999**, 54, 132-136	8.5	21
17	Theory and modelling of optical waveguide sensors utilising surface plasmon resonance. *Sensors and Actuators B: Chemical*, **1999**, 54, 66-73	8.5	73
16	Surface plasmon resonance analysis of immobilized fibrinogen and fibrin and their interaction with thrombin and fibrinogen **1999**, 3570, 176		
15	Molecular arrangement of adsorbed fibrinogen molecules characterized by specific monoclonal antibodies and a surface plasmon resonance sensor. *Sensors and Actuators B: Chemical*, **1998**, 51, 268-272	8.5	25

14	Miniaturization of fiber optic surface plasmon resonance sensor. *Sensors and Actuators B: Chemical*, **1998**, 51, 311-315	8.5	92
13	Novel polarization control scheme for spectral surface plasmon resonance sensors. *Sensors and Actuators B: Chemical*, **1998**, 51, 331-339	8.5	41
12	Optical biosensing using surface plasmon resonance spectroscopy **1997**,		2
11	Novel surface plasmon resonance sensor based on single-mode optical fiber **1997**,		9
10	Tuning of spectral operation range of a waveguide surface plasmon resonance sensor. *Electronics Letters*, **1997**, 33, 1246	1.1	37
9	Interaction between fiber modes and surface plasmon waves: spectral properties. *Optics Letters*, **1997**, 22, 1403-5	3	31
8	A surface plasmon resonance based integrated optical sensor. *Sensors and Actuators B: Chemical*, **1997**, 39, 286-290	8.5	65
7	Modelling of surface plasmon resonance waveguide sensor by complex mode expansion and propagation method. *Optical and Quantum Electronics*, **1997**, 29, 301-311	2.4	44
6	On the sensitivity of surface plasmon resonance sensors with spectral interrogation. *Sensors and Actuators B: Chemical*, **1997**, 41, 207-211	8.5	278
5	Fibre-optic sensor based on surface plasmon resonance. *Electronics Letters*, **1996**, 32, 480	1.1	50
4	Surface plasmon resonance sensor based on planar light pipe: theoretical optimization analysis. *Sensors and Actuators B: Chemical*, **1996**, 37, 145-150	8.5	12
3	Optical fiber sensor based on surface plasmon excitation. *Sensors and Actuators B: Chemical*, **1995**, 29, 401-405	8.5	148
2	Fiber optic sensor for adsorption studies using surface plasmon resonance **1995**,		5
1	Model of a chemo-optical sensor based on plasmon excitation in thin silver films. *Sensors and Actuators B: Chemical*, **1993**, 11, 481-485	8.5	6