Marek Piliarik

List of Publications by Year
in descending order

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Version: 2024-02-01

48	4,161	172457	289244
papers	citations	29 h-index	40 g-index

53	53	53	4848
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Surface plasmon resonance (SPR) sensors: approaching their limits?. Optics Express, 2009, 17, 16505.	3.4	601
2	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, 7894-7901.	6.5	381
3	Direct optical sensing of single unlabelled proteins and super-resolution imaging of their binding sites. Nature Communications, 2014, 5, 4495.	12.8	245
4	Surface plasmon resonance sensor based on a single-mode polarization-maintaining optical fiber. Sensors and Actuators B: Chemical, 2003, 90, 236-242.	7.8	226
5	High-throughput SPR sensor for food safety. Biosensors and Bioelectronics, 2009, 24, 1399-1404.	10.1	211
6	Multi-analyte surface plasmon resonance biosensing. Methods, 2005, 37, 26-36.	3.8	183
7	Surface Plasmon Resonance Biosensing. Methods in Molecular Biology, 2009, 503, 65-88.	0.9	172
8	Functionalizable surface platform with reduced nonspecific protein adsorption from full blood plasmaâ€"Material selection and protein immobilization optimization. Biosensors and Bioelectronics, 2009, 24, 1924-1930.	10.1	170
9	A label-free and portable multichannel surface plasmon resonance immunosensor for on site analysis of antibiotics in milk samples. Biosensors and Bioelectronics, 2010, 26, 1231-1238.	10.1	166
10	A new surface plasmon resonance sensor for high-throughput screening applications. Biosensors and Bioelectronics, 2005, 20, 2104-2110.	10.1	161
11	Data analysis for optical sensors based on spectroscopy of surface plasmons. Measurement Science and Technology, 2002, 13, 2038-2046.	2.6	146
12	Surface plasmon resonance biosensor for parallelized detection of protein biomarkers in diluted blood plasma. Biosensors and Bioelectronics, 2010, 26, 1656-1661.	10.1	124
13	Label-free detection of cancer biomarker candidates using surface plasmon resonance imaging. Analytical and Bioanalytical Chemistry, 2009, 393, 1157-1163.	3.7	104
14	Compact and low-cost biosensor based on novel approach to spectroscopy of surface plasmons. Biosensors and Bioelectronics, 2009, 24, 3430-3435.	10.1	104
15	High-resolution biosensor based on localized surface plasmons. Optics Express, 2012, 20, 672.	3.4	99
16	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, 2276-2282.	10.1	95
17	Surface plasmon resonance biosensor for direct detection of antibody against Epstein-Barr virus. Biosensors and Bioelectronics, 2007, 22, 1020-1026.	10.1	89
18	Local refractive index sensitivity of plasmonic nanoparticles. Optics Express, 2011, 19, 9213.	3.4	77

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19	High-performance compact SPR sensor for multi-analyte sensing. Sensors and Actuators B: Chemical, 2010, 148, 544-549.	7.8	58
20	Visualization of lipids and proteins at high spatial and temporal resolution via interferometric scattering (iSCAT) microscopy. Journal Physics D: Applied Physics, 2016, 49, 274002.	2.8	58
21	Towards parallelized surface plasmon resonance sensor platform for sensitive detection of oligonucleotides. Sensors and Actuators B: Chemical, 2007, 121, 187-193.	7.8	55
22	Novel concept of multi-channel fiber optic surface plasmon resonance sensor. Sensors and Actuators B: Chemical, 2009, 139, 199-203.	7.8	50
23	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.	7.8	50
24	Visualizing Single-Cell Secretion Dynamics with Single-Protein Sensitivity. Nano Letters, 2018, 18, 513-519.	9.1	50
25	Hybrid Surface Platform for the Simultaneous Detection of Proteins and DNAs Using a Surface Plasmon Resonance Imaging Sensor. Analytical Chemistry, 2008, 80, 4231-4236.	6.5	47
26	Detection of bisphenol A using a novel surface plasmon resonance biosensor. Analytical and Bioanalytical Chemistry, 2010, 398, 1963-1966.	3.7	46
27	Self-referencing SPR imaging for most demanding high-throughput screening applications. Sensors and Actuators B: Chemical, 2008, 134, 353-355.	7.8	37
28	Real-time monitoring of biomolecular interactions in blood plasma using a surface plasmon resonance biosensor. Analytical and Bioanalytical Chemistry, 2010, 398, 1955-1961.	3.7	35
29	[INVITED] Optical imaging and localization of prospective scattering labels smaller than a single protein. Optics and Laser Technology, 2019, 109, 323-327.	4.6	23
30	SPR Sensor Instrumentation. Springer Series on Chemical Sensors and Biosensors, 2006, , 95-116.	0.5	18
31	Fast photothermal spatial light modulation for quantitative phase imaging at the nanoscale. Nature Communications, 2021, 12, 2921.	12.8	18
32	Portable Surface Plasmon Resonance Biosensor for Detection of Nucleic Acids. Procedia Engineering, 2011, 25, 148-151.	1.2	15
33	Anomalous elasticity and damping in covalently cross-linked graphene aerogels. Communications Physics, 2022, 5, .	5.3	15
34	Surface plasmon resonance biosensors. Proceedings of SPIE, 2007, 6619, 68.	0.8	12
35	Nanoscopic Structural Fluctuations of Disassembling Microtubules Revealed by Labelâ€Free Superâ€Resolution Microscopy. Small Methods, 2021, 5, e2000985.	8.6	12
36	Novel polarization control for high-throughput surface plasmon resonance sensors. , 2007, , .		10

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37	Multiscale modeling and analysis for high-fidelity interferometric scattering microscopy. Journal Physics D: Applied Physics, 2021, 54, 274002.	2.8	5
38	Advances in development of miniature fiber optic surface plasmon resonance sensors. , 2001, , .		3
39	Fast Leaps between Millisecond Confinements Govern Ase1 Diffusion along Microtubules. Small Methods, 2021, 5, e2100370.	8.6	3
40	Interferometric scattering (iSCAT) microscopy for high fidelity tracking at microseconds timescales. , 2018, , .		3
41	Surface plasmon resonance imaging for parallelized detection of protein biomarkers. Proceedings of SPIE, 2009, , .	0.8	1
42	Compact multi-channel high-sensitivity biosensor based on spectroscopy of surface plasmons. , 2009, , .		1
43	Quantitative detection of optical anisotropy of single microtubules by polarization-sensitive interferometric scattering microscopy. Journal Physics D: Applied Physics, 2021, 54, 204001.	2.8	1
44	Fluorescence-free Imaging and Tracking of Individual Secretory Proteins and Bioparticles. , 2017, , .		0
45	High-Fidelity Fast Tracking of Protein Motion. , 2018, , .		0
46	Weighing single protein complexes on the go. Nature Methods, 2021, 18, 1159-1160.	19.0	0
47	Interferometric scattering (iSCAT) microscopy with optimized reference wave. , 2019, , .		0
48	Quantitative phase imaging at the nanoscale using interferometric microscope and thermo-optic effect. , 2021, , .		0