

# Jakub Dostalek

## List of Publications by Citations

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100  
papers

3,956  
citations

33  
h-index

61  
g-index

111  
ext. papers

4,489  
ext. citations

6.6  
avg, IF

5.45  
L-index

#	Paper	IF	Citations
100	Plasmon-Enhanced Fluorescence Biosensors: a Review. <i>Plasmonics</i> , <b>2014</b> , 9, 781-799	2.4	287
99	Spectral surface plasmon resonance biosensor for detection of staphylococcal enterotoxin B in milk. <i>International Journal of Food Microbiology</i> , <b>2002</b> , 75, 61-9	5.8	261
98	Detection of foodborne pathogens using surface plasmon resonance biosensors. <i>Sensors and Actuators B: Chemical</i> , <b>2001</b> , 74, 100-105	8.5	223
97	Surface plasmon resonance biosensor based on integrated optical waveguide. <i>Sensors and Actuators B: Chemical</i> , <b>2001</b> , 76, 8-12	8.5	192
96	Multi-analyte surface plasmon resonance biosensing. <i>Methods</i> , <b>2005</b> , 37, 26-36	4.6	162
95	Bacterial pathogen surface plasmon resonance biosensor advanced by long range surface plasmons and magnetic nanoparticle assays. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 8345-50	7.8	138
94	Magnetic nanoparticle-enhanced biosensor based on grating-coupled surface plasmon resonance. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 6202-7	7.8	134
93	Long Range Surface Plasmons for Observation of Biomolecular Binding Events at Metallic Surfaces. <i>Plasmonics</i> , <b>2007</b> , 2, 97-106	2.4	125
92	Thin hydrogel films for optical biosensor applications. <i>Membranes</i> , <b>2012</b> , 2, 40-69	3.8	117
91	Rich information format surface plasmon resonance biosensor based on array of diffraction gratings. <i>Sensors and Actuators B: Chemical</i> , <b>2005</b> , 107, 154-161	8.5	117
90	Long-range surface plasmon-enhanced fluorescence spectroscopy biosensor for ultrasensitive detection of E. coli O157:H7. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 674-7	7.8	102
89	Prostate specific antigen biosensor based on long range surface plasmon-enhanced fluorescence spectroscopy and dextran hydrogel binding matrix. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 9625-32	7.8	101
88	A novel multichannel surface plasmon resonance biosensor. <i>Sensors and Actuators B: Chemical</i> , <b>2001</b> , 76, 403-410	8.5	101
87	Multichannel surface plasmon resonance biosensor with wavelength division multiplexing. <i>Sensors and Actuators B: Chemical</i> , <b>2005</b> , 108, 758-764	8.5	98
86	Biosensors based on surface plasmon-enhanced fluorescence spectroscopy. <i>Biointerphases</i> , <b>2008</b> , 3, FD12-22	9.1	91
85	Long range surface plasmon-enhanced fluorescence spectroscopy for the detection of aflatoxin M1 in milk. <i>Biosensors and Bioelectronics</i> , <b>2009</b> , 24, 2264-7	11.8	77
84	Biosensor based on hydrogel optical waveguide spectroscopy. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 25, 1663-8	11.8	69

83	Lipopolysaccharides detection on a grating-coupled surface plasmon resonance smartphone biosensor. <i>Biosensors and Bioelectronics</i> , <b>2018</b> , 99, 312-317	11.8	66
82	Bloch surface wave-enhanced fluorescence biosensor. <i>Biosensors and Bioelectronics</i> , <b>2013</b> , 43, 108-114	11.8	66
81	Nanobiotechnology advanced antifouling surfaces for the continuous electrochemical monitoring of glucose in whole blood using a lab-on-a-chip. <i>Lab on A Chip</i> , <b>2013</b> , 13, 1780-9	7.2	63
80	Active Control of SPR by Thermoresponsive Hydrogels for Biosensor Applications. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 11705-11712	3.8	61
79	Surface plasmon resonance sensor based on an array of diffraction gratings for highly parallelized observation of biomolecular interactions. <i>Sensors and Actuators B: Chemical</i> , <b>2008</b> , 129, 303-310	8.5	59
78	Multiple surface plasmon spectroscopy for study of biomolecular systems. <i>Sensors and Actuators B: Chemical</i> , <b>2006</b> , 113, 774-781	8.5	57
77	Tunable laser interference lithography preparation of plasmonic nanoparticle arrays tailored for SERS. <i>Nanoscale</i> , <b>2018</b> , 10, 10268-10276	7.7	55
76	Sensitive and rapid detection of aflatoxin M1 in milk utilizing enhanced SPR and p(HEMA) brushes. <i>Biosensors and Bioelectronics</i> , <b>2016</b> , 81, 159-165	11.8	54
75	Fast and sensitive detection of ochratoxin A in red wine by nanoparticle-enhanced SPR. <i>Analytica Chimica Acta</i> , <b>2016</b> , 937, 143-50	6.6	51
74	Hepatitis B plasmonic biosensor for the analysis of clinical serum samples. <i>Biosensors and Bioelectronics</i> , <b>2016</b> , 85, 272-279	11.8	49
73	Compact surface plasmon-enhanced fluorescence biochip. <i>Optics Express</i> , <b>2013</b> , 21, 10121-32	3.3	46
72	Multichannel SPR biosensor for detection of endocrine-disrupting compounds. <i>Analytical and Bioanalytical Chemistry</i> , <b>2007</b> , 389, 1841-7	4.4	45
71	Biosensor based on hydrogel optical waveguide spectroscopy for the detection of 17 $\beta$ -estradiol. <i>Talanta</i> , <b>2013</b> , 104, 149-54	6.2	44
70	Long range surface plasmon and hydrogel optical waveguide field-enhanced fluorescence biosensor with 3D hydrogel binding matrix: on the role of diffusion mass transfer. <i>Biosensors and Bioelectronics</i> , <b>2010</b> , 26, 1425-31	11.8	36
69	Surface plasmon-coupled emission on plasmonic Bragg gratings. <i>Optics Express</i> , <b>2012</b> , 20, 14042-53	3.3	35
68	Magnetic nanoparticle-enhanced surface plasmon resonance biosensor for extracellular vesicle analysis. <i>Analyst, The</i> , <b>2017</b> , 142, 3913-3921	5	34
67	Plasmonic Hepatitis B Biosensor for the Analysis of Clinical Saliva. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 2972-2978		33
66	Tuneable and robust long range surface plasmon resonance for biosensing applications. <i>Optical Materials</i> , <b>2013</b> , 35, 2507-2513	3.3	32

65	Optical waveguide spectroscopy for the investigation of protein-functionalized hydrogel films. <i>Macromolecular Rapid Communications</i> , <b>2009</b> , 30, 872-7	4.8	32
64	Pushing the Boundaries of Interfacial Sensitivity in Graphene FET Sensors: Polyelectrolyte Multilayers Strongly Increase the Debye Screening Length. <i>Journal of Physical Chemistry C</i> , <b>2018</b> , 122, 10181-10188	3.8	30
63	Collective localized surface plasmons for high performance fluorescence biosensing. <i>Optics Express</i> , <b>2013</b> , 21, 20470-83	3.3	29
62	Biosensor platform for parallel surface plasmon-enhanced epifluorescence and surface plasmon resonance detection. <i>Sensors and Actuators B: Chemical</i> , <b>2018</b> , 257, 594-601	8.5	26
61	Tunable Plasmonic Nanohole Arrays Actuated by a Thermo-responsive Hydrogel Cushion. <i>Journal of Physical Chemistry C</i> , <b>2016</b> , 120, 561-568	3.8	24
60	Directional fluorescence emission co-enhanced by localized and propagating surface plasmons for biosensing. <i>Nanoscale</i> , <b>2016</b> , 8, 8008-16	7.7	24
59	Compact Grating-Coupled Biosensor for the Analysis of Thrombin. <i>ACS Sensors</i> , <b>2019</b> , 4, 2109-2116	9.2	24
58	Surface interactions of oxidized cellulose with fibrin(ogen) and blood platelets. <i>Sensors and Actuators B: Chemical</i> , <b>2003</b> , 90, 243-249	8.5	24
57	Bicyclic RGD Peptides with Exquisite Selectivity for the Integrin Receptor Using a "Random Design" Approach. <i>ACS Combinatorial Science</i> , <b>2019</b> , 21, 198-206	3.9	23
56	Multidiffractive Broadband Plasmonic Absorber. <i>Advanced Optical Materials</i> , <b>2016</b> , 4, 435-443	8.1	22
55	Long range surface plasmon-coupled fluorescence emission for biosensor applications. <i>Optics Express</i> , <b>2011</b> , 19, 11090-9	3.3	19
54	Diffusion and Permeation of Labeled IgG in Grafted Hydrogels. <i>Macromolecules</i> , <b>2017</b> , 50, 4770-4779	5.5	18
53	Optimization of layer structure supporting long range surface plasmons for surface plasmon-enhanced fluorescence spectroscopy biosensors. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2010</b> , 28, 66-72	1.3	17
52	Molecularly controlled functional architectures. <i>Materials Today</i> , <b>2010</b> , 13, 46-55	21.8	17
51	Dual Monitoring of Surface Reactions in Real Time by Combined Surface-Plasmon Resonance and Field-Effect Transistor Interrogation. <i>Journal of the American Chemical Society</i> , <b>2020</b> , 142, 11709-11716	16.4	15
50	Surface plasmon resonance-based aptasensor for direct monitoring of thrombin in a minimally processed human blood. <i>Sensors and Actuators B: Chemical</i> , <b>2020</b> , 320, 128380	8.5	15
49	A surface plasmon field-enhanced fluorescence reversible split aptamer biosensor. <i>Analyst</i> , <b>2017</b> , 142, 2995-3001	5	15
48	Diffraction grating-coupled surface plasmon resonance sensor based on spectroscopy of long-range and short-range surface plasmons <b>2007</b> ,		15

47	Shedding Light on the Dark Corners of Metal-Organic Framework Thin Films: Growth and Structural Stability of ZIF-8 Layers Probed by Optical Waveguide Spectroscopy. <i>Journal of Physical Chemistry A</i> , <b>2019</b> , 123, 1100-1109	2.8	15
46	Plasmon Field-Enhanced Fluorescence Energy Transfer for Hairpin Aptamer Assay Readout. <i>ACS Sensors</i> , <b>2017</b> , 2, 916-923	9.2	14
45	Plasmonic amplification for bioassays with epi-fluorescence readout. <i>Optics Express</i> , <b>2014</b> , 22, 32026-38	3.3	14
44	UV-Laser Interference Lithography for Local Functionalization of Plasmonic Nanostructures with Responsive Hydrogel. <i>Journal of Physical Chemistry C</i> , <b>2020</b> , 124, 3297-3305	3.8	14
43	Spectroscopy of Bragg-scattered surface plasmons for characterization of thin biomolecular films. <i>Optics Letters</i> , <b>2007</b> , 32, 2903-5	3	13
42	Hydrogel-Terminated Photonic Crystal for Label-Free Detection of Angiopoietin-1. <i>Journal of Lightwave Technology</i> , <b>2016</b> , 34, 3641-3645	4	12
41	SPR bacterial pathogen biosensor: the importance of fluidic conditions and probing depth. <i>Talanta</i> , <b>2014</b> , 122, 166-71	6.2	12
40	Actively Tunable Collective Localized Surface Plasmons by Responsive Hydrogel Membrane. <i>Advanced Optical Materials</i> , <b>2019</b> , 7, 1900342	8.1	11
39	Actuated plasmonic nanohole arrays for sensing and optical spectroscopy applications. <i>Nanoscale</i> , <b>2020</b> , 12, 9756-9768	7.7	11
38	Coupled long range surface plasmons for the investigation of thin films and interfaces. <i>Sensors and Actuators B: Chemical</i> , <b>2009</b> , 139, 9-12	8.5	11
37	NEW CONCEPTS WITH SURFACE PLASMONS AND NANO-BIOINTERFACES. <i>Journal of Nonlinear Optical Physics and Materials</i> , <b>2008</b> , 17, 121-129	0.8	11
36	Novel approach to surface plasmon resonance multichannel sensing <b>2001</b> , 4416, 86		11
35	Surface plasmon modes of nanomesh-on-mirror nanocavities prepared by nanosphere lithography. <i>Nanoscale</i> , <b>2018</b> , 10, 17983-17989	7.7	11
34	High-Affinity Integrin-Selective Bicyclic RGD Peptides Identified via Screening of Designed Random Libraries. <i>ACS Combinatorial Science</i> , <b>2019</b> , 21, 598-607	3.9	9
33	Multiresonant plasmonic nanostructure for ultrasensitive fluorescence biosensing. <i>Nanophotonics</i> , <b>2020</b> , 9, 3673-3685	6.3	9
32	Molecularly Imprinted Polymer Waveguides for Direct Optical Detection of Low-Molecular-Weight Analytes. <i>Macromolecular Chemistry and Physics</i> , <b>2014</b> , 215, 2295-2304	2.6	8
31	SPR Biosensors for Detection of Biological and Chemical Analytes. <i>Springer Series on Chemical Sensors and Biosensors</i> , <b>2006</b> , 177-190	2	8
30	Optical Waveguide-Enhanced Diffraction for Observation of Responsive Hydrogel Nanostructures. <i>Macromolecular Chemistry and Physics</i> , <b>2017</b> , 218, 1600400	2.6	7

29	Nanostructured as-deposited indium tin oxide thin films for broadband antireflection and light trapping. <i>Nanotechnology</i> , <b>2017</b> , 28, 325201	3.4	7
28	Free-standing hydrogel-particle composite membrane with dynamically controlled permeability. <i>Biointerphases</i> , <b>2017</b> , 12, 051002	1.8	6
27	Bragg-Scattered Surface Plasmon Microscopy: Theoretical Study. <i>Plasmonics</i> , <b>2012</b> , 7, 293-299	2.4	6
26	Plasmonically amplified bioassay - Total internal reflection fluorescence vs. epifluorescence geometry. <i>Talanta</i> , <b>2016</b> , 156-157, 225-231	6.2	6
25	Biosensor platform based on surface plasmon-enhanced fluorescence spectroscopy and responsive hydrogel binding matrix <b>2009</b> ,		5
24	Magnetic nanoparticle-enhanced SPR biosensor. <i>Procedia Engineering</i> , <b>2010</b> , 5, 1017-1020		5
23	Reversibly tunable plasmonic bandgap by responsive hydrogel grating. <i>Optics Express</i> , <b>2016</b> , 24, 2457-653.3		5
22	SPR sensor based on a bi-diffractive grating <b>2007</b> ,		4
21	Plasmonic Properties of Gold Nanostructures on Gold Film. <i>Plasmonics</i> , <b>2020</b> , 15, 1653-1660	2.4	4
20	Development of a specific troponin I detection system with enhanced immune sensitivity using a single monoclonal antibody. <i>Royal Society Open Science</i> , <b>2020</b> , 7, 200871	3.3	4
19	Investigation of optical fiber-tip probes for common and ultrafast SERS. <i>New Journal of Physics</i> , <b>2020</b> , 22, 033027	2.9	3
18	<i>Plasmonics</i> <b>2012</b> , 647-659		3
17	Microfluidic Platform for Multiplexed Cell Sampling and Time-Resolved SPR-Based Cytokine Sensing. <i>IFMBE Proceedings</i> , <b>2015</b> , 785-788	0.2	3
16	Functionalized Terpolymer-Brush-Based Biointerface with Improved Antifouling Properties for Ultra-Sensitive Direct Detection of Virus in Crude Clinical Samples.. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 60612-60624	9.5	3
15	Plasmonic biosensors relying on biomolecular conformational changes: Case of odorant binding proteins. <i>Methods in Enzymology</i> , <b>2020</b> , 642, 469-493	1.7	2
14	Responsive Hydrogel Binding Matrix for Dual Signal Amplification in Fluorescence Affinity Biosensors and Peptide Microarrays. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 27645-27655	9.5	2
13	Plasmonically amplified fluorescence bioassay with microarray format <b>2015</b> ,		1
12	Long range surface plasmon resonance bacterial pathogen biosensor with magnetic nanoparticle assay <b>2011</b> ,		1

11	Reference-compensated surface plasmon resonance biosensor for detection of foodborne pathogens <b>2001</b> ,		1
10	Multi-diffractive grating for surface plasmon biosensors with direct back-side excitation. <i>Optics Express</i> , <b>2020</b> , 28, 39770-39780	3.3	1
9	Thin-Film Polyisocyanide-Based Hydrogels for Affinity Biosensors. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 12960-12967	3.8	1
8	Monitoring of Rolling Circle Amplification on a Solid Support by Surface Plasmon Resonance and Optical Waveguide Spectroscopy. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> , 13, 32352-32362	9.5	1
7	State of the Art of Chemosensors in a Biomedical Context. <i>Chemosensors</i> , <b>2022</b> , 10, 199	4	1
6	Tutorial Review: Surface Plasmon Resonance-Based Biosensors29-53		0
5	Plasmonic Exosome Biosensors for Medical Diagnostics. <i>Progress in Optical Science and Photonics</i> , <b>2016</b> , 249-272	0.3	
4	Fluorescence Biosensors Utilizing Grating-Assisted Plasmonic Amplification <b>2017</b> , 227-240		
3	Responsive Polymer Networks and Brushes for Active Plasmonics <b>2017</b> , 687-707		
2	Biofunctional Surfaces <b>2015</b> , 341-362		
1	Long-Range Surface Plasmon Enhanced Fluorescence Spectroscopy as a Platform for Biosensors447-461		