Ioannis Raptis

List of Publications by Year
in descending order

85 papers	1,417 citations	331670 21 h-index	395702 33 g-index
86 all docs	86 docs citations	86 times ranked	1464 citing authors

#	Article	IF	Citations
1	Rapid Detection of Salmonella typhimurium in Drinking Water by a White Light Reflectance Spectroscopy Immunosensor. Sensors, 2021, 21, 2683.	3.8	18
2	Fast and Sensitive Determination of the Fungicide Carbendazim in Fruit Juices with an Immunosensor Based on White Light Reflectance Spectroscopy. Biosensors, 2021, 11, 153.	4.7	7
3	Current Progress on Biosensors and Point-of-Care Devices for Sepsis Diagnosis. IEEE Sensors Journal, 2021, 21, 12840-12855.	4.7	6
4	Development of a Point-of-Care System Based on White Light Reflectance Spectroscopy: Application in CRP Determination. Biosensors, 2021, 11, 268.	4.7	9
5	Rapid detection of mozzarella and feta cheese adulteration with cow milk through a silicon photonic immunosensor. Analyst, The, 2021, 146, 529-537.	3.5	17
6	Gas Sensitivity Amplification of Interdigitated Chemocapacitors Through Etching. IEEE Sensors Journal, 2020, 20, 463-470.	4.7	3
7	Spatially selective biomolecules immobilization on silicon nitride waveguides through contact printing onto plasma treated photolithographic micropattern: Step-by-step analysis with TOF-SIMS chemical imaging. Applied Surface Science, 2020, 506, 145002.	6.1	4
8	Fast Deoxynivalenol Determination in Cereals Using a White Light Reflectance Spectroscopy Immunosensor. Biosensors, 2020, 10, 154.	4.7	5
9	Reversible chemocapacitor system based on PDMAEMA polymers for fast sensing of VOCs mixtures. Microelectronic Engineering, 2020, 227, 111304.	2.4	4
10	Fast, sensitive and selective determination of herbicide glyphosate in water samples with a White Light Reflectance Spectroscopy immunosensor. Talanta, 2020, 214, 120854.	5.5	24
11	Multiplexed mycotoxins determination employing white light reflectance spectroscopy and silicon chips with silicon oxide areas of different thickness. Biosensors and Bioelectronics, 2020, 153, 112035.	10.1	21
12	All-Silicon Spectrally Resolved Interferometric Circuit for Multiplexed Diagnostics: A Monolithic Lab-on-a-Chip Integrating All Active and Passive Components. ACS Photonics, 2019, 6, 1694-1705.	6.6	14
13	Rapid and sensitive label-free determination of aflatoxin M1 levels in milk through a White Light Reflectance Spectroscopy immunosensor. Sensors and Actuators B: Chemical, 2019, 282, 104-111.	7.8	21
14	Rapid C-reactive protein determination in whole blood with a White Light Reflectance Spectroscopy label-free immunosensor for Point-of-Care applications. Sensors and Actuators B: Chemical, 2018, 260, 282-288.	7.8	17
15	Protein adsorption/desorption and antibody binding stoichiometry on silicon interferometric biosensors examined with TOF-SIMS. Applied Surface Science, 2018, 444, 187-196.	6.1	10
16	Interferometry-Based Immunoassays. , 2018, , 241-271.		0
17	Simultaneous determination of aflatoxin B1, fumonisin B1 and deoxynivalenol in beer samples with a label-free monolithically integrated optoelectronic biosensor. Journal of Hazardous Materials, 2018, 359, 445-453.	12.4	41
18	Simultaneous determination of paraquat and atrazine in water samples with a white light reflectance spectroscopy biosensor. Journal of Hazardous Materials, 2018, 359, 67-75.	12.4	31

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19	Ultrafast Multiplexed-Allergen Detection through Advanced Fluidic Design and Monolithic Interferometric Silicon Chips. Analytical Chemistry, 2018, 90, 9559-9567.	6.5	35
20	Detection of ochratoxin A in beer samples with a label-free monolithically integrated optoelectronic biosensor. Journal of Hazardous Materials, 2017, 323, 75-83.	12.4	41
21	Fast label-free detection of C-reactive protein using broad-band Mach-Zehnder interferometers integrated on silicon chips. Talanta, 2017, 165, 458-465.	5.5	24
22	Contact pin-printing of albumin-fungicide conjugate for silicon nitride-based sensors biofunctionalization: Multi-technique surface analysis for optimum immunoassay performance. Applied Surface Science, 2017, 410, 79-86.	6.1	9
23	White light reflectance spectroscopy biosensing system for fast quantitative prostate specific antigen determination in forensic samples. Talanta, 2017, 175, 443-450.	5.5	10
24	Indirect immunoassay on functionalized silicon surface: Molecular arrangement, composition and orientation examined step-by-step with multi-technique and multivariate analysis. Colloids and Surfaces B: Biointerfaces, 2017, 150, 437-444.	5.0	13
25	Fast simultaneous detection of three pesticides by a White Light Reflectance Spectroscopy sensing platform. Sensors and Actuators B: Chemical, 2017, 238, 1214-1223.	7.8	30
26	Development and Bioanalytical Applications of a White Light Reflectance Spectroscopy Label-Free Sensing Platform. Biosensors, 2017, 7, 46.	4.7	17
27	Broadband Young interferometry for simultaneous dual polarization bioanalytics. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1691.	2.1	5
28	Imaging and chemical surface analysis of biomolecular functionalization of monolithically integrated on silicon Mach-Zehnder interferometric immunosensors. Applied Surface Science, 2016, 385, 529-542.	6.1	18
29	Monolithically-integrated Young interferometers for label-free and multiplexed detection of biomolecules. Proceedings of SPIE, 2016, , .	0.8	5
30	Simultaneous determination of CRP and D-dimer in human blood plasma samples with White Light Reflectance Spectroscopy. Biosensors and Bioelectronics, 2016, 84, 89-96.	10.1	37
31	A miniaturized optoelectronic system for rapid quantitative label-free detection of harmful species in food. Proceedings of SPIE, 2016, , .	0.8	0
32	Design and fabrication of suspended Si3N4 nanobeam cavities. Microelectronic Engineering, 2016, 159, 42-45.	2.4	0
33	Imaging and spectroscopic comparison of multi-step methods to form DNA arrays based on the biotinâ€“streptavidin system. Analyst, The, 2015, 140, 1127-1139.	3.5	15
34	Assessment of goat milk adulteration with a label-free monolithically integrated optoelectronic biosensor. Analytical and Bioanalytical Chemistry, 2015, 407, 3995-4004.	3.7	42
35	Monitoring and Evaluation of Alcoholic Fermentation Processes Using a Chemocapacitor Sensor Array. Sensors, 2014, 14, 16258-16273.	3.8	14
36	Real-time multi-analyte label-free detection of proteins by white light reflectance spectroscopy. , 2014, , .		1

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37	Monolithic optoelectronic chip for label-free multi-analyte sensing applications. , 2014, , .		1
38	Simulation of Electron Beam Exposure and Resist Processing for Nano-Patterning. , 2012, , 43-91.		0
39	Microfabricated disposable lab-on-a-chip sensors with integrated bismuth microelectrode arrays for voltammetric determination of trace metals. Analytica Chimica Acta, 2012, 710, 1-8.	5.4	33
40	Polymerâ€BaTiO₃ composites: Dielectric constant and vapor sensing properties in chemocapacitor applications. Journal of Applied Polymer Science, 2012, 125, 2577-2584.	2.6	11
41	Compensation of Temperature Variations in Chemcapacitive Gas Sensing Systems. Sensor Letters, 2012, 10, 736-741.	0.4	3
42	Disposable microfabricated bismuth microelectrode arrays for trace metal analysis by stripping voltammetry. Procedia Engineering, 2011, 25, 880-883.	1.2	7
43	Monolithically integrated Mach-Zehnder biosensors for real-time label-free monitoring of biomolecular reactions. , 2011, 2011, 7654-7.		2
44	Disposable lithographically fabricated bismuth microelectrode arrays for stripping voltammetric detection of trace metals. Electrochemistry Communications, 2011, 13, 391-395.	4.7	43
45	A Chemocapacitive Sensor Array System for Gas Sensing Applications. Sensor Letters, 2011, 9, 577-583.	0.4	4
46	Vaporâ€induced swelling of supported methacrylic and siloxane polymer films: Determination of interaction parameters. Journal of Applied Polymer Science, 2010, 116, 184-190.	2.6	8
47	Determination of Trace Tl(I) by Anodic Stripping Voltammetry on Novel Disposable Microfabricated Bismuthâ€Film Sensors. Electroanalysis, 2010, 22, 2359-2365.	2.9	27
48	A regenerable flow-through affinity sensor for label-free detection of proteins and DNA. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2010, 878, 237-242.	2.3	6
49	Integrated optical frequency-resolved Mach-Zehnder interferometers for label-free affinity sensing. Optics Express, 2010, 18, 8193.	3.4	63
50	Monolithically integrated biosensors based on Frequency-Resolved Mach-Zehnder Interferometers for multi-analyte determinations. , 2010, 2010, 298-301.		2
51	A flow-through optical sensor system for label-free detection of proteins and DNA. , 2009, , .		1
52	Novel disposable microfabricated antimony-film electrodes for adsorptive stripping analysis of trace Ni(II). Electrochemistry Communications, 2009, 11, 250-253.	4.7	58
53	Disposable micro-fabricated electrochemical bismuth sensors for the determination of Tl(I) by stripping voltammetry. Procedia Chemistry, 2009, 1, 1039-1042.	0.7	8
54	Real-time label-free detection of complement activation products in human serum by white light reflectance spectroscopy. Biosensors and Bioelectronics, 2009, 24, 3359-3364.	10.1	17

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55	Ordering domains of spin cast blends of conjugated and dielectric polymers on surfaces patterned by soft- and photo-lithography. Soft Matter, 2009, 5, 234-241.	2.7	30
56	A monolithic photonic microcantilever device for in situ monitoring of volatile compounds. Lab on A Chip, 2009, 9, 1261.	6.0	18
57	Materials for lithography in the nanoscale. International Journal of Nanotechnology, 2009, 6, 71.	0.2	9
58	Disposable mercury-free cell-on-a-chip devices with integrated microfabricated electrodes for the determination of trace nickel(II) by adsorptive stripping voltammetry. Analytica Chimica Acta, 2008, 622, 111-118.	5.4	51
59	Lithographically fabricated disposable bismuth-film electrodes for the trace determination of Pb(II) and Cd(II) by anodic stripping voltammetry. Electrochimica Acta, 2008, 53, 5294-5299.	5.2	124
60	Realization and Simulation of High-Aspect-Ratio Micro/Nanostructures by Proton Beam Writing. Japanese Journal of Applied Physics, 2008, 47, 8600-8605.	1.5	7
61	Stochastic Simulation of Material and Process Effects on the Patterning of Complex Layouts. Japanese Journal of Applied Physics, 2007, 46, 6191-6197.	1.5	14
62	Composite Chemical Sensors Based on Carbon-Filled Patterned Negative Resists. Japanese Journal of Applied Physics, 2007, 46, 6423-6428.	1.5	4
63	Novel disposable bismuth-sputtered electrodes for the determination of trace metals by stripping voltammetry. Electrochemistry Communications, 2007, 9, 2795-2800.	4.7	57
64	Sequential polymer lithography for chemical sensor arrays. European Polymer Journal, 2007, 43, 4602-4612.	5.4	11
65	Enhancement of Sensing Properties of Thin Poly(Methyl Methacrylate) Films by VUV Modification. Journal of Laser Micro Nanoengineering, 2007, 2, 200-205.	0.1	10
66	Vapor sorption in thin supported polymer films studied by white light interferometry. Polymer, 2006, 47, 6117-6122.	3.8	41
67	A lithographic polymer process sequence for chemical sensing arrays. Microelectronic Engineering, 2006, 83, 1192-1196.	2.4	14
68	Off-Line Metrology on SEM Images Using Gray Scale Morphology. Mikrochimica Acta, 2006, 155, 323-326.	5.0	1
69	Polymeric electrolytes for WO3-based all solid-state electrochromic displays. Microelectronic Engineering, 2006, 83, 1414-1417.	2.4	26
70	Photolithographic Process Based on High Contrast Acrylate Photoresist for Multi-Protein Patterning. Materials Research Society Symposia Proceedings, 2006, 950, 1.	0.1	0
71	Glass Transition Temperature Monitoring in Bilayer and Patterned Photoresist Films. Japanese Journal of Applied Physics, 2004, 43, 5247-5248.	1.5	4
72	In situ monitoring of thermal transitions in thin polymeric films via optical interferometry. Polymer, 2003, 44, 251-260.	3.8	19

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73	Glass transition temperature studies in thin photoresist films with an interferometric method. , 2003, , .		0
74	Dilute aqueous base developable resists for environmentally friendly and biocompatible processes. Microelectronic Engineering, 2002, 61-62, 819-827.	2.4	17
75	Strippable aqueous base developable negative photoresist for high aspect ratio micromachining. Microelectronic Engineering, 2002, 61-62, 729-735.	2.4	12
76	Non-destructive method for monitoring glass transitions in thin photoresist films. Microelectronic Engineering, 2002, 61-62, 829-834.	2.4	12
77	Free-radical synthesis of narrow polydispersed 2-hydroxyethyl methacrylate-based tetrapolymers for dilute aqueous base developable negative photoresists. Polymer, 2002, 43, 1103-1113.	3.8	24
78	Application of a Novel Aqueous Base Developable Resist in Micromachining.. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2001, 14, 445-448.	0.3	4
79	Negative (meth)acrylate resist materials based on novel crosslinking chemistry. Microelectronic Engineering, 2001, 57-58, 539-545.	2.4	7
80	Resist Lithographic Performance Enhancement Based on Solvent Removal Measurements by Optical Interferometry. Japanese Journal of Applied Physics, 2001, 40, 5310-5311.	1.5	5
81	Electron Beam Lithography Simulation on Homogeneous and Multilayer Substrates. Japanese Journal of Applied Physics, 2000, 39, 635-644.	1.5	14
82	Evaluation of advanced epoxy novolac resist, EPR, for sub 100nm synchrotron x-ray proximity lithography. Microelectronic Engineering, 1999, 46, 461-464.	2.4	1
83	Electron-beam lithography on multilayer substrates: experimental and theoretical study. , 1998, , .		6
84	Determination of Acid Diffusion Parameters and Proximity Effect Correction for Highly Dense0.15 ÂµmFeatures on SAL-601. Japanese Journal of Applied Physics, 1997, 36, 6562-6571.	1.5	8
85	<title>SELID: a new 3D simulator for e-beam lithography</title>. , 1996, , .		5