

Sotirios E Kakabakos

List of Publications by Year in descending order

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114
papers

2,105
citations

218381

26
h-index

301761

39
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115
all docs

115
docs citations

115
times ranked

2495
citing authors

#	ARTICLE	IF	CITATIONS
1	Photopatternable materials for guided cell adhesion and growth. <i>European Polymer Journal</i> , 2022, 162, 110896.	2.6	8
2	Application of Optical and Acoustic Methods for the Detection of Bacterial Pathogens Using DNA Aptamers as Receptors. , 2022, 16, .		0
3	Simultaneous Detection of Salmonella typhimurium and Escherichia coli O157:H7 in Drinking Water with Machâ€™Zehnder Interferometers Monolithically Integrated on Silicon Chips. , 2022, 16, .		1
4	Monolithically Integrated Label-Free Optical Immunosensors. , 2022, 16, .		0
5	Fast and Accurate Determination of Minute Ochratoxin A Levels in Cereal Flours: Towards Application at the Field. , 2022, 16, .		0
6	A perspective on ToF-SIMS analysis of biosensor interfaces: Controlling and optimizing multi-molecular composition, immobilization through bioprinting, molecular orientation. <i>Applied Surface Science</i> , 2022, 594, 153439.	3.1	3
7	Simultaneous Detection of Salmonella typhimurium and Escherichia coli O157:H7 in Drinking Water and Milk with Machâ€™Zehnder Interferometers Monolithically Integrated on Silicon Chips. <i>Biosensors</i> , 2022, 12, 507.	2.3	11
8	Recent Developments in the Field of Optical Immunosensors Focusing on a Label-Free, White Light Reflectance Spectroscopy-Based Immunosensing Platform. <i>Sensors</i> , 2022, 22, 5114.	2.1	7
9	Directly immersible silicon photonic probes: Application to rapid SARS-CoV-2 serological testing. <i>Biosensors and Bioelectronics</i> , 2022, 215, 114570.	5.3	8
10	Fluorescence Enhancement on Silver-Plated Plasma Micro-Nanostructured 3D Polymeric Microarray Substrates for Multiplex Mycotoxin Detection. <i>Processes</i> , 2021, 9, 392.	1.3	7
11	Rapid Detection of Salmonella typhimurium in Drinking Water by a White Light Reflectance Spectroscopy Immunosensor. <i>Sensors</i> , 2021, 21, 2683.	2.1	18
12	Fast and Sensitive Determination of the Fungicide Carbendazim in Fruit Juices with an Immunosensor Based on White Light Reflectance Spectroscopy. <i>Biosensors</i> , 2021, 11, 153.	2.3	7
13	3D printed microcell featuring a disposable nanocomposite Sb/Sn immunosensor for quantum dot-based electrochemical determination of adulteration of ewe/goatâ€™s cheese with cowâ€™s milk. <i>Sensors and Actuators B: Chemical</i> , 2021, 334, 129614.	4.0	14
14	Development of a Point-of-Care System Based on White Light Reflectance Spectroscopy: Application in CRP Determination. <i>Biosensors</i> , 2021, 11, 268.	2.3	9
15	Rapid detection of mozzarella and feta cheese adulteration with cow milk through a silicon photonic immunosensor. <i>Analyst, The</i> , 2021, 146, 529-537.	1.7	17
16	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. <i>Applied Surface Science</i> , 2020, 506, 145002.	3.1	4
17	Three-dimensional (3D) hierarchical oxygen plasma micro/nanostructured polymeric substrates for selective enrichment of cancer cells from mixtures with normal ones. <i>Colloids and Surfaces B: Biointerfaces</i> , 2020, 187, 110675.	2.5	6
18	Oxygen plasma micro-nanostructured PMMA plates and microfluidics for increased adhesion and proliferation of cancer versus normal cells: The role of surface roughness and disorder. <i>Micro and Nano Engineering</i> , 2020, 8, 100060.	1.4	3

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19	Fast Deoxynivalenol Determination in Cereals Using a White Light Reflectance Spectroscopy Immunosensor. <i>Biosensors</i> , 2020, 10, 154.	2.3	5
20	Reacquisition of a spindle cell shape does not lead to the restoration of a youthful state in senescent human skin fibroblasts. <i>Biogerontology</i> , 2020, 21, 695-708.	2.0	3
21	Functionalization of silicon dioxide and silicon nitride surfaces with aminosilanes for optical biosensing applications. <i>Medical Devices & Sensors</i> , 2020, 3, e10072.	2.7	17
22	Fast, sensitive and selective determination of herbicide glyphosate in water samples with a White Light Reflectance Spectroscopy immunosensor. <i>Talanta</i> , 2020, 214, 120854.	2.9	24
23	Multiplexed mycotoxins determination employing white light reflectance spectroscopy and silicon chips with silicon oxide areas of different thickness. <i>Biosensors and Bioelectronics</i> , 2020, 153, 112035.	5.3	21
24	A White Light Reflectance Spectroscopy label-free biosensor for the determination of fungicide carbendazim. , 2020, 60, .		0
25	All-Silicon Spectrally Resolved Interferometric Circuit for Multiplexed Diagnostics: A Monolithic Lab-on-a-Chip Integrating All Active and Passive Components. <i>ACS Photonics</i> , 2019, 6, 1694-1705.	3.2	14
26	Bio-orthogonal fluorinated resist for biomolecules patterning applications. <i>Colloids and Surfaces B: Biointerfaces</i> , 2019, 178, 208-213.	2.5	4
27	A modular integrated lab-on-a-chip platform for fast and highly efficient sample preparation for foodborne pathogen screening. <i>Sensors and Actuators B: Chemical</i> , 2019, 288, 171-179.	4.0	34
28	Rapid and sensitive label-free determination of aflatoxin M1 levels in milk through a White Light Reflectance Spectroscopy immunosensor. <i>Sensors and Actuators B: Chemical</i> , 2019, 282, 104-111.	4.0	21
29	Guided cell adhesion, orientation, morphology and differentiation on silicon substrates photolithographically micropatterned with a cell-repellent cross-linked poly(vinyl alcohol) film. <i>Biomedical Materials (Bristol)</i> , 2019, 14, 014101.	1.7	11
30	Three-dimensional (3D) plasma micro-nanotextured slides for high performance biomolecule microarrays: Comparison with epoxy-silane coated glass slides. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 165, 270-277.	2.5	13
31	3D Plasma Nanotextured® Polymeric Surfaces for Protein or Antibody Arrays, and Biomolecule and Cell Patterning. <i>Methods in Molecular Biology</i> , 2018, 1771, 27-40.	0.4	2
32	Paper-Based Microfluidic Device with Integrated Sputtered Electrodes for Stripping Voltammetric Determination of DNA via Quantum Dot Labeling. <i>Analytical Chemistry</i> , 2018, 90, 1092-1097.	3.2	49
33	Rapid C-reactive protein determination in whole blood with a White Light Reflectance Spectroscopy label-free immunosensor for Point-of-Care applications. <i>Sensors and Actuators B: Chemical</i> , 2018, 260, 282-288.	4.0	17
34	Protein adsorption/desorption and antibody binding stoichiometry on silicon interferometric biosensors examined with TOF-SIMS. <i>Applied Surface Science</i> , 2018, 444, 187-196.	3.1	10
35	Stable hydrophilization of FR4 and polyimide-based substrates implemented in microfluidics-on-PCB. <i>Surface and Coatings Technology</i> , 2018, 334, 292-299.	2.2	7
36	Label-Free Biosensors Based onto Monolithically Integrated onto Silicon Optical Transducers. <i>Chemosensors</i> , 2018, 6, 52.	1.8	8

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37	Interferometry-Based Immunoassays. , 2018, , 241-271.		0
38	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.	6.5	41
39	Simultaneous determination of paraquat and atrazine in water samples with a white light reflectance spectroscopy biosensor. Journal of Hazardous Materials, 2018, 359, 67-75.	6.5	31
40	Ultrafast Multiplexed-Allergen Detection through Advanced Fluidic Design and Monolithic Interferometric Silicon Chips. Analytical Chemistry, 2018, 90, 9559-9567.	3.2	35
41	Detection of ochratoxin A in beer samples with a label-free monolithically integrated optoelectronic biosensor. Journal of Hazardous Materials, 2017, 323, 75-83.	6.5	41
42	Fast label-free detection of C-reactive protein using broad-band Mach-Zehnder interferometers integrated on silicon chips. Talanta, 2017, 165, 458-465.	2.9	24
43	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.	3.1	9
44	White light reflectance spectroscopy biosensing system for fast quantitative prostate specific antigen determination in forensic samples. Talanta, 2017, 175, 443-450.	2.9	10
45	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.	2.5	13
46	Fast simultaneous detection of three pesticides by a White Light Reflectance Spectroscopy sensing platform. Sensors and Actuators B: Chemical, 2017, 238, 1214-1223.	4.0	30
47	Development and Bioanalytical Applications of a White Light Reflectance Spectroscopy Label-Free Sensing Platform. Biosensors, 2017, 7, 46.	2.3	17
48	Broadband Young interferometry for simultaneous dual polarization bioanalytics. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1691.	0.9	5
49	Imaging and chemical surface analysis of biomolecular functionalization of monolithically integrated on silicon Mach-Zehnder interferometric immunosensors. Applied Surface Science, 2016, 385, 529-542.	3.1	18
50	Monolithically-integrated Young interferometers for label-free and multiplexed detection of biomolecules. Proceedings of SPIE, 2016, , .	0.8	5
51	Lab-on-a-Membrane Foldable Devices for Duplex Drop-Volume Electrochemical Biosensing Using Quantum Dot Tags. Analytical Chemistry, 2016, 88, 6897-6904.	3.2	55
52	Three-dimensional plasma micro-“nanotextured cyclo-olefin-polymer surfaces for biomolecule immobilization and environmentally stable superhydrophobic and superoleophobic behavior. Chemical Engineering Journal, 2016, 300, 394-403.	6.6	56
53	Simultaneous determination of CRP and D-dimer in human blood plasma samples with White Light Reflectance Spectroscopy. Biosensors and Bioelectronics, 2016, 84, 89-96.	5.3	37
54	A miniaturized optoelectronic system for rapid quantitative label-free detection of harmful species in food. Proceedings of SPIE, 2016, , .	0.8	0

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55	Selective aggregation of PAMAM dendrimer nanocarriers and PAMAM/ZnPc nanodrugs on human atheromatous carotid tissues: a photodynamic therapy for atherosclerosis. <i>Nanoscale Research Letters</i> , 2015, 10, 210.	3.1	42
56	Flexible Microfabricated Film Sensors for the in Situ Quantum Dot-Based Voltammetric Detection of DNA Hybridization in Microwells. <i>Analytical Chemistry</i> , 2015, 87, 853-857.	3.2	21
57	Imaging and spectroscopic comparison of multi-step methods to form DNA arrays based on the biotin-streptavidin system. <i>Analyst</i> , The, 2015, 140, 1127-1139.	1.7	15
58	Disposable integrated bismuth citrate-modified screen-printed immunosensor for ultrasensitive quantum dot-based electrochemical assay of C-reactive protein in human serum. <i>Analytica Chimica Acta</i> , 2015, 886, 29-36.	2.6	66
59	Improved DNA microarray detection sensitivity through immobilization of preformed in solution streptavidin/biotinylated oligonucleotide conjugates. <i>Colloids and Surfaces B: Biointerfaces</i> , 2015, 128, 464-472.	2.5	9
60	Assessment of goat milk adulteration with a label-free monolithically integrated optoelectronic biosensor. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 3995-4004.	1.9	42
61	A label-free flow-through immunosensor for determination of total- and free-PSA in human serum samples based on white-light reflectance spectroscopy. <i>Sensors and Actuators B: Chemical</i> , 2015, 209, 1041-1048.	4.0	21
62	Quantum dot-based electrochemical DNA biosensor using a screen-printed graphite surface with embedded bismuth precursor. <i>Electrochemistry Communications</i> , 2015, 60, 47-51.	2.3	38
63	Nanothermodynamics Mediates Drug Delivery. <i>Advances in Experimental Medicine and Biology</i> , 2015, 822, 213-220.	0.8	7
64	Commercially available chemicals as immunizing haptens for the development of a polyclonal antibody recognizing carbendazim and other benzimidazole-type fungicides. <i>Chemosphere</i> , 2015, 119, S16-S20.	4.2	21
65	Real-time multi-analyte label-free detection of proteins by white light reflectance spectroscopy. , 2014, , .		1
66	All-silicon monolithic Mach-Zehnder interferometer as a refractive index and bio-chemical sensor. <i>Optics Express</i> , 2014, 22, 26803.	1.7	61
67	Protein-Resistant Cross-Linked Poly(vinyl alcohol) Micropatterns via Photolithography Using Removable Polyoxometalate Photocatalyst. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 17463-17473.	4.0	14
68	Photolithography and plasma processing of polymeric lab on chip for wetting and fouling control and cell patterning. <i>Microelectronic Engineering</i> , 2014, 124, 47-52.	1.1	23
69	Cell array fabrication by plasma nanotexturing. , 2013, , .		4
70	Microfabricated Tin-Film Electrodes for Protein and DNA Sensing Based on Stripping Voltammetric Detection of Cd(II) Released from Quantum Dots Labels. <i>Analytical Chemistry</i> , 2013, 85, 10686-10691.	3.2	44
71	Creating highly dense and uniform protein and DNA microarrays through photolithography and plasma modification of glass substrates. <i>Biosensors and Bioelectronics</i> , 2012, 34, 273-281.	5.3	25
72	Controlled protein adsorption on microfluidic channels with engineered roughness and wettability. <i>Sensors and Actuators B: Chemical</i> , 2012, 161, 216-222.	4.0	58

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73	Plasma Nanotextured Polystyrene for Intense DNA Microarrays. <i>Procedia Engineering</i> , 2011, 25, 1573-1576.	1.2	1
74	Nanoscale Protein Patterning on Si Substrates using Colloidal Lithography and Plasma Processing. <i>Procedia Engineering</i> , 2011, 25, 1641-1644.	1.2	1
75	Monolithically integrated Mach-Zehnder biosensors for real-time label-free monitoring of biomolecular reactions. , 2011, 2011, 7654-7.		2
76	Protein arrays on high-surface-area plasma-nanotextured poly(dimethylsiloxane)-coated glass slides. <i>Colloids and Surfaces B: Biointerfaces</i> , 2011, 83, 270-276.	2.5	16
77	Protein immobilization and detection on laser processed polystyrene surfaces. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	7
78	Dual-cardiac marker capillary waveguide fluoroimmunosensor based on tyramide signal amplification. <i>Analytical and Bioanalytical Chemistry</i> , 2010, 396, 1187-1196.	1.9	22
79	A regenerable flow-through affinity sensor for label-free detection of proteins and DNA. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2010, 878, 237-242.	1.2	6
80	Electrochemical biosensor microarray functionalized by means of biomolecule friendly photolithography. <i>Biosensors and Bioelectronics</i> , 2010, 25, 2115-2121.	5.3	26
81	Fully integrated monolithic optoelectronic transducer for real-time protein and DNA detection: The NEMOSLAB approach. <i>Biosensors and Bioelectronics</i> , 2010, 26, 1528-1535.	5.3	24
82	Monolithically integrated biosensors based on Frequency-Resolved Mach-Zehnder Interferometers for multi-analyte determinations. , 2010, 2010, 298-301.		2
83	A flow-through optical sensor system for label-free detection of proteins and DNA. , 2009, , .		1
84	Monolithic silicon optical microdevices for biomolecular sensing. , 2009, , .		4
85	Real-time detection of BRCA1 gene mutations using a monolithic silicon optocoupler array. <i>Biosensors and Bioelectronics</i> , 2009, 24, 1341-1347.	5.3	28
86	Bulk fluorescence light blockers to improve homogeneous detection in capillary-waveguide fluoroimmunosensors. <i>Biosensors and Bioelectronics</i> , 2009, 24, 2735-2739.	5.3	5
87	Capillary waveguide fluoroimmunosensor with improved repeatability and detection sensitivity. <i>Analytical and Bioanalytical Chemistry</i> , 2009, 393, 1081-1086.	1.9	8
88	Photopatterned PLED arrays for biosensing applications. <i>Microelectronic Engineering</i> , 2009, 86, 1511-1514.	1.1	5
89	Chemical binding of biomolecules to micropatterned epoxy modified surfaces for biosensing applications. <i>Microelectronic Engineering</i> , 2009, 86, 1473-1476.	1.1	3
90	Ultra-thin poly(dimethylsiloxane) film-coated glass capillaries for fluoroimmunosensing applications. <i>Microelectronic Engineering</i> , 2009, 86, 1491-1494.	1.1	3

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91	Effect of surface nanostructuring of PDMS on wetting properties, hydrophobic recovery and protein adsorption. <i>Microelectronic Engineering</i> , 2009, 86, 1321-1324.	1.1	55
92	Nano-texturing of poly(methyl methacrylate) polymer using plasma processes and applications in wetting control and protein adsorption. <i>Microelectronic Engineering</i> , 2009, 86, 1424-1427.	1.1	48
93	High-density protein patterning through selective plasma-induced fluorocarbon deposition on Si substrates. <i>Biosensors and Bioelectronics</i> , 2009, 24, 2979-2984.	5.3	19
94	Real-time label-free detection of complement activation products in human serum by white light reflectance spectroscopy. <i>Biosensors and Bioelectronics</i> , 2009, 24, 3359-3364.	5.3	17
95	Silicon optocouplers for biosensing. <i>International Journal of Nanotechnology</i> , 2009, 6, 4.	0.1	7
96	Capillary-based immunoassays, immunosensors and DNA sensors – steps towards integration and multi-analysis. <i>TrAC - Trends in Analytical Chemistry</i> , 2008, 27, 771-784.	5.8	23
97	Glycerin Suppression of Fluorescence Self-Quenching and Improvement of Heterogeneous Fluoroimmunoassay Sensitivity. <i>Analytical Chemistry</i> , 2007, 79, 647-653.	3.2	11
98	A biomolecule friendly photolithographic process for fabrication of protein microarrays on polymeric films coated on silicon chips. <i>Biosensors and Bioelectronics</i> , 2007, 22, 1994-2002.	5.3	56
99	Biofluid transport on hydrophobic plasma-deposited fluorocarbon films. <i>Microelectronic Engineering</i> , 2007, 84, 1677-1680.	1.1	14
100	Label-free kinetic study of biomolecular interactions by white light reflectance spectroscopy. <i>Micro and Nano Letters</i> , 2006, 1, 94.	0.6	23
101	Monolithic silicon optoelectronic transducers and elastomeric fluidic modules for bio-spotting and bio-assay experiments. <i>Microelectronic Engineering</i> , 2006, 83, 1605-1608.	1.1	10
102	Biochip-compatible packaging and micro-fluidics for a silicon opto-electronic biosensor. <i>Microelectronic Engineering</i> , 2006, 83, 1677-1680.	1.1	11
103	157-nm Laser ablation of polymeric layers for fabrication of biomolecule microarrays. <i>Analytical and Bioanalytical Chemistry</i> , 2005, 381, 1027-1032.	1.9	20
104	A Monolithic Silicon Optoelectronic Transducer as a Real-Time Affinity Biosensor. <i>Analytical Chemistry</i> , 2004, 76, 1366-1373.	3.2	92
105	Simultaneous Determination of Pesticides Using a Four-Band Disposable Optical Capillary Immunosensor. <i>Analytical Chemistry</i> , 2002, 74, 6064-6072.	3.2	67
106	Biocompatible photolithographic process for the patterning of biomolecules. <i>Biosensors and Bioelectronics</i> , 2002, 17, 269-278.	5.3	52
107	Photolithographic patterning of proteins with photoresists processable under biocompatible conditions. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2001, 19, 2820.	1.6	25
108	A multi-band capillary immunosensor. <i>Biosensors and Bioelectronics</i> , 1998, 13, 825-830.	5.3	22

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109	Determination of the Coupling Capacity of Cyanogen Bromide-, Epoxy-, and 1,1- C^2 -Carbonyldiimidazole-Activated Solid Supports. <i>Analytical Biochemistry</i> , 1995, 224, 437-440.	1.1	1
110	Direct Colorimetric Determination of Solid-Supported Functional Groups and Ligands Using Bicinchoninic Acid. <i>Analytical Biochemistry</i> , 1994, 219, 335-340.	1.1	28
111	High-performance liquid chromatographic separation of biotinylamide analogues used as substrates in biotinidase radioassays. <i>Biomedical Applications</i> , 1994, 656, 215-218.	1.7	3
112	Biotinidase radioassay using an ^{125}I -biotin derivative, avidin, and polyethylene glycol reagents. <i>Analytical Biochemistry</i> , 1991, 196, 385-389.	1.1	8
113	Isolation of mono- and di-iodine ^{125}I tyramines for conjugation labelling. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 1991, 18, 952-4.	2.2	5
114	Monolithic silicon optoelectronic biochips. , 0, , .		1