

# Sergio B Mendes

## List of Publications by Year in descending order

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59  
papers

1,018  
citations

361413

20  
h-index

454955

30  
g-index

60  
all docs

60  
docs citations

60  
times ranked

761  
citing authors

#	ARTICLE	IF	CITATIONS
1	The Electroactive Integrated Optical Waveguide: An Ultrasensitive Spectroelectrochemistry of Submonolayer Adsorbates. <i>Analytical Chemistry</i> , 1997, 69, 3086-3094.	6.5	83
2	Low-loss optical waveguides for the near ultra-violet and visible spectral regions with Al <sub>2</sub> O <sub>3</sub> thin films from atomic layer deposition. <i>Thin Solid Films</i> , 2010, 518, 4935-4940.	1.8	76
3	Diffraction gratings in sol-gel films by direct contact printing using a UV-mercury lamp. <i>Optics Communications</i> , 1999, 162, 215-218.	2.1	52
4	Planar Integrated Optical Waveguide Spectroscopy. <i>Analytical Chemistry</i> , 2005, 77, 28 A-36 A.	6.5	52
5	Near diffraction-limited laser emission from a polymer in a high finesse planar cavity. <i>Applied Physics Letters</i> , 1998, 72, 269-271.	3.3	51
6	Broad-Band Attenuated Total Reflection Spectroscopy of a Hydrated Protein Film on a Single Mode Planar Waveguide. <i>Langmuir</i> , 1996, 12, 3374-3376.	3.5	50
7	Sol-Gel-Based, Planar Waveguide Sensor for Water Vapor. <i>Analytical Chemistry</i> , 1999, 71, 1332-1337.	6.5	49
8	Broadband Coupling into a Single-Mode, Electroactive Integrated Optical Waveguide for Spectroelectrochemical Analysis of Surface-Confined Redox Couples. <i>Analytical Chemistry</i> , 2003, 75, 1080-1088.	6.5	47
9	A Simplified Broadband Coupling Approach Applied to Chemically Robust Sol-Gel, Planar Integrated Optical Waveguides. <i>Analytical Chemistry</i> , 2002, 74, 1751-1759.	6.5	45
10	Static tester for characterization of phase-change, dye-polymer, and magneto-optical media for optical data storage. <i>Applied Optics</i> , 1999, 38, 7095.	2.1	29
11	Determination of Anisotropic Optical Constants and Surface Coverage of Molecular Films Using Polarized Visible ATR Spectroscopy. Application to Adsorbed Cytochrome c Films. <i>Journal of Physical Chemistry B</i> , 2005, 109, 424-431.	2.6	25
12	An electroactive fiber optic chip for spectroelectrochemical characterization of ultra-thin redox-active films. <i>Analyst</i> , 2009, 134, 454-459.	3.5	25
13	Integrated optical biosensor for detection of multivalent proteins. <i>Optics Letters</i> , 1999, 24, 1723.	3.3	24
14	Comparative analysis of absorbance calculations for integrated optical waveguide configurations by use of the ray optics model and the electromagnetic wave theory. <i>Applied Optics</i> , 2000, 39, 612.	2.1	24
15	70-nm-bandwidth achromatic waveguide coupler. <i>Applied Optics</i> , 1995, 34, 6180.	2.1	23
16	Compact multimode pumped erbium-doped phosphate fiber amplifiers. <i>Optical Engineering</i> , 2003, 42, 2817.	1.0	23
17	Voltammetric and waveguide spectroelectrochemical characterization of ultrathin poly(aniline)/poly(acrylic acid) films self-assembled on indium-tin oxide. <i>Talanta</i> , 2005, 65, 1126-1131.	5.5	23
18	On probing molecular monolayers: a spectroscopic optical waveguide approach of ultra-sensitivity. <i>Optics Express</i> , 1999, 4, 449.	3.4	22

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19	Combination of Polarized TIRF and ATR Spectroscopies for Determination of the Second and Fourth Order Parameters of Molecular Orientation in Thin Films and Construction of an Orientation Distribution Based on the Maximum Entropy Method. <i>Journal of Physical Chemistry B</i> , 2006, 110, 6721-6731.	2.6	20
20	Highly sensitive spectroscopic detection of heme-protein submonolayer films by channel integrated optical waveguide. <i>Optics Express</i> , 2007, 15, 5595.	3.4	20
21	Technique for determining the angular orientation of molecules bound to the surface of an arbitrary planar optical waveguide. <i>Applied Optics</i> , 2004, 43, 70.	2.1	19
22	Determination of Molecular Anisotropy in Thin Films of Discotic Assemblies Using Attenuated Total Reflectance UV-Visible Spectroscopy. <i>Langmuir</i> , 2005, 21, 360-368.	3.5	17
23	Optical Impedance Spectroscopy with Single-Mode Electro-Active-Integrated Optical Waveguides. <i>Analytical Chemistry</i> , 2014, 86, 1468-1477.	6.5	17
24	Order Parameters and Orientation Distributions of Solution Adsorbed and Microcontact Printed Cytochrome c Protein Films on Glass and ITO. <i>Journal of Physical Chemistry B</i> , 2006, 110, 6732-6739.	2.6	16
25	Determination of Surface Coverage and Orientation of Reduced Cytochrome <i>c</i> on a Silica Surface with Polarized ATR Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2007, 111, 13062-13067.	3.1	15
26	Investigations on the Q and CT Bands of Cytochrome <i>c</i> Submonolayer Adsorbed on an Alumina Surface Using Broadband Spectroscopy with Single-Mode Integrated Optical Waveguides. <i>Journal of Physical Chemistry C</i> , 2009, 113, 8306-8312.	3.1	15
27	Light amplification and laser emission in conjugated polymers. <i>Optical Engineering</i> , 1998, 37, 1149.	1.0	14
28	Influenza virus immunosensor with an electro-active optical waveguide under potential modulation. <i>Optics Letters</i> , 2017, 42, 1205.	3.3	14
29	Molecular Ordering in Monolayers of an Alkyl-Substituted Perylene-Bisimide Dye by Attenuated Total Reflectance Ultraviolet-Visible Spectroscopy. <i>Applied Spectroscopy</i> , 2005, 59, 1248-1256.	2.2	12
30	Detection of influenza virus by electrochemical surface plasmon resonance under potential modulation. <i>Applied Optics</i> , 2019, 58, 2839.	1.8	12
31	Design and characteristics of DBR-laser-based environmental sensors. <i>Sensors and Actuators B: Chemical</i> , 1998, 53, 116-124.	7.8	11
32	Spectroelectrochemical properties of ultra-thin indium tin oxide films under electric potential modulation. <i>Thin Solid Films</i> , 2016, 603, 230-237.	1.8	11
33	Achromatic prism-coupler for planar waveguide. <i>Optics Communications</i> , 1997, 136, 320-326.	2.1	10
34	Ag <sup>+</sup> -Na <sup>+</sup> exchanged channel waveguides in germanate glass. <i>Electronics Letters</i> , 1998, 34, 2239.	1.0	7
35	Planar Fiber-Optic Chips for Broadband Spectroscopic Interrogation of Thin Films. <i>Applied Spectroscopy</i> , 2007, 61, 585-592.	2.2	7
36	Characterization of the Angular Orientation Distribution of Discotic Molecules in Thin-Film Assemblies: A Combination of Polarized Transmission and Reflection Absorption Infrared Spectroscopies. <i>Journal of Physical Chemistry C</i> , 2008, 112, 4971-4977.	3.1	7

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37	Distributed Bragg reflector laser-based sensor for chemical detection. Optics Communications, 1998, 156, 311-315.	2.1	6
38	Planar Integrated Optical Waveguide Sensor for Isopropyl Alcohol in Aqueous Media. Journal of Sol-Gel Science and Technology, 2002, 24, 167-173.	2.4	6
39	Solid immersion lens at the aplanatic condition for enhancing the spectral bandwidth of a waveguide grating coupler. Optical Engineering, 2010, 49, 124601.	1.0	6
40	Angle-Multiplexed Waveguide Resonance of High Sensitivity and Its Application to Nanosecond Dynamics of Molecular Assemblies. Analytical Chemistry, 2012, 84, 9762-9767.	6.5	6
41	Electroactive Interface for Enabling Spectroelectrochemical Investigations in Evanescent-Wave Cavity-Ring-Down Spectroscopy. Analytical Chemistry, 2020, 92, 11288-11296.	6.5	5
42	Sub-Micron Integrated Grating Couplers for Single-Mode Planar Optical Waveguides. , 2008, , .		4
43	Electron-Transfer Rate in Potential-Modulated Redox Reactions with Electro-Active Optical Waveguides. Analytical Sciences, 2017, 33, 435-441.	1.6	4
44	High-power wavelength-tunable circular-grating surface-emitting distributed Bragg deflector lasers. Applied Physics Letters, 2000, 76, 1359-1361.	3.3	3
45	Surface modification of optical materials with hydrogen plasma for fabrication of Bragg gratings. Applied Optics, 2016, 55, 485.	2.1	2
46	Adsorption Properties and Electron-Transfer Rates of a Redox Probe at Different Interfaces of an Immunoassay Assembled on an Electro-Active Photonic Platform. Analytical Sciences, 2021, 37, 1391-1399.	1.6	2
47	Broadband Spectroelectrochemical Interrogation of Molecular Thin Films by Single-Mode Electro-Active Integrated Optical Waveguides. Springer Series on Chemical Sensors and Biosensors, 2010, , 101-129.	0.5	2
48	<title>In-situ chemical detection based on photonic devices</title>. , 1997, , .		1
49	Waveguide-Based Chemical and Spectroelectrochemical Sensor Platforms. ECS Transactions, 2009, 19, 109-117.	0.5	1
50	Studies of redox reactions in electro-active proteins using optical impedance spectroscopy at single-mode waveguides. , 2013, , .		1
51	Extension of the broadband single-mode integrated optical waveguide technique to the ultraviolet spectral region and its applications. Analyst, The, 2014, 139, 1396-1402.	3.5	1
52	Photobleaching reduction in modulated super-resolution microscopy. Microscopy (Oxford, England), 2021, 70, 278-288.	1.5	1
53	Probing structure and function in planar supported protein films. , 1999, , .		0
54	Order in Biomolecular Assemblies using a Combination of Polarized Evanescent-Wave Spectroscopies. , 2005, , FWK3.		0

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55	Spectroscopic studies in protein films with highly sensitive single-mode guided-wave platforms. , 2009, , .		0
56	Spectroscopic studies on ultra-thin films of indium tin oxide under electro-chemical modulation. Proceedings of SPIE, 2012, , .	0.8	0
57	Electron-Transfer Kinetics in Protein Assemblies by Single-Mode Electro-Active Integrated Optical Waveguides. , 2014, , .		0
58	Avian Influenza Virus Immunosensor Using Single-Mode, Electro-Active, Integrated Optical Waveguide. , 2017, , .		0
59	Characterization of an Immunoassay Assembly on an Electro-Active Waveguide Platform. , 2017, , .		0