Carlos Dominguez

List of Publications by Year
in descending order

214 papers	4,389 citations	101543 36 h-index	138484 58 g-index
217 all docs	217 docs citations	217 times ranked	3900 citing authors

#	Article	IF	Citations
1	An integrated optical interferometric nanodevice based on silicon technology for biosensor applications. Nanotechnology, 2003, 14, 907-912.	2.6	279
2	Silicon Nitride Photonic Integration Platforms for Visible, Near-Infrared and Mid-Infrared Applications. Sensors, 2017, 17, 2088.	3.8	202
3	Integrated Bimodal Waveguide Interferometric Biosensor for Label-Free Analysis. Journal of Lightwave Technology, 2011, 29, 1926-1930.	4.6	167
4	Optical biosensor microsystems based on the integration of highly sensitive Machâ€“Zehnder interferometer devices. Journal of Optics, 2006, 8, S561-S566.	1.5	154
5	The realization of an integrated Mach-Zehnder waveguide immunosensor in silicon technology. Sensors and Actuators B: Chemical, 1997, 40, 147-153.	7.8	110
6	Integrated Machâ€“Zehnder interferometer based on ARROW structures for biosensor applications. Sensors and Actuators B: Chemical, 2003, 92, 151-158.	7.8	109
7	Application of ion sensitive field effect transistor based sensors to soil analysis. Computers and Electronics in Agriculture, 2001, 31, 281-293.	7.7	97
8	A novel optical waveguide microcantilever sensor for the detection of nanomechanical forces. Journal of Lightwave Technology, 2006, 24, 2132-2138.	4.6	90
9	Nanophotonic lab-on-a-chip platforms including novel bimodal interferometers, microfluidics and grating couplers. Lab on A Chip, 2012, 12, 1987.	6.0	82
10	Open-Access Silicon Photonics Platforms in Europe. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-18.	2.9	82
11	Silicon Photonic Biosensors for Lab-on-a-Chip Applications. Advances in Optical Technologies, 2008, 2008, 1-6.	0.8	80
12	Microfluidic-optical integrated CMOS compatible devices for label-free biochemical sensing. Journal of Micromechanics and Microengineering, 2006, 16, 1006-1016.	2.6	74
13	[INVITED] Silicon nitride photonic integration for visible light applications. Optics and Laser Technology, 2019, 112, 299-306.	4.6	74
14	Photocurable Polymer Matrixes for Potassium-Sensitive Ion-Selective Electrode Membranes. Analytical Chemistry, 1995, 67, 3589-3595.	6.5	73
15	A highly sensitive microsystem based on nanomechanical biosensors for genomics applications. Sensors and Actuators B: Chemical, 2006, 118, 2-10.	7.8	68
16	Field effect luminescence from Si nanocrystals obtained by plasma-enhanced chemical vapor deposition. Applied Physics Letters, 2006, 89, 051112.	3.3	65
17	Electrodepositable alginate membranes for enzymatic sensors: An amperometric glucose biosensor for whole blood analysis. Biosensors and Bioelectronics, 2017, 97, 136-142.	10.1	64
18	Photosensitive polyurethanes applied to the development of CHEMFET and ENFET devices for biomedical sensing. Biosensors and Bioelectronics, 1997, 12, 577-585.	10.1	63

#	Article	IF	Citations
19	Design and analysis of silicon antiresonant reflecting optical waveguides for evanescent field sensor. Journal of Lightwave Technology, 2000, 18, 966-972.	4.6	62
20	Investigation of chloride sensitive ISFETs with different membrane compositions suitable for medical applications. Analytica Chimica Acta, 2004, 514, 99-106.	5.4	57
21	Photocurable polymers applied as encapsulating materials for ISFET production. Sensors and Actuators B: Chemical, 1995, 25, 823-825.	7.8	56
22	Three-dimensional interdigitated electrode array as a transducer for label-free biosensors. Biosensors and Bioelectronics, 2008, 24, 729-735.	10.1	51
23	Label-free bimodal waveguide immunosensor for rapid diagnosis of bacterial infections in cirrhotic patients. Biosensors and Bioelectronics, 2016, 85, 310-316.	10.1	51
24	Chemical sensors, biosensors and thick-film technology. TrAC - Trends in Analytical Chemistry, 1995, 14, 225-231.	11.4	47
25	Comparative study between silicon-rich oxide films obtained by LPCVD and PECVD. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 38, 54-58.	2.7	47
26	Foundry Developments Toward Silicon Nitride Photonics From Visible to the Mid-Infrared. IEEE Journal of Selected Topics in Quantum Electronics, 2019, 25, 1-13.	2.9	47
27	Electrochemical platinum coatings for improving performance of implantable microelectrode arrays. Biomaterials, 2002, 23, 4515-4521.	11.4	46
28	Ion-selective field effect transistor (ISFET)-based calcium ion sensor with photocured polyurethane membrane suitable for ionised calcium determination in milk. Analytica Chimica Acta, 2000, 408, 57-64.	5.4	44
29	Cell analysis using a multiple internal reflection photonic lab-on-a-chip. Nature Protocols, 2011, 6, 1642-1655.	12.0	41
30	Optical characterization of silicon rich oxide films. Sensors and Actuators A: Physical, 2008, 142, 12-18.	4.1	40
31	Cost-effective smartphone-based reconfigurable electrochemical instrument for alcohol determination in whole blood samples. Biosensors and Bioelectronics, 2018, 117, 736-742.	10.1	40
32	Analysis of surface roughness and its relationship with photoluminescence properties of silicon-rich oxide films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 57-62.	2.1	39
33	Asymmetrically coupled resonators for mass sensing. Applied Physics Letters, 2017, 111, .	3.3	39
34	Integrated Waveguide Absorbance Optode for Chemical Sensing. Analytical Chemistry, 1999, 71, 5037-5044.	6.5	38
35	Plasma enhanced CVD silicon oxide films for integrated optic applications. Vacuum, 1999, 52, 395-400.	3.5	37
36	Optimized silicon antiresonant reflecting optical waveguides for sensing applications. Journal of Lightwave Technology, 2001, 19, 75-83.	4.6	37

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37	BESOI-Based Integrated Optical Silicon Accelerometer. Journal of Microelectromechanical Systems, 2004, 13, 355-364.	2.5	37
38	Si-nanocrystal-based LEDs fabricated by ion implantation and plasma-enhanced chemical vapour deposition. Nanotechnology, 2009, 20, 405201.	2.6	34
39	Planar Compatible Polymer Technology for Packaging of Chemical Microsensors. Journal of the Electrochemical Society, 1996, 143, 2020-2025.	2.9	33
40	Efficiency and reliability enhancement of silicon nanocrystal field-effect luminescence from nitride-oxide gate stacks. Applied Physics Letters, 2008, 92, 241104.	3.3	32
41	Optimization of Photocurable Polyurethane Membrane Composition for Ammonium Ion Sensor. Journal of the Electrochemical Society, 1997, 144, 617-621.	2.9	31
42	ISE and ISFET microsensors based on a sensitive chalcogenide glass for copper ion detection in solution. Sensors and Actuators B: Chemical, 1999, 59, 123-127.	7.8	31
43	Improved Integrated Waveguide Absorbance Optodes for Ion-Selective Sensing. Analytical Chemistry, 2002, 74, 3354-3361.	6.5	30
44	Grating couplers integrated on Mach-Zehnder interferometric biosensors operating in the visible range. IEEE Photonics Journal, 2013, 5, 3700108-3700108.	2.0	30
45	Glucose biosensor based on a reagentless graphite-epoxy screen-printable biocomposite. Sensors and Actuators B: Chemical, 1997, 45, 55-62.	7.8	29
46	Glucose biosensor strip in a three electrode configuration based on composite and biocomposite materials applied by planar thick film technology. Sensors and Actuators B: Chemical, 1998, 52, 257-263.	7.8	27
47	Monolithic Integration of a Silicon-Based Photonic Transceiver in a CMOS Process. IEEE Photonics Journal, 2016, 8, 1-13.	2.0	27
48	Structural damage and defects created in SiO2 films by Ar ion implantation. Journal of Non-Crystalline Solids, 1995, 187, 101-105.	3.1	26
49	Full-field photonic biosensors based on tunable bio-doped solâ€“gel glasses. Lab on A Chip, 2008, 8, 1185.	6.0	26
50	A comparative study of in-flow and micro-patterning biofunctionalization protocols for nanophotonic silicon-based biosensors. Journal of Colloid and Interface Science, 2013, 393, 402-410.	9.4	26
51	Analysis of leakage properties and guiding conditions of rib antiresonant reflecting optical waveguides. Journal of Lightwave Technology, 1996, 14, 798-805.	4.6	25
52	Characterisation of the interdigitated electrode array with tantalum silicide electrodes separated by insulating barriers. Electrochemistry Communications, 2008, 10, 1621-1624.	4.7	25
53	Dimension dependence of the thermomechanical noise of microcantilevers. Journal of Applied Physics, 2006, 99, 024910.	2.5	24
54	Integrated multisensor chip with sequential injection technique as a base for â€œelectronic tongueâ€• devices. Sensors and Actuators B: Chemical, 2008, 131, 48-52.	7.8	24

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55	DC and AC electroluminescence in silicon nanoparticles embedded in silicon-rich oxide films. Nanotechnology, 2010, 21, 085710.	2.6	24
56	pH-ISFET with NMOS technology. Electroanalysis, 1991, 3, 355-360.	2.9	23
57	Chalcogenide glass-based rib ARROW waveguide. Journal of Non-Crystalline Solids, 2003, 326-327, 455-459.	3.1	23
58	Development of a multiparametric analyser based on ISFET sensors applied to process control in the wine industry. Sensors and Actuators B: Chemical, 2003, 89, 199-204.	7.8	22
59	Optical Biosensor Based On Hollow Integrated Waveguides. Analytical Chemistry, 2008, 80, 3498-3501.	6.5	22
60	The mechanism of electrical annihilation of conductive paths and charge trapping in silicon-rich oxides. Nanotechnology, 2009, 20, 045201.	2.6	22
61	On the Origin of Light Emission in Silicon Rich Oxide Obtained by Low-Pressure Chemical Vapor Deposition. Journal of Nanomaterials, 2012, 2012, 1-11.	2.7	22
62	Patterning High-Aspect-Ratio Solâ€“Gel Structures by Microtransfer Molding. Chemistry of Materials, 2008, 20, 2662-2668.	6.7	21
63	Poly(Dimethylsiloxane) Waveguide Cantilevers for Optomechanical Sensing. IEEE Photonics Technology Letters, 2009, 21, 79-81.	2.5	21
64	Strong blue and red luminescence in silicon nanoparticles based light emitting capacitors. Applied Physics Letters, 2011, 99, 171102.	3.3	21
65	The effect of rapid thermal annealing on properties of plasma enhanced CVD silicon oxide films. Thin Solid Films, 1999, 346, 202-206.	1.8	20
66	Application of an ion-selective field effect transistor with a photocured polymer membrane in nephrology for determination of potassium ions in dialysis solutions and in blood plasma. Talanta, 2000, 52, 533-538.	5.5	20
67	Pulsed electroluminescence in silicon nanocrystals-based devices fabricated by PECVD. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 38, 193-196.	2.7	20
68	Flow-through pH-ISFET + reference-ISE as integrated detector in automated FIA determinations. Sensors and Actuators B: Chemical, 1992, 7, 555-560.	7.8	19
69	Metal-nitride-oxide-semiconductor light-emitting devices for general lighting. Optics Express, 2011, 19, A234.	3.4	19
70	Configurational statistical model for the damaged structure of silicon oxide after ion implantation. Physical Review B, 1994, 49, 14845-14849.	3.2	18
71	Effect of hydrogen-related impurities on the thermal behavior of mechanical stress in silicon oxides suitable for integrated optics. Journal of Applied Physics, 2003, 93, 5125-5130.	2.5	18
72	Silicon excess and thermal annealing effects on the photoluminescence of SiO2 and silicon rich oxide super enriched with siliscon implantation. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, S83-S87.	0.8	18

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73	Photoluminescence enhancement through silicon implantation on SRO-LPCVD films. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 174, 119-122.	3.5	18
74	Ion Sensor with Photocurable Polyurethane Polymer Membrane. Journal of the Electrochemical Society, 1994, 141, L111-L112.	2.9	17
75	An integrated silicon ARROW Mach-Zehnder interferometer for sensing applications. Optics Communications, 1996, 132, 437-441.	2.1	17
76	Analysis of optochemical absorbance sensors based on bidimensional planar ARROW microoptics. Sensors and Actuators B: Chemical, 1999, 60, 191-199.	7.8	16
77	T-shaped microcantilever sensor with reduced deflection offset. Applied Physics Letters, 2006, 89, 094109.	3.3	16
78	Coulomb blockade effects in silicon nanoparticles embedded in thin silicon-rich oxide films. Nanotechnology, 2008, 19, 165401.	2.6	15
79	Correlation between charge transport and electroluminescence properties of Si-rich oxide/nitride/oxide-based light emitting capacitors. Journal of Applied Physics, 2012, 112, 033114.	2.5	15
80	Reconfigurable multiplexed point of Care System for monitoring type 1 diabetes patients. Biosensors and Bioelectronics, 2019, 136, 38-46.	10.1	15
81	3-D modulable PDMS-based microlens system. Optics Express, 2008, 16, 4918.	3.4	14
82	Optical waveguide cantilever actuated by light. Applied Physics Letters, 2008, 92, .	3.3	14
83	Low Pressure Chemical Etching of Silicon by HClâ€‰/â€‰â€‰Hâ€‰2 Gas Mixtures. Journal of the Electrochemical Society, 1987, 134, 199-202.	2.9	13
84	Light coupling into an optical microcantilever by an embedded diffraction grating. Applied Optics, 2006, 45, 229.	2.1	13
85	Auger quenching-based modulation of electroluminescence from ion-implanted silicon nanocrystals. Nanotechnology, 2008, 19, 205201.	2.6	13
86	Influence of the gate and dielectric thickness on the electro-optical performance of SRO-based LECs: Resistive switching, IR and deep UV emission. Journal of Luminescence, 2017, 192, 919-924.	3.1	13
87	Flow-through pH-ISFET as detector in automated determinations. Electroanalysis, 1991, 3, 349-354.	2.9	12
88	Lowering the detection limit of calcium selective ISFETs with polymeric membranes. Talanta, 2004, 62, 91-96.	5.5	12
89	Etching rate modification in silicon oxide by ion implantation and rapid thermal annealing. Nuclear Instruments & Methods in Physics Research B, 1993, 80-81, 1367-1370.	1.4	11
90	Bidimensional planar micro-optics for optochemical absorbance sensing. Optics Letters, 1998, 23, 225.	3.3	11

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91	Biosensing microsystem platforms based on the integration of Si Mach-Zehnder interferometer, microfluidics and grating couplers. , 2009, , .		11
92	Blueâ€“green to near-IR switching electroluminescence from Si-rich silicon oxide/nitride bilayer structures. Optics Letters, 2011, 36, 2617.	3.3	11
93	Comparison of electrical and electro-optical characteristics of light-emitting capacitors based on silicon-rich Si-oxide fabricated by plasma-enhanced chemical vapor deposition and ion implantation. Journal of Applied Physics, 2012, 111, 053109.	2.5	11
94	Laser emission in Nd³⁺doped bariumâ€“titaniumâ€“silicate microspheres under continuous and chopped wave pumping in a non-coupled pumping scheme. Laser Physics, 2013, 23, 075801.	1.2	11
95	Characterization and Passivation Effects of an Optical Accelerometer Based on Antiresonant Waveguides. IEEE Photonics Technology Letters, 2004, 16, 233-235.	2.5	10
96	Simple Estimation of Transition Losses in Bends of Wide Optical Waveguides by a Ray Tracing Method. IEEE Photonics Technology Letters, 2004, 16, 825-827.	2.5	10
97	Diffraction grating couplers milled in Si3N4 rib waveguides with a focused ion beam. Optics Express, 2005, 13, 8618.	3.4	10
98	Ellipsometry on Very Thick Multilayer Structures. Physica Status Solidi (B): Basic Research, 1999, 215, 247-251.	1.5	9
99	Technological aspects on the fabrication of silicon-based optical accelerometer with ARROW structures. Sensors and Actuators A: Physical, 2004, 110, 395-400.	4.1	9
100	Broad range adjustable emission of stacked SiNx/SiOy layers. Journal of Materials Research, 2008, 23, 1513-1516.	2.6	9
101	One-Step Patterning of Hybrid Xerogel Materials for the Fabrication of Disposable Solid-State Light Emitters. ACS Applied Materials & Interfaces, 2012, 4, 5029-5037.	8.0	9
102	Interferometric waveguide biosensors based on Si-technology for point-of-care diagnostic. Proceedings of SPIE, 2012, , .	0.8	9
103	Composition and emission characterization and computational simulation of silicon rich oxide films obtained by LPCVD. Surface and Interface Analysis, 2014, 46, 216-223.	1.8	9
104	Out-of-plane single-mode photonic microcantilevers for integrated nanomechanical sensing platform. Sensors and Actuators B: Chemical, 2016, 232, 60-67.	7.8	9
105	Nanoporous silk films with capillary action and size-exclusion capacity for sensitive glucose determination in whole blood. Lab on A Chip, 2021, 21, 608-615.	6.0	9
106	Photosensor and optical waveguide coupling in silicon technology. Sensors and Actuators A: Physical, 1997, 62, 524-528.	4.1	8
107	Electrostatic discharge sensitivity tests for ISFET sensors. Sensors and Actuators B: Chemical, 2001, 80, 255-260.	7.8	8
108	Modeling of non-stoichiometric silicon oxides obtained by plasma enhanced chemical vapour deposition process. Thin Solid Films, 2007, 515, 3380-3386.	1.8	8

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109	Hollow waveguide-based full-field absorbance biosensor. Sensors and Actuators B: Chemical, 2009, 139, 143-149.	7.8	8
110	DC Electroluminescence Efficiency of Silicon Rich Silicon Oxide Light Emitting Capacitors. Journal of Lightwave Technology, 2013, 31, 2913-2918.	4.6	8
111	Sensitivity analysis for improving nanomechanical photonic transducers biosensors. Journal Physics D: Applied Physics, 2015, 48, 335401.	2.8	8
112	Lowâ€loss inverted taper edge coupler in silicon nitride. IET Optoelectronics, 2019, 13, 62-66.	3.3	8
113	Analysis of the Low Pressure Gas Composition in the Etching of Silicon. Journal of the Electrochemical Society, 1987, 134, 202-205.	2.9	7
114	Integrated micro- and nano-optical biosensor silicon devices CMOS compatible. , 2004, 5357, 96.		7
115	Photoluminescence characterization of silicon nanostructures embedded in silicon oxide. Superlattices and Microstructures, 2008, 43, 588-593.	3.1	7
116	Mechanically tuneable microoptical structure based on PDMS. Sensors and Actuators A: Physical, 2010, 162, 260-266.	4.1	7
117	Influence by Layer Structure on the Output EL of CMOS Compatible Silicon-Based Light Emitters. IEEE Transactions on Electron Devices, 2013, 60, 1971-1974.	3.0	7
118	Study of narrow and intense UV electroluminescence from ITO/SRO/Si-p and ITO/SRN/SRO/Si-p based light emitting capacitors. Journal of Luminescence, 2017, 183, 334-340.	3.1	7
119	Low-cost vertical taper for highly efficient light in-coupling in bimodal nanointerferometric waveguide biosensors. JPhys Photonics, 2019, 1, 025002.	4.6	7
120	Towards a complete Lab-On-Chip system using integrated Mach-Zehnder interferometers. Optica Pura Y Aplicada, 2012, 45, 87-95.	0.1	7
121	CHF3-reactive ion etching for waveguides. Sensors and Actuators A: Physical, 1993, 37-38, 779-783.	4.1	6
122	Development of a multiparametric system based on solid-state microsensors for monitoring a nuclear waste repository. Sensors and Actuators B: Chemical, 2003, 91, 103-108.	7.8	6
123	Nanostructures for chemical recognition using ISFET sensors. Microelectronics Journal, 2004, 35, 69-71.	2.0	6
124	Dual-wavelength measurement system for absorbance chemical sensing. Measurement Science and Technology, 2007, 18, 3443-3450.	2.6	6
125	Lab-on-a-chip platforms based on highly sensitive nanophotonic Si biosensors for single nucleotide DNA testing. , 2007, , .		6
126	Enzymatic Biosensors Based on Electrodeposited Alginate Hydrogels. Procedia Engineering, 2016, 168, 622-625.	1.2	6

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127	Structural and optical properties of silicon rich oxide films in graded-stoichiometric multilayers for optoelectronic devices. Applied Physics Letters, 2016, 109, 031906.	3.3	6
128	Enhancing emission and conduction of light emitting capacitors by multilayered structures of silicon rich oxide. Sensors and Actuators A: Physical, 2017, 265, 306-312.	4.1	6
129	Hot electron engineering for boosting electroluminescence efficiencies of silicon-rich nitride light emitting devices. Journal of Luminescence, 2017, 183, 26-31.	3.1	6
130	Evolution of the mechanical stress on PECVD silicon oxide films under thermal processing. Journal of Materials Science Letters, 2000, 19, 1399-1401.	0.5	5
131	Integrated optical silicon IC compatible nanodevices for biosensing applications. , 2003, , .		5
132	Optical properties of silicon rich silicon oxides obtained by PECVD. Microelectronics Journal, 2004, 35, 65-67.	2.0	5
133	Large-Core Single-Mode Waveguides With Cross-Sectional Antiresonant Confinement. Journal of Lightwave Technology, 2004, 22, 1560-1565.	4.6	5
134	Charge trapping and de-trapping in Si-nanoparticles embedded in silicon oxide films. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 3651-3654.	0.8	5
135	Silicon-based rectangular hollow integrated waveguides. Optics Communications, 2008, 281, 1568-1575.	2.1	5
136	State of the art of Silicon Nitride photonics integration platforms. , 2017, , .		5
137	Refractive index sensing using a Si-based light source embedded in a fully integrated monolithic transceiver. AIP Advances, 2019, 9, .	1.3	5
138	Embedded Silicon Nanoparticles as Enabler of a Novel CMOS-Compatible Fully Integrated Silicon Photonics Platform. Crystals, 2021, 11, 630.	2.2	5
139	Reconfigurable reflective arrayed waveguide grating using optimization algorithms. Optics Express, 2020, 28, 31446.	3.4	5
140	A low cost manufacturing process for high density hybrid components based on multilayer polyimide/ceramic structures. IEEE Transactions on Components, Hybrids and Manufacturing Technology, 1993, 16, 13-20.	0.4	4
141	N2O plasma etching of polyimides. Vacuum, 1994, 45, 1101-1102.	3.5	4
142	Effect of wall tilt on the optical properties of integrated directional couplers. Optics Letters, 2002, 27, 601.	3.3	4
143	Novel cantilever design with high control of the mechanical performance. Microelectronic Engineering, 2007, 84, 1292-1295.	2.4	4
144	Mechanically tuneable microoptical structure based on PDMS. Procedia Chemistry, 2009, 1, 560-563.	0.7	4

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145	Topographic analysis of silicon nanoparticles-based electroluminescent devices. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2010, 174, 123-126.	3.5	4
146	Fluorophore-doped xerogel antiresonant reflecting optical waveguides. Optics Express, 2011, 19, 5026.	3.4	4
147	High Q light-emitting Si-rich Si_3N_4 microdisks. Optics Letters, 2011, 36, 1344.	3.3	4
148	Stoichiometry of silicon-rich dielectrics for silicon nanocluster formation. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 804-807.	0.8	4
149	Floating substrate luminescence from silicon rich oxide metal-oxide-semiconductor devices. Thin Solid Films, 2013, 531, 442-445.	1.8	4
150	Synthesis of solâ€“gel SiO2-based materials using alkoxydisilane precursors: mechanisms and luminescence studies. Journal of Sol-Gel Science and Technology, 2015, 73, 417-427.	2.4	4
151	Array of Microfluidic Beam Resonators for Density and Viscosity Analysis of Liquids. Journal of Microelectromechanical Systems, 2017, 26, 749-757.	2.5	4
152	Luminescence from Si-Implanted SiO2-Si3N4 Nano Bi-Layers for Electrophotonic Integrated Si Light Sources. Sensors, 2019, 19, 865.	3.8	4
153	Study of waveguide background at visible wavelengths for on-chip nanoscopy. Optics Express, 2021, 29, 20735.	3.4	4
154	Thermo-Optic Phase Tuners Analysis and Design for Process Modules on a Silicon Nitride Platform. Photonics, 2021, 8, 496.	2.0	4
155	Multilayer analysis of arrow structures. Microwave and Optical Technology Letters, 1995, 10, 303-307.	1.4	3
156	Ion beam analysis of PECVD silicon oxide thin films. Nuclear Instruments & Methods in Physics Research B, 2006, 243, 200-204.	1.4	3
157	Blue and red electroluminescence of silicon-rich oxide light emitting capacitors. , 2010, , .		3
158	Influence of Silicon Binding Energy on Photoluminescence of Si-Implanted Silicon Dioxide. ECS Transactions, 2012, 49, 307-314.	0.5	3
159	Bulk silica-based luminescent materials by sol-gel processing of non-conventional precursors. Applied Physics Letters, 2012, 101, 171908.	3.3	3
160	Visible Light Emitting Si-Rich Si$_{3}$N$_{4} mu$-Disk Resonators for Sensoristic Applications. Journal of Lightwave Technology, 2012, 30, 169-174.	4.6	3
161	The effect of absorption and coherent interference in the photoluminescence and electroluminescence spectra of SRO/SRN MIS capacitors. Optics Express, 2013, 21, 10111.	3.4	3
162	Towards a biosensing multiple platform based on an array of hollow microbridge resonators. , 2014, , .		3

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163	Conservation of the Optical Properties of SRO after CMOS IC Processing. Procedia Technology, 2014, 17, 587-594.	1.1	3
164	Photoelectroâ€Enzymatic Glucose Reusable Biosensor by Using Dithienylethene Mediators. Chemistry - A European Journal, 2020, 26, 8714-8719.	3.3	3
165	Absorbance-Based Integrated Optical Sensors. , 2005, , 1-44.		3
166	Silicon nitride photonics: from visible to mid-infrared wavelengths. , 2018, , .		3
167	Epitaxial growth of in situ doped silicon by LPCVD. Vacuum, 1987, 37, 407-409.	3.5	2
168	Characterization of the Electrical Damage due to Polysilicon RIE â€‰(â€‰â€‰SFâ€‰6â€‰+â€‰Cl2â€‰â€‰â€‰Plasmaâ€‰)â€ the Electrochemical Society, 1992, 139, 193-195.	2.9	2
169	Dry development of photosensitive polyimides for high resolution and aspect ratio applications. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1995, 13, 2179.	1.6	2
170	Precipitation of highly luminescent phases from PECVD Si suboxides. Materials Research Society Symposia Proceedings, 2004, 832, 303.	0.1	2
171	Optical biosensor based on arrays of waveguide microcantilevers. , 2007, , .		2
172	UV laser-induced high resolution cleaving of Si wafers for microâ€“nano devices and polymeric waveguide characterization. Applied Surface Science, 2011, 257, 5424-5428.	6.1	2
173	Effect of the active layer thickness on the electrical and electroluminescent properties in silicon rich oxide based light emitting capacitors. , 2016, , .		2
174	Silk Fibroin Pads for Whole Blood Glucose Determination. Proceedings (mdpi), 2018, 2, .	0.2	2
175	Hot Wall Siâ€CVD at Reduced Pressures. Journal of the Electrochemical Society, 1984, 131, 2726-2727.	2.9	1
176	Positive photoresist stripping by plasma barrel. Vacuum, 1989, 39, 757-759.	3.5	1
177	Electrical characteristics of aligned and transversally recrystallized SOI-MOS transistors. Solid-State Electronics, 1992, 35, 1447-1450.	1.4	1
178	Tone control in dry development of photosensitive polyimides. Vacuum, 1998, 49, 35-41.	3.5	1
179	<title>Mechanical properties of PECVD silicon oxide films suitable for integrated optics applications</title>. , 2000, , .		1
180	Characterization of antiresonant reflecting optical waveguide devices by scanning near-field optical microscopy. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2000, 17, 2243.	1.5	1

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181	LUMINESCENCE STUDIES IN THERMAL OXIDE FILMS WITH Si IMPLANTATION. Modern Physics Letters B, 2001, 15, 704-707.	1.9	1
182	Chapter 13 Integrated optical transducers for (bio)chemical sensing. Comprehensive Analytical Chemistry, 2003, , 541-586.	1.3	1
183	Magnetism and magneto-optics of Co nanoparticles embedded in dielectric and metallic matrices. , 2005, , .		1
184	Surface and Interface Structure of Silicon Rich Oxide Films. , 2006, , .		1
185	Butt coupled microcantilever in sensing applications. , 2006, 6186, 55.		1
186	Cantilever-based poly(dimethylsiloxane) Microoptoelectromechanical Systems. , 2009, , .		1
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