Borja Sepulveda

List of Publications by Year
in descending order

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63	4,790	117453	138251
papers	citations	34 h-index	58 g-index

63	63	63	6300
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	LSPR-based nanobiosensors. Nano Today, 2009, 4, 244-251.	6.2	882
2	An integrated optical interferometric nanodevice based on silicon technology for biosensor applications. Nanotechnology, 2003, 14, 907-912.	1.3	279
3	Trends and challenges of refractometric nanoplasmonic biosensors: A review. Analytica Chimica Acta, 2014, 806, 55-73.	2.6	268
4	Highly sensitive detection of biomolecules with the magneto-optic surface-plasmon-resonance sensor. Optics Letters, 2006, 31, 1085.	1.7	248
5	Plasmonic Au/Co/Au Nanosandwiches with Enhanced Magnetoâ€optical Activity. Small, 2008, 4, 202-205.	5.2	221
6	Identification of the Optimal Spectral Region for Plasmonic and Nanoplasmonic Sensing. ACS Nano, 2010, 4, 349-357.	7.3	174
7	Optical biosensor microsystems based on the integration of highly sensitive Machâ€“Zehnder interferometer devices. Journal of Optics, 2006, 8, S561-S566.	1.5	154
8	Nanohole Plasmons in Optically Thin Gold Films. Journal of Physical Chemistry C, 2007, 111, 1207-1212.	1.5	151
9	Plasmon-Induced Magneto-Optical Activity in Nanosized Gold Disks. Physical Review Letters, 2010, 104, 147401.	2.9	148
10	Integrated Machâ€“Zehnder interferometer based on ARROW structures for biosensor applications. Sensors and Actuators B: Chemical, 2003, 92, 151-158.	4.0	109
11	Magnetooptic effects in surface-plasmon-polaritons slab waveguides. Journal of Lightwave Technology, 2006, 24, 945-955.	2.7	108
12	Suitable combination of noble/ferromagnetic metal multilayers for enhanced magneto-plasmonic biosensing. Optics Express, 2011, 19, 8336.	1.7	107
13	Optical antennas based on coupled nanoholes in thin metal films. Nature Physics, 2007, 3, 884-889.	6.5	98
14	Highly active ZnO-based biomimetic fern-like microleaves for photocatalytic water decontamination using sunlight. Applied Catalysis B: Environmental, 2019, 248, 129-146.	10.8	98
15	Au/Fe/Au multilayer transducers for magneto-optic surface plasmon resonance sensing. Journal of Applied Physics, 2010, 108, .	1.1	96
16	All-optical phase modulation for integrated interferometric biosensors. Optics Express, 2012, 20, 7195.	1.7	91
17	Improved Biosensing Capability with Novel Suspended Nanodisks. Journal of Physical Chemistry C, 2011, 115, 5344-5351.	1.5	89
18	Silicon Photonic Biosensors for Lab-on-a-Chip Applications. Advances in Optical Technologies, 2008, 2008, 1-6.	0.8	80

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19	Precise Size Control of the Growth of Fe₃O₄ Nanocubes over a Wide Size Range Using a Rationally Designed One-Pot Synthesis. ACS Nano, 2019, 13, 7716-7728.	7.3	79
20	Molecular inversion probe-based SPR biosensing for specific, label-free and real-time detection of regional DNA methylation. Chemical Communications, 2014, 50, 3585-3588.	2.2	78
21	Optical Forces in Plasmonic Nanoparticle Dimers. Journal of Physical Chemistry C, 2010, 114, 7472-7479.	1.5	74
22	Substrate Effect on the Refractive Index Sensitivity of Silver Nanoparticles. Journal of Physical Chemistry C, 2014, 118, 24680-24687.	1.5	74
23	Sensitivity enhancement of nanoplasmonic sensors in low refractive index substrates. Optics Express, 2009, 17, 2015.	1.7	72
24	Direct Detection of Protein Biomarkers in Human Fluids Using Site-Specific Antibody Immobilization Strategies. Sensors, 2014, 14, 2239-2258.	2.1	69
25	Sensing with magnetic dipolar resonances in semiconductor nanospheres. Optics Express, 2013, 21, 23007.	1.7	67
26	Seeded Growth Synthesis of Auâ€“Fe₃O₄ Heterostructured Nanocrystals: Rational Design and Mechanistic Insights. Chemistry of Materials, 2017, 29, 4022-4035.	3.2	67
27	Shape effects in the localized surface plasmon resonance of single nanoholes in thin metal films. Optics Express, 2008, 16, 5609.	1.7	65
28	Cobalt dependence of the magneto-optical response in magnetoplasmonic nanodisks. Applied Physics Letters, 2010, 97, .	1.5	59
29	Highly sensitive dendrimer-based nanoplasmonic biosensor for drug allergy diagnosis. Biosensors and Bioelectronics, 2015, 66, 115-123.	5.3	57
30	Highly reduced ecotoxicity of ZnO-based micro/nanostructures on aquatic biota: Influence of architecture, chemical composition, fixation, and photocatalytic efficiency. Water Research, 2020, 169, 115210.	5.3	57
31	Polypeptide Folding-Mediated Tuning of the Optical and Structural Properties of Gold Nanoparticle Assemblies. Nano Letters, 2011, 11, 5564-5573.	4.5	55
32	Optimizing the Refractive Index Sensitivity of Plasmonically Coupled Gold Nanoparticles. Plasmonics, 2014, 9, 773-780.	1.8	52
33	Hybrid Ni@ZnO@ZnSâ€Microalgae for Circular Economy: A Smart Route to the Efficient Integration of Solar Photocatalytic Water Decontamination and Bioethanol Production. Advanced Science, 2020, 7, 1902447.	5.6	49
34	Unraveling the Operational Mechanisms of Chemically Propelled Motors with Micropumps. Accounts of Chemical Research, 2018, 51, 1921-1930.	7.6	37
35	Simultaneous Local Heating/Thermometry Based on Plasmonic Magnetochromic Nanoheaters. Small, 2018, 14, e1800868.	5.2	31
36	Transparent conducting oxides for active hybrid metamaterial devices. Journal of Optics (United) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 6	1.0	29

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37	Nanometric control of the distance between plasmonic nanoparticles using optical forces. Optics Express, 2007, 15, 14914.	1.7	28
38	Magneto-optical phase modulation in integrated Machâ€“Zehnder interferometric sensors. Sensors and Actuators A: Physical, 2007, 134, 339-347.	2.0	27
39	Guiding Light in Monolayers of Sparse and Random Plasmonic Meta-atoms. ACS Nano, 2011, 5, 9179-9186.	7.3	26
40	Exchange bias in laterally oxidized Au/Co/Au nanopillars. Applied Physics Letters, 2009, 94, 062502.	1.5	25
41	Selfâ€Assembly of Mechanoplasmonic Bacterial Celluloseâ€“Metal Nanoparticle Composites. Advanced Functional Materials, 2020, 30, 2004766.	7.8	24
42	Linear and quadratic magneto-optical Kerr effects in continuous and granular ultrathin monocrystalline Fe films. Physical Review B, 2003, 68, .	1.1	20
43	Magnetically amplified photothermal therapies and multimodal imaging with magneto-plasmonic nanodomes. Applied Materials Today, 2018, 12, 430-440.	2.3	20
44	Size mediated control of the optical and magneto-optical properties of Co nanoparticles in ZrO2. Journal of Applied Physics, 2006, 100, 074320.	1.1	17
45	Enhanced light extraction in ITO-free OLEDs using double-sided printed electrodes. Nanoscale, 2012, 4, 3495.	2.8	15
46	Photochemically Activated Motors: From Electrokinetic to Diffusion Motion Control. ACS Applied Materials & Interfaces, 2017, 9, 44948-44953.	4.0	15
47	Surface plasmon resonance biosensors for highly sensitive detection in real samples. , 2009, , .		12
48	Mechanochromic Detection for Soft Opto-Magnetic Actuators. ACS Applied Materials & Interfaces, 2021, 13, 47871-47881.	4.0	10
49	Fabrication of well-ordered silicon nanopillars embedded in a microchannel via metal-assisted chemical etching: a route towards an opto-mechanical biosensor. RSC Advances, 2016, 6, 85666-85674.	1.7	8
50	Ultrabroadband light absorbing Fe/polymer flexible metamaterial for soft opto-mechanical devices. Applied Materials Today, 2021, 23, 101052.	2.3	8
51	Integrated micro- and nano-optical biosensor silicon devices CMOS compatible. , 2004, 5357, 96.		7
52	Matrix Analysis of Discontinuities in Nonreciprocal Waveguides: Analytical Description for Magnetooptical Slab Waveguides. Journal of Lightwave Technology, 2004, 22, 1772-1781.	2.7	7
53	Figures of Merit for Refractometric LSPR Biosensing. , 2012, , 317-331.		7
54	Tailored Height Gradients in Vertical Nanowire Arrays via Mechanical and Electronic Modulation of Metalâ€Assisted Chemical Etching. Small, 2015, 11, 4201-4208.	5.2	7

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55	Towards a complete Lab-On-Chip system using integrated Mach-Zehnder interferometers. Optica Pura Y Aplicada, 2012, 45, 87-95.	0.0	7
56	Elastic Plasmonicâ€Enhanced Fabryâ€“PÃ©rot Cavities with Ultrasensitive Stretching Tunability. Advanced Materials, 2022, 34, e2106731.	11.1	7
57	Integrated optical silicon IC compatible nanodevices for biosensing applications. , 2003, , .		5
58	Spatial Distribution of Optical Near-Fields in Plasmonic Gold Sphere Segment Voids. Plasmonics, 2013, 8, 921-930.	1.8	5
59	Water-mediated photo-induced reduction of platinum films. Journal of Synchrotron Radiation, 2019, 26, 1288-1293.	1.0	4
60	Plasmonics and Metamaterials with Transparent Conducting Oxides. ECS Transactions, 2014, 64, 291-298.	0.3	3
61	Novel nanoplasmonic biosensor integrated in a microfluidic channel. Proceedings of SPIE, 2015, , .	0.8	2
62	Metamirrors Based on Arrays of Silicon Nanowires with Height Gradients. Advanced Optical Materials, 2017, 5, 1600933.	3.6	2
63	Photonic Micro/Nanobiosensors for Early Diagnosis of Diseases. , 2006, , .		0