

# Stefano Mariani

## List of Publications by Year in descending order

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34  
papers

1,131  
citations

516710

16  
h-index

454955

30  
g-index

34  
all docs

34  
docs citations

34  
times ranked

1684  
citing authors

#	ARTICLE	IF	CITATIONS
1	4D Printing of a Bioinspired Microneedle Array with Backward-Facing Barbs for Enhanced Tissue Adhesion. <i>Advanced Functional Materials</i> , 2020, 30, 1909197.	14.9	180
2	Surface plasmon resonance applications in clinical analysis. <i>Analytical and Bioanalytical Chemistry</i> , 2014, 406, 2303-2323.	3.7	165
3	Flexible Polydimethylsiloxane Foams Decorated with Multiwalled Carbon Nanotubes Enable Unprecedented Detection of Ultralow Strain and Pressure Coupled with a Large Working Range. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 13877-13885.	8.0	119
4	Layer-by-layer biofunctionalization of nanostructured porous silicon for high-sensitivity and high-selectivity label-free affinity biosensing. <i>Nature Communications</i> , 2018, 9, 5256.	12.8	74
5	10 <sup>4</sup> -Fold Improvement in Protein Detection Using Nanostructured Porous Silicon Interferometric Aptasensors. <i>ACS Sensors</i> , 2016, 1, 1471-1479.	7.8	70
6	Bioresorbable Materials on the Rise: From Electronic Components and Physical Sensors to In Vivo Monitoring Systems. <i>Advanced Science</i> , 2020, 7, 1902872.	11.2	70
7	Femtomole Detection of Proteins Using a Label-Free Nanostructured Porous Silicon Interferometer for Perspective Ultrasensitive Biosensing. <i>Analytical Chemistry</i> , 2016, 88, 8502-8509.	6.5	50
8	Decoration of Porous Silicon with Gold Nanoparticles via Layer-by-Layer Nanoassembly for Interferometric and Hybrid Photonic/Plasmonic (Bio)sensing. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 43731-43740.	8.0	47
9	A reusable optical biosensor for the ultrasensitive and selective detection of unamplified human genomic DNA with gold nanostars. <i>Biosensors and Bioelectronics</i> , 2015, 74, 981-988.	10.1	45
10	Direct detection of genomic DNA by surface plasmon resonance imaging: An optimized approach. <i>Biosensors and Bioelectronics</i> , 2013, 40, 193-199.	10.1	37
11	Bioanalytical approaches for the detection of single nucleotide polymorphisms by Surface Plasmon Resonance biosensors. <i>Biosensors and Bioelectronics</i> , 2014, 61, 28-37.	10.1	34
12	Electrical Double Layer-Induced Ion Surface Accumulation for Ultrasensitive Refractive Index Sensing with Nanostructured Porous Silicon Interferometers. <i>ACS Sensors</i> , 2018, 3, 595-605.	7.8	24
13	Bioresorbable Nanostructured Chemical Sensor for Monitoring of pH Level In Vivo. <i>Advanced Science</i> , 2022, 9, .	11.2	20
14	Moldless Printing of Silicone Lenses with Embedded Nanostructured Optical Filters. <i>Advanced Functional Materials</i> , 2020, 30, 1906836.	14.9	19
15	In situ controlled and conformal coating of polydimethylsiloxane foams with silver nanoparticle networks with tunable piezo-resistive properties. <i>Nanoscale Horizons</i> , 2022, 7, 425-436.	8.0	18
16	Single nucleotide polymorphism detection by optical DNA-based sensing coupled with whole genomic amplification. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 985-993.	3.7	16
17	Three-dimensional silicon-integrated capacitor with unprecedented areal capacitance for on-chip energy storage. <i>Nano Energy</i> , 2020, 68, 104281.	16.0	16
18	Maskless Preparation of Spatially-Resolved Plasmonic Nanoparticles on Polydimethylsiloxane via In Situ Fluoride-Assisted Synthesis. <i>Advanced Functional Materials</i> , 2021, 31, 2100774.	14.9	16

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19	Investigating nanoparticle properties in plasmonic nanoarchitectures with DNA by surface plasmon resonance imaging. <i>Chemical Communications</i> , 2015, 51, 6587-6590.	4.1	14
20	SPR-Based Affinity Biosensors as Innovative Analytical Devices. <i>Journal of Lightwave Technology</i> , 2015, 33, 3374-3384.	4.6	14
21	Real-time kinetic binding studies at attomolar concentrations in solution phase using a single-stage opto-biosensing platform based upon infrared surface plasmons. <i>Optics Express</i> , 2017, 25, 39.	3.4	13
22	Improving surface plasmon resonance imaging of DNA by creating new gold and silver based surface nanostructures. <i>Mikrochimica Acta</i> , 2013, 180, 1093-1099.	5.0	12
23	Label free Affinity sensing: application to food analysis. <i>Acta IMEKO (2012)</i> , 2016, 5, 36.	0.7	10
24	4D Printing of Plasmon-Encoded Tunable Polydimethylsiloxane Lenses for On-Field Microscopy of Microbes. <i>Advanced Optical Materials</i> , 2022, 10, 2101610.	7.3	10
25	Low-Concentration Ethanol Vapor Sensing With Nanostructured Porous Silicon Interferometers Using Interferogram Average Over Wavelength Reflectance Spectroscopy. <i>IEEE Sensors Journal</i> , 2018, 18, 7842-7849.	4.7	8
26	Direct genotyping of C3435T single nucleotide polymorphism in unamplified human MDR1 gene using a surface plasmon resonance imaging DNA sensor. <i>Analytical and Bioanalytical Chemistry</i> , 2015, 407, 4023-4028.	3.7	7
27	Nanoscale Photoluminescence Manipulation in Monolithic Porous Silicon Oxide Microcavity Coated with Rhodamine-Labelled Polyelectrolyte via Electrostatic Nanoassembly. <i>Advanced Optical Materials</i> , 2021, 9, 2100036.	7.3	7
28	Morphological Computation in Plant Seeds for a New Generation of Self-Burial and Flying Soft Robots. <i>Frontiers in Robotics and AI</i> , 2021, 8, 797556.	3.2	6
29	Macroporous PDMS foam decorated with carbon nanotubes for conductometric pressure and strain sensors. , 2017, , .		4
30	Electrochemical and optical study of metallothionein interactions with prion proteins. <i>Journal of Pharmaceutical and Biomedical Analysis</i> , 2017, 140, 355-361.	2.8	3
31	Interferogram Average over Wavelength Spectroscopy: An Ultrasensitive Technique for Biosensing with Porous Silicon Interferometers. <i>ECS Transactions</i> , 2017, 77, 1815-1823.	0.5	3
32	Porous silicon interferometers for high-sensitivity label-free detection of biomolecules. , 2017, , .		0
33	Bioresorbable and Biodegradable Electronics and Photonics. , 2020, , .		0
34	Layer-by-layer nano-assembly of charged polyelectrolytes for label-free optical biosensing with nanostructured materials: the case of nanostructured porous silicon interferometers. , 2019, , .		0