Valentina Mussi

List of Publications by Year
in descending order

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71 papers	1,045 citations	471371 17 h-index	477173 29 g-index
71 all docs	71 docs citations	71 times ranked	1583 citing authors

#	Article	IF	Citations
1	Interactions of single-wall carbon nanotubes with endothelial cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2010, 6, 277-288.	1.7	72
2	Schroedinger cat states and optimum universal quantum cloning by entangled parametric amplification. Optics Communications, 2000, 179, 581-589.	1.0	61
3	Disordered array of Au covered Silicon nanowires for SERS biosensing combined with electrochemical detection. Scientific Reports, 2016, 6, 25099.	1.6	49
4	DNA detection with a polymeric nanochannel device. Lab on A Chip, 2011, 11, 2961.	3.1	48
5	Comparability of Raman Spectroscopic Configurations: A Large Scale Cross-Laboratory Study. Analytical Chemistry, 2020, 92, 15745-15756.	3.2	46
6	Preparation and properties of macroporous brushite bone cements. Acta Biomaterialia, 2009, 5, 2161-2168.	4.1	43
7	DNA-functionalized solid state nanopore for biosensing. Nanotechnology, 2010, 21, 145102.	1.3	42
8	â€œDNA-Dressed NAnoporeâ€•for complementary sequence detection. Biosensors and Bioelectronics, 2011, 29, 125-131.	5.3	41
9	Mechanical properties of â€œtwo generationsâ€•of teeth aligners: Change analysis during oral permanence. Dental Materials Journal, 2018, 37, 835-842.	0.8	41
10	Modulating DNA Translocation by a Controlled Deformation of a PDMS Nanochannel Device. Scientific Reports, 2012, 2, 791.	1.6	38
11	Surface nanostructuring and optical activation of lithium fluoride crystals by ion beam irradiation. Applied Physics Letters, 2006, 88, 103116.	1.5	37
12	Mode analysis in He+-implanted lithium fluoride planar waveguides. Applied Physics Letters, 2003, 82, 3886-3888.	1.5	35
13	Nanotechnology Applications in Medicine. Tumori, 2008, 94, 206-215.	0.6	27
14	Array of disordered silicon nanowires coated by a gold film for combined NIR photothermal treatment of cancer cells and Raman monitoring of the process evolution. Nanotechnology, 2018, 29, 415102.	1.3	24
15	Silverâ€Coated Disordered Silicon Nanowires Provide Highly Sensitive Labelâ€Free Glycated Albumin Detection through Molecular Trapping and Plasmonic Hotspot Formation. Advanced Healthcare Materials, 2021, 10, e2001110.	3.9	23
16	Raman analysis and mapping for the determination of COOH groups on oxidized single walled carbon nanotubes. Carbon, 2010, 48, 3391-3398.	5.4	22
17	Ion sputtered surfaces as templates for carbon nanotubes alignment and deformation. Nuclear Instruments & Methods in Physics Research B, 2005, 230, 545-550.	0.6	17
18	A sensitive and practical fluorimetric test for CNT acidic site determination. Chemical Communications, 2010, 46, 1443.	2.2	16

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19	Size and functional tuning of solid state nanopores by chemical functionalization. Nanotechnology, 2012, 23, 435301.	1.3	15
20	Insights into the morphological pattern of erythrocytes' aging: Coupling quantitative AFM data to microcalorimetry and Raman spectroscopy. Journal of Molecular Recognition, 2018, 31, e2732.	1.1	15
21	Fabrication and spectroscopic characterization of graphene transparent electrodes on flexible cyclo-olefin substrates for terahertz electro-optic applications. Nanotechnology, 2020, 31, 364006.	1.3	15
22	Selective protein detection with a dsLNA-functionalized nanopore. Biosensors and Bioelectronics, 2015, 64, 219-226.	5.3	14
23	Photoacoustic technique for the characterization of plasmonic properties of 2D periodic arrays of gold nanoholes. AIP Advances, 2017, 7, 025210.	0.6	14
24	Efficient Photothermal Generation by Nanoscale Light Trapping in a Forest of Silicon Nanowires. Journal of Physical Chemistry C, 2021, 125, 14134-14140.	1.5	14
25	Physical and chemical mechanisms involved in adhesion of orthodontic bonding composites: in vitro evaluations. BMC Oral Health, 2021, 21, 350.	0.8	14
26	The propagator for a particle in a well. European Journal of Physics, 2001, 22, 53-66.	0.3	13
27	Infrared near-field microscopy with the Vanderbilt free electron laser: overview and perspectives. Infrared Physics and Technology, 2004, 45, 409-416.	1.3	13
28	In situ study of the dewetting behavior of Ni-films on oxidized Si(001) by GISAXS. Surface Science, 2007, 601, 4526-4530.	0.8	13
29	Living Matter Observations with a Novel Hyperspectral Supercontinuum Confocal Microscope for VIS to Near-IR Reflectance Spectroscopy. Sensors, 2013, 13, 14523-14542.	2.1	12
30	A Deep Morphological Characterization and Comparison of Different Dental Restorative Materials. BioMed Research International, 2017, 2017, 1-16.	0.9	12
31	Broad band light-emitting nanostructured substrates by ion beam irradiation of lithium fluoride crystals. Surface Science, 2007, 601, 2746-2749.	0.8	11
32	Mechanical squeezing of an elastomeric nanochannel device: numerical simulations and ionic current characterization. Microfluidics and Nanofluidics, 2013, 14, 21-30.	1.0	11
33	Silver-coated silicon nanowire platform discriminates genomic DNA from normal and malignant human epithelial cells using label-free Raman spectroscopy. Materials Science and Engineering C, 2021, 122, 111951.	3.8	10
34	Study of Microplastics and Inorganic Contaminants in Mussels from the Montenegrin Coast, Adriatic Sea. Journal of Marine Science and Engineering, 2021, 9, 544.	1.2	10
35	Lithium fluoride films and crystals containing metallic colloids studied by scanning near-field optical microscopyPresented at the LANMAT 2001 Conference on the Interaction of Laser Radiation with Matter at Nanoscopic Scales: From Single Molecule Spectroscopy to Materials Processing, Venice, 3â€“6 October, 2001.. Physical Chemistry Chemical Physics, 2002, 4, 2742-2746.	1.3	9
36	Functionalization of Single-Walled Carbon Nanotubes through 1,3-CycloÂaddition of Carbonyl Ylides under Microwave Irradiation. Synlett, 2012, 23, 1459-1462.	1.0	9

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37	Concentration of F2 and F3+ defects in He+ implanted LiF crystals determined by optical transmission and photoluminescence measurements. Optical Materials, 2003, 24, 291-296.	1.7	8
38	Electrical characterization of DNA-functionalized solid state nanopores for bio-sensing. Journal of Physics Condensed Matter, 2010, 22, 454104.	0.7	8
39	Label-free and non-invasive discrimination of HaCaT and melanoma cells in a co-culture model by hyperspectral confocal reflectance microscopy. Journal of Biophotonics, 2016, 9, 619-625.	1.1	7
40	Focused ion beam surface treatments of single crystal zinc oxide for device fabrication. Materials and Design, 2016, 112, 530-538.	3.3	7
41	Universal Quantum Cloning and Macroscopic Superposition in Parametric Amplification. Fortschritte Der Physik, 2000, 48, 413-422.	1.5	6
42	Optical investigation of metallic lithium colloids and F-centres in ion-assisted LiF thin films. IOP Conference Series: Materials Science and Engineering, 2010, 15, 012017.	0.3	6
43	Label-free discrimination of cells undergoing apoptosis by hyperspectral confocual reflectance imaging. Journal of the European Optical Society-Rapid Publications, 0, 8, .	0.9	6
44	MOCVD Growth of GeTe/Sb2Te3 Coreâ€“Shell Nanowires. Coatings, 2021, 11, 718.	1.2	6
45	Hybrid Electrothermal Simulations of GaN HEMT Devices Based on Self-Heating Free Virtual Electrical Characteristics. IEEE Transactions on Electron Devices, 2021, 68, 3740-3747.	1.6	6
46	Growth, Electronic and Electrical Characterization of Ge-Rich Geâ€“Sbâ€“Te Alloy. Nanomaterials, 2022, 12, 1340.	1.9	6
47	IR-SNOM on lithium fluoride films with regular arrays based on colour centres. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 3075-3080.	0.8	5
48	Nanostructuring polymers by soft lithography templates realized via ion sputtering. Nanotechnology, 2005, 16, 2714-2717.	1.3	5
49	Solid state nanopores for gene expression profiling. Superlattices and Microstructures, 2009, 46, 59-63.	1.4	5
50	A 3D-Printed Multi-Chamber Device Allows Culturing Cells On Buckypapers Coated With PAMAM Dendrimer And Obtain Innovative Materials For Biomedical Applications . International Journal of Nanomedicine, 2019, Volume 14, 9295-9306.	3.3	5
51	Antiviral Filtering Capacity of GO-Coated Textiles. Applied Sciences (Switzerland), 2021, 11, 7501.	1.3	5
52	Phase Change Ge-Rich Geâ€“Sbâ€“Te/Sb2Te3 Core-Shell Nanowires by Metal Organic Chemical Vapor Deposition. Nanomaterials, 2021, 11, 3358.	1.9	5
53	Terahertz characterization of graphene conductivity via time-domain reflection spectroscopy on metal-backed dielectric substrates. Journal Physics D: Applied Physics, 2022, 55, 365101.	1.3	5
54	Defect generation in low-energy ion-assisted thermal deposited lithium fluoride films. Journal of Non-Crystalline Solids, 2003, 322, 111-116.	1.5	4

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55	Binding force measurement of NF-Î¹Bâ€“ODNs interaction: An AFM based decoy and drug testing tool. Biosensors and Bioelectronics, 2011, 28, 158-165.	5.3	4
56	Multivariate analysis of mean Raman spectra of erythrocytes for a fast analysis of the biochemical signature of ageing. Talanta, 2021, 221, 121442.	2.9	4
57	Raman Mapping of Biological Systems Interacting with a Disordered Nanostructured Surface: A Simple and Powerful Approach to the Label-Free Analysis of Single DNA Bases. Micromachines, 2021, 12, 264.	1.4	4
58	Structural and Electrical Properties of Annealed Ge2Sb2Te5 Films Grown on Flexible Polyimide. Nanomaterials, 2022, 12, 2001.	1.9	4
59	Multivariate analysis applied to Raman mapping of dye-functionalized carbon nanotubes: a novel approach to support the rational design of functional nanostructures. Analyst, The, 2015, 140, 5754-5763.	1.7	3
60	Zn nanoparticle formation in FIB irradiated single crystal ZnO. Applied Surface Science, 2018, 433, 899-903.	3.1	3
61	Aggregation behaviour of triphenylphosphonium bolaamphiphiles. Journal of Colloid and Interface Science, 2018, 531, 451-462.	5.0	3
62	Optical nanospectroscopy applications in material science. Applied Surface Science, 2004, 234, 374-386.	3.1	2
63	Active waveguides produced in lithium fluoride by He+ implantation. Nuclear Instruments & Methods in Physics Research B, 2005, 230, 257-261.	0.6	2
64	Optical Investigation of Metallic Colloids in Ion-Irradiated Lithium Fluoride (Lif) Crystals. Radiation Effects and Defects in Solids, 2003, 158, 181-184.	0.4	1
65	Toward control of point defects in lithium fluoride thin layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 864-869.	0.8	1
66	Ga₂Se₃ Nanowires via Au-Assisted Heterovalent Exchange Reaction on GaAs. Journal of Physical Chemistry C, 2020, 124, 17783-17794.	1.5	1
67	About optical coupling properties of 2D plasmonic nanostructures. , 2015, , .		1
68	Label-Free Morpho-Molecular Imaging for Studying the Differential Interaction of Black Phosphorus with Tumor Cells. Nanomaterials, 2022, 12, 1994.	1.9	1
69	Optical characterization of active waveguides produced in lithium fluoride by He/sup +/ implantation. , 0, , .		0
70	Influence of diameter on temperature dynamics of hot carriers in photoexcited GaAsP nanowires. Physical Review B, 2021, 104, .	1.1	0
71	OPTICAL SPECTROSCOPY AND SCANNING NEAR-FIELD OPTICAL MICROSCOPY ON HE+ IRRADIATED LITHIUM FLUORIDE CRYSTALS. , 2004, , .		0