Valentina Cauda

List of Publications by Year in Descending Order

126 papers	5,228 citations	39 h-index	69 g-index
135 ext. papers	6,144 ext. citations	6.3 avg, IF	6.02 L-index

#	Paper	IF	Citations
126	In Vitro and Ex Vivo Investigation of the Effects of Polydopamine Nanoparticle Size on Their Antioxidant and Photothermal Properties: Implications for Biomedical Applications. *ACS Applied Nano Materials*, **2022**, 5, 1702-1713	5.6	5
125	Insight into Sonoluminescence Augmented by ZnO-Functionalized Nanoparticles.. *ACS Omega*, **2022** , 7, 6591-6600	3.9	0
124	Nanotechnological engineering of extracellular vesicles for the development of actively targeted hybrid nanodevices.. *Cell and Bioscience*, **2022**, 12, 61	9.8	1
123	Extracellular Vesicles Tropism: A Comparative Study between Passive Innate Tropism and the Active Engineered Targeting Capability of Lymphocyte-Derived EVs. *Membranes*, **2021**, 11,	3.8	4
122	Iron-Doped ZnO Nanoparticles as Multifunctional Nanoplatforms for Theranostics. *Nanomaterials*, **2021**, 11,	5.4	5
121	Ultrasound Triggered ZnO-Based Devices for Tunable and Multifaceted Biomedical Applications. *Advanced Materials Interfaces*, **2021**, 8, 2101021	4.6	1
120	Synthesis and characterization of ordered mesoporous silicas for the immobilization of formate dehydrogenase (FDH). *International Journal of Biological Macromolecules*, **2021**, 177, 261-270	7.9	3
119	A deep-learning model to continuously predict severe acute kidney injury based on urine output changes in critically ill patients. *Journal of Nephrology*, **2021**, 34, 1875-1886	4.8	2
118	Extracellular Vesicles and Their Current Role in Cancer Immunotherapy. *Cancers*, **2021**, 13,	6.6	4
117	Enhancing the preservation of liposomes: The role of cryoprotectants, lipid formulations and freezing approaches. *Cryobiology*, **2021**, 98, 46-56	2.7	9
116	ZnO Materials as Effective Anodes for the Photoelectrochemical Regeneration of Enzymatically Active NAD. *ACS Applied Materials & Interfaces*, **2021**, 13, 10719-10727	9.5	2
115	Smart Shockwave Responsive Titania-Based Nanoparticles for Cancer Treatment. *Pharmaceutics*, **2021**, 13,	6.4	2
114	Biomimetic mesoporous vectors enabling the efficient inhibition of wild-type isocitrate dehydrogenase in multiple myeloma cells. *Microporous and Mesoporous Materials*, **2021**, 325, 111320	5.3	0
113	Biodegradation and Antimicrobial Properties of Zinc Oxide–Polymer Composite Materials for Urinary Stent Applications. *Coatings*, **2020**, 10, 1002	2.9	4
112	The urgent need for integrated science to fight COVID-19 pandemic and beyond. *Journal of Translational Medicine*, **2020**, 18, 205	8.5	92
111	Piezo- and Photocatalytic Activity of Ferroelectric ZnO:Sb Thin Films for the Efficient Degradation of Rhodamine-B Dye Pollutant. *ACS Applied Materials & Interfaces*, **2020**, 12, 25798-25808	9.5	27
110	Multimodal Decorations of Mesoporous Silica Nanoparticles for Improved Cancer Therapy. *Pharmaceutics*, **2020**, 12,	6.4	22

109	Metal-Organic Framework Nanoparticles Induce Pyroptosis in Cells Controlled by the Extracellular pH. *Advanced Materials*, **2020**, 32, e1907267	24	50
108	Facile Chemical Synthesis of Doped ZnO Nanocrystals Exploiting Oleic Acid. *Nanomaterials*, **2020**, 10,	5.4	6
107	Zinc Oxide Nanocrystals and High-Energy Shock Waves: A New Synergy for the Treatment of Cancer Cells. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 577	5.8	16
106	Leveraging re-chargeable nanobubbles on amine-functionalized ZnO nanocrystals for sustained ultrasound cavitation towards echographic imaging. *Ultrasonics Sonochemistry*, **2020**, 67, 105132	8.9	10
105	The investigation of the parameters affecting the ZnO nanoparticle cytotoxicity behaviour: a tutorial review. *Biomaterials Science*, **2020**, 8, 6157-6174	7.4	12
104	Polydopamine Nanoparticles as an Organic and Biodegradable Multitasking Tool for Neuroprotection and Remote Neuronal Stimulation. *ACS Applied Materials & Interfaces*, **2020**, 12, 35782-35798	9.5	20
103	Doped Zinc Oxide Nanoparticles: Synthesis, Characterization and Potential Use in Nanomedicine. *Applied Sciences (Switzerland)*, **2020**, 10, 5194	2.6	36
102	EVs and Bioengineering: From Cellular Products to Engineered Nanomachines. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	17
101	Biodegradable and Drug-Eluting Inorganic Composites Based on Mesoporous Zinc Oxide for Urinary Stent Applications. *Materials*, **2020**, 13,	3.5	6
100	Biomimetic Amorphous Titania Nanoparticles as Ultrasound Responding Agents to Improve Cavitation and ROS Production for Sonodynamic Therapy. *Applied Sciences (Switzerland)*, **2020**, 10, 8479	2.6	6
99	Remotely Activated Nanoparticles for Anticancer Therapy. *Nano-Micro Letters*, **2020**, 13, 11	19.5	11
98	Zinc oxide nanocrystals as a nanoantibiotic and osteoinductive agent. *RSC Advances*, **2019**, 9, 11312-11321	3.7	24
97	Improving dispersal of therapeutic nanoparticles in the human body. *Nanomedicine*, **2019**, 14, 797-801	5.6	17
96	Biodegradable polymer nanocomposites for tissue engineering: synthetic strategies and related applications **2019**, 157-198		1
95	Nanoparticles for hematologic diseases detection and treatment. *Hematology & Medical Oncology*, **2019**, 4, 1000183	1	1
94	A Microwave-Assisted Synthesis of Zinc Oxide Nanocrystals Finely Tuned for Biological Applications. *Nanomaterials*, **2019**, 9,	5.4	44
93	The Synergistic Effect of Nanocrystals Combined With Ultrasound in the Generation of Reactive Oxygen Species for Biomedical Applications. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 374	5.8	13
92	ZnO thick films for NO2 detection: effect of different nanostructures on the sensors performances. *Journal of Materials Science: Materials in Electronics*, **2019**, 30, 20958-20969	2.1	5

91	ZnO nanocrystals shuttled by extracellular vesicles as effective Trojan nano-horses against cancer cells. *Nanomedicine*, **2019**, 14, 2815-2833	5.6	27
90	Engineered Extracellular Vesicles as a Reliable Tool in Cancer Nanomedicine. *Cancers*, **2019**, 11,	6.6	36
89	Design, Fabrication, and In Vitro Evaluation of Nanoceria-Loaded Nanostructured Lipid Carriers for the Treatment of Neurological Diseases. *ACS Biomaterials Science and Engineering*, **2019**, 5, 670-682	5.5	19
88	Sonophotocatalytic degradation mechanisms of Rhodamine B dye via radicals generation by micro- and nano-particles of ZnO. *Applied Catalysis B: Environmental*, **2019**, 243, 629-640	21.8	207
87	Graphene Oxide Finely Tunes the Bioactivity and Drug Delivery of Mesoporous ZnO Scaffolds. *ACS Applied Materials & Interfaces*, **2019**, 11, 449-456	9.5	26
86	Nanoparticle-assisted ultrasound: A special focus on sonodynamic therapy against cancer. *Chemical Engineering Journal*, **2018**, 340, 155-172	14.7	156
85	Porous Zinc Oxide Thin Films: Synthesis Approaches and Applications. *Coatings*, **2018**, 8, 67	2.9	37
84	Lipid-Coated Zinc Oxide Nanoparticles as Innovative ROS-Generators for Photodynamic Therapy in Cancer Cells. *Nanomaterials*, **2018**, 8,	5.4	65
83	Gentamicin-Releasing Mesoporous ZnO Structures. *Materials*, **2018**, 11,	3.5	24
82	Preparation of bio-functional textiles by surface functionalization of cellulose fabrics with caffeine loaded nanoparticles.. *IOP Conference Series: Materials Science and Engineering*, **2018**, 460, 012044	0.4	8
81	Porous ZnO/2Hydroxyethyl Methacrylate Eluting Coatings for Ureteral Stent Applications. *Coatings*, **2018**, 8, 376	2.9	11
80	Zinc Oxide Nanostructures in Biomedicine **2018**, 171-187		15
79	Functionalized ZnO nanowires for microcantilever biosensors with enhanced binding capability. *Analytical and Bioanalytical Chemistry*, **2017**, 409, 2615-2625	4.4	11
78	Comparative spectroscopic approach for the dye loading optimization of sheet-like ZnO photoanodes for dye-sensitized solar cells. *Journal of Photochemistry and Photobiology A: Chemistry* , **2017**, 337, 192-197	4.7	4
77	Surface Engineering of Nanostructured ZnO Surfaces. *Advanced Materials Interfaces*, **2017**, 4, 1600758	4.6	39
76	Exosome-Coated Metal Organic Framework Nanoparticles: An Efficient Drug Delivery Platform. *Chemistry of Materials*, **2017**, 29, 8042-8046	9.6	134
75	Enhanced biostability and cellular uptake of zinc oxide nanocrystals shielded with a phospholipid bilayer. *Journal of Materials Chemistry B*, **2017**, 5, 8799-8813	7.3	49
74	Ureteral double-J stents performances toward encrustation after long-term indwelling in a dynamic in vitro model. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2017**, 105, 2244-2253	3.5	12

73	ZnO Nanostructures for Tissue Engineering Applications. *Nanomaterials*, **2017**, 7,	5.4	89
72	One-Dimensional ZnO/Gold Junction for Simultaneous and Versatile Multisensing Measurements. *Scientific Reports*, **2016**, 6, 29763	4.9	69
71	How Micropatterning and Surface Functionalization Affect the Wetting Behavior of ZnO Nanostructured Surfaces. *Advanced Materials Interfaces*, **2016**, 3, 1600110	4.6	18
70	Aerosol-assisted synthesis of mesoporous aluminosilicate microspheres: the effect of the aluminum precursor. *New Journal of Chemistry*, **2016**, 40, 4420-4427	3.6	6
69	An electronic platform for real-time detection of bovine serum albumin by means of amine-functionalized zinc oxide microwires. *RSC Advances*, **2016**, 6, 891-897	3.7	19
68	A porous nanobranched structure: an effective way to improve piezoelectricity in sputtered ZnO thin films. *RSC Advances*, **2016**, 6, 76996-77004	3.7	19
67	Nanostructured piezoelectric polymers. *Journal of Applied Polymer Science*, **2015**, 132, n/a-n/a	2.9	41
66	A Low-Power 0.13- $mu text{m}$ CMOS IC for ZnO-Nanowire Assembly and Nanowire-Based UV Sensor Interface. *IEEE Sensors Journal*, **2015**, 15, 4203-4212	4	8
65	Flexible piezoelectric energy nanogenerator based on ZnO nanotubes hosted in a polycarbonate membrane. *Nano Energy*, **2015**, 13, 474-481	17.1	66
64	Ultraviolet mem-sensors: flexible anisotropic composites featuring giant photocurrent enhancement. *Nano Research*, **2015**, 8, 1956-1963	10	22
63	Evaluation of the piezoelectric properties and voltage generation of flexible zinc oxide thin films. *Nanotechnology*, **2015**, 26, 215704	3.4	45
62	Leveraging ZnO morphologies in piezoelectric composites for mechanical energy harvesting. *Nano Energy*, **2015**, 18, 212-221	17.1	29
61	Surface area enhancement by mesoporous silica deposition on microcantilever sensors for small molecule detection. *Journal of Materials Chemistry C*, **2015**, 3, 12507-12513	7.1	13
60	Nanobranched ZnO Structure: p-Type Doping Induces Piezoelectric Voltage Generation and Ferroelectric-Photovoltaic Effect. *Advanced Materials*, **2015**, 27, 4218-23	24	52
59	Interface of a single ZnO-nanowire assembled onto custom-fabricated nanogap device for UV sensing applications **2015**,		1
58	Comparison of photocatalytic and transport properties of TiO2 and ZnO nanostructures for solar-driven water splitting. *Physical Chemistry Chemical Physics*, **2015**, 17, 7775-86	3.6	190
57	Electrophoretic deposition of mesoporous bioactive glass on glass-ceramic foam scaffolds for bone tissue engineering. *Journal of Materials Science: Materials in Medicine*, **2015**, 26, 5346	4.5	48
56	pH-triggered conduction of amine-functionalized single ZnO wire integrated on a customized nanogap electronic platform. *Nanoscale Research Letters*, **2014**, 9, 53	5	18

55	Comprehensive study of the templating effect on the ZnO nanostructure formation within porous hard membranes. *New Journal of Chemistry*, **2014**, 38, 2058	3.6	26
54	Development of Hybrid Piezoelectric Materials for Tactile Sensing. *Key Engineering Materials*, **2014**, 605, 263-266	0.4	3
53	Optimization of 1D ZnO@TiO2 core-shell nanostructures for enhanced photoelectrochemical water splitting under solar light illumination. *ACS Applied Materials & Interfaces*, **2014**, 6, 12153-67	9.5	175
52	Shape-Controlled Synthesis of Silver Nature-Like Spiky Particles for Piezoresistive Sensor Applications. *European Journal of Inorganic Chemistry*, **2014**, 2014, 2711-2719	2.3	1
51	Piezoresistive flexible composite for robotic tactile applications. *Sensors and Actuators A: Physical*, **2014**, 208, 1-9	3.9	71
50	Streamlining of commercial Berl saddles: A new material to improve the performance of microbial fuel cells. *Energy*, **2014**, 71, 615-623	7.9	29
49	Wetting Behavior of Hierarchical Oxide Nanostructures: TiO2Nanotubes from Anodic Oxidation Decorated with ZnO Nanostructures. *Journal of the Electrochemical Society*, **2014**, 161, D484-D488	3.9	22
48	Stretchable and Wearable Piezoresistive Insole for Continuous Pressure Monitoring. *Key Engineering Materials*, **2014**, 605, 474-477	0.4	5
47	Nanostructured ZnO Materials: Synthesis, Properties and Applications **2014**, 137-177		7
46	Properties of ZnO nanorods grown by hydrothermal synthesis on conductive layers. *Crystal Research and Technology*, **2014**, 49, 599-605	1.3	14
45	Ultralong and Mesoporous ZnO and Al2O3 Oriented Nanowires Obtained by Template-assisted Hydrothermal Approach. *Journal of Materials Science and Technology*, **2014**, 30, 1167-1173	9.1	17
44	Nanosized Gold and Silver Spherical, Spiky, and Multi-branched Particles **2014**, 179-212		3
43	Flexible tactile sensing based on piezoresistive composites: a review. *Sensors*, **2014**, 14, 5296-332	3.8	254
42	Multi-functional energy conversion and storage electrodes using flower-like Zinc oxide nanostructures. *Energy*, **2014**, 65, 639-646	7.9	76
41	Fast and low-cost synthesis of 1D ZnO TiO2 core shell nanoarrays: Characterization and enhanced photo-electrochemical performance for water splitting. *Journal of Alloys and Compounds*, **2014**, 615, S530-S537	5.7	60
40	Effect of the fabrication method on the functional properties of BaTiO3: PVDF nanocomposites. *Journal of Materials Science*, **2013**, 48, 6943-6951	4.3	32
39	Nanoconfinement: an effective way to enhance PVDF piezoelectric properties. *ACS Applied Materials & Interfaces*, **2013**, 5, 6430-7	9.5	117
38	Comparison between ZnO nanowires grown by chemical vapor deposition and hydrothermal synthesis. *Applied Physics A: Materials Science and Processing*, **2013**, 113, 623-632	2.6	71

37	A chemometric approach for the sensitization procedure of ZnO flowerlike microstructures for dye-sensitized solar cells. *ACS Applied Materials & Interfaces*, **2013**, 5, 11288-95	9.5	71
36	A low-power Read-Out Circuit and low-cost assembly of nanosensors onto a 0.13 μm CMOS Micro-for-Nano chip **2013**,		3
35	Bis-Ferrocene Molecular QCA Wire: Ab Initio Simulations of Fabrication Driven Fault Tolerance. *IEEE Nanotechnology Magazine*, **2013**, 12, 498-507	2.6	54
34	Different Scale Confinements of PVDF-TrFE as Functional Material of Piezoelectric Devices. *IEEE Sensors Journal*, **2013**, 13, 2237-2244	4	20
33	Length-dependent charge generation from vertical arrays of high-aspect-ratio ZnO nanowires. *Chemistry - A European Journal*, **2013**, 19, 14665-74	4.8	61
32	Wearable and flexible pedobarographic insole for continuous pressure monitoring **2013**,		8
31	Functionalized single ZnO-metal junction as a pH sensor **2013**,		3
30	Wettability Control on ZnO Nanowires Driven by Seed Layer Properties. *European Journal of Inorganic Chemistry*, **2013**, 2013, 2520-2527	2.3	50
29	Discrete tomography of demanding samples based on a modified SIRT algorithm. *Ultramicroscopy*, **2012**, 115, 41-9	3.1	25
28	Heparin-coated colloidal mesoporous silica nanoparticles efficiently bind to antithrombin as an anticoagulant drug-delivery system. *Chemistry - A European Journal*, **2012**, 18, 428-32	4.8	37
27	A nanogap array platform for testing the optically modulated conduction of gold octithiophene gold junctions for molecular optoelectronics. *RSC Advances*, **2012**, 2, 10985	3.7	11
26	Confinement in Oriented Mesopores Induces Piezoelectric Behavior of Polymeric Nanowires. *Chemistry of Materials*, **2012**, 24, 4215-4221	9.6	55
25	Evaluation of different conductive nanostructured particles as filler in smart piezoresistive composites. *Nanoscale Research Letters*, **2012**, 7, 327	5	24
24	Direct visualization of dye and oligonucleotide diffusion in silica filaments with collinear mesopores. *Nano Letters*, **2012**, 12, 1354-61	11.5	23
23	Synthesis and Characterization of Gold Nanostars as Filler of Tunneling Conductive Polymer Composites. *European Journal of Inorganic Chemistry*, **2012**, 2012, 2669-2673	2.3	34
22	Cascaded photoinduced drug delivery to cells from multifunctional core-shell mesoporous silica. *Advanced Healthcare Materials*, **2012**, 1, 316-20	10.1	35
21	Photo-induced Drug Delivery: Cascaded Photoinduced Drug Delivery to Cells from Multifunctional Core Shell Mesoporous Silica (Adv. Healthcare Mater. 3/2012). *Advanced Healthcare Materials*, **2012**, 1, 360-360	10.1	
20	Different scale confinements of PVDF-TrFE as functional material of piezoelectric sensor devices **2012**,		1

19	"Liquid-phase calcination" of colloidal mesoporous silica nanoparticles in high-boiling solvents. *Journal of the American Chemical Society*, **2011**, 133, 6484-6	16.4	26
18	All-inorganic core–shell silica–titania mesoporous colloidal nanoparticles showing orthogonal functionality. *Journal of Materials Chemistry*, **2011**, 21, 13817		4
17	Impact of different PEGylation patterns on the long-term bio-stability of colloidal mesoporous silica nanoparticles. *Journal of Materials Chemistry*, **2010**, 20, 8693		196
16	Colchicine-loaded lipid bilayer-coated 50 nm mesoporous nanoparticles efficiently induce microtubule depolymerization upon cell uptake. *Nano Letters*, **2010**, 10, 2484-92	11.5	134
15	Role of endosomal escape for disulfide-based drug delivery from colloidal mesoporous silica evaluated by live-cell imaging. *Nano Letters*, **2010**, 10, 3684-91	11.5	143
14	Controlling the delivery kinetics from colloidal mesoporous silica nanoparticles with pH-sensitive gates. *Journal of Materials Chemistry*, **2010**, 20, 4305		67
13	Bio-degradation study of colloidal mesoporous silica nanoparticles: Effect of surface functionalization with organo-silanes and poly(ethylene glycol). *Microporous and Mesoporous Materials*, **2010**, 132, 60-71	5.3	182
12	Ni-Cr-Co alloy ureteral stent: scanning electron microscopy and elemental analysis characterization after long-term indwelling. *Journal of Biomedical Materials Research - Part B Applied Biomaterials*, **2010**, 94, 501-7	3.5	5
11	Tuning drug uptake and release rates through different morphologies and pore diameters of confined mesoporous silica. *Microporous and Mesoporous Materials*, **2009**, 118, 435-442	5.3	77
10	Multiple core-shell functionalized colloidal mesoporous silica nanoparticles. *Journal of the American Chemical Society*, **2009**, 131, 11361-70	16.4	207
9	Coated ureteral stents **2009**, 134-156		1
8	Large antibiotic molecule diffusion in confined mesoporous silica with controlled morphology. *Journal of Materials Chemistry*, **2008**, 18, 5888		45
7	Heparin coating on ureteral Double J stents prevents encrustations: an in vivo case study. *Journal of Endourology*, **2008**, 22, 465-72	2.7	84
6	Synthesis and characterization of MCM-41 spheres inside bioactive glass–ceramic scaffold. *Chemical Engineering Journal*, **2008**, 137, 54-61	14.7	57
5	SBA-15 ordered mesoporous silica inside a bioactive glass-ceramic scaffold for local drug delivery. *Journal of Materials Science: Materials in Medicine*, **2008**, 19, 3303-10	4.5	35
4	Studies on MCM-41 mesoporous silica for drug delivery: Effect of particle morphology and amine functionalization. *Chemical Engineering Journal*, **2008**, 137, 30-37	14.7	344
3	Incorporation of ordered mesoporous silica inside a bioactive porous scaffold in view of controlled drug release. *Studies in Surface Science and Catalysis*, **2005**, 158, 2027-2032	1.8	3
2	Nanogaps and biomolecules11-33		

1 Future Directions for Ureteral Stent Technology: From Bench to the Market. *Advanced Therapeutics*,2100158 3 4 5 6 7 8