Andrea Lamberti

List of Publications by Year
in descending order

121	4,402	87888	123424
papers	citations	38 h-index	61 g-index

122	122	122	6649
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comparison of photocatalytic and transport properties of TiO₂ and ZnO nanostructures for solar-driven water splitting. Physical Chemistry Chemical Physics, 2015, 17, 7775-7786.	2.8	234
2	In situ MoS₂ Decoration of Laser-Induced Graphene as Flexible Supercapacitor Electrodes. ACS Applied Materials & Interfaces, 2016, 8, 10459-10465.	8.0	228
3	A Highly Stretchable Supercapacitor Using Laserâ€Induced Graphene Electrodes onto Elastomeric Substrate. Advanced Energy Materials, 2016, 6, 1600050.	19.5	207
4	PDMS membranes with tunable gas permeability for microfluidic applications. RSC Advances, 2014, 4, 61415-61419.	3.6	137
5	A flexible and portable powerpack by solid-state supercapacitor and dye-sensitized solar cell integration. Journal of Power Sources, 2017, 359, 311-321.	7.8	134
6	All-SPEEK flexible supercapacitor exploiting laser-induced graphenization. 2D Materials, 2017, 4, 035012.	4.4	92
7	Unveiling the controversial mechanism of reversible Na storage in TiO2 nanotube arrays: Amorphous versus anatase TiO2. Nano Research, 2017, 10, 2891-2903.	10.4	90
8	High-Performing and Stable Wearable Supercapacitor Exploiting rGO Aerogel Decorated with Copper and Molybdenum Sulfides on Carbon Fibers. ACS Applied Energy Materials, 2018, 1, 4440-4447.	5.1	88
9	Multi-functional energy conversion and storage electrodes using flower-like Zinc oxide nanostructures. Energy, 2014, 65, 639-646.	8.8	87
10	Innovative multipolymer electrolyte membrane designed by oxygen inhibited UV-crosslinking enables solid-state in plane integration of energy conversion and storage devices. Energy, 2019, 166, 789-795.	8.8	87
11	Combined Structural, Chemometric, and Electrochemical Investigation of Vertically Aligned TiO₂ Nanotubes for Na-ion Batteries. ACS Omega, 2018, 3, 8440-8450.	3.5	86
12	New insights on laser-induced graphene electrodes for flexible supercapacitors: tunable morphology and physical properties. Nanotechnology, 2017, 28, 174002.	2.6	80
13	A Chemometric Approach for the Sensitization Procedure of ZnO Flowerlike Microstructures for Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2013, 5, 11288-11295.	8.0	78
14	PDMS/Polyimide Composite as an Elastomeric Substrate for Multifunctional Laser-Induced Graphene Electrodes. ACS Applied Materials & Interfaces, 2019, 11, 33221-33230.	8.0	78
15	Interfacial Effects in Solidâ€“Liquid Electrolytes for Improved Stability and Performance of Dye-Sensitized Solar Cells. ACS Applied Materials & Interfaces, 2017, 9, 37797-37803.	8.0	76
16	High efficiency dye-sensitized solar cells exploiting sponge-like ZnO nanostructures. Physical Chemistry Chemical Physics, 2012, 14, 16203.	2.8	75
17	TiO 2 nanotubes as flexible photoanode for back-illuminated dye-sensitized solar cells with hemi-squaraine organic dye and iodine-free transparent electrolyte. Organic Electronics, 2014, 15, 3715-3722.	2.6	74
18	As-grown vertically aligned amorphous TiO2 nanotube arrays as high-rate Li-based micro-battery anodes with improved long-term performance. Electrochimica Acta, 2015, 151, 222-229.	5.2	73

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19	Charge transport improvement employing TiO₂nanotube arrays as front-side illuminated dye-sensitized solar cell photoanodes. Physical Chemistry Chemical Physics, 2013, 15, 2596-2602.	2.8	71
20	Novel electrode and electrolyte membranes: Towards flexible dye-sensitized solar cell combining vertically aligned TiO2 nanotube array and light-cured polymer network. Journal of Membrane Science, 2014, 470, 125-131.	8.2	71
21	Highly Uniform Anodically Deposited Film of MnO₂ Nanoflakes on Carbon Fibers for Flexible and Wearable Fiber-Shaped Supercapacitors. ACS Applied Materials & Interfaces, 2017, 9, 28386-28393.	8.0	71
22	Ultrafast Room-Temperature Crystallization of TiO2 Nanotubes Exploiting Water-Vapor Treatment. Scientific Reports, 2015, 5, 7808.	3.3	70
23	Self-assembly of graphene aerogel on copper wire for wearable fiber-shaped supercapacitors. Carbon, 2016, 105, 649-654.	10.3	67
24	Fiber-shaped asymmetric supercapacitor exploiting rGO/Fe2O3 aerogel and electrodeposited MnOx nanosheets on carbon fibers. Carbon, 2019, 144, 91-100.	10.3	61
25	Electro-oxidation of phenol over electrodeposited MnOx nanostructures and the role of a TiO2 nanotubes interlayer. Applied Catalysis B: Environmental, 2017, 203, 270-281.	20.2	60
26	Boosting Electric Double Layer Capacitance in Laserâ€Induced Grapheneâ€Based Supercapacitors. Advanced Sustainable Systems, 2022, 6, 2100228.	5.3	58
27	SERS-Active Ag Nanoparticles on Porous Silicon and PDMS Substrates: A Comparative Study of Uniformity and Raman Efficiency. Journal of Physical Chemistry C, 2016, 120, 16946-16953.	3.1	57
28	Investigation of Transport and Recombination Properties in Graphene/Titanium Dioxide Nanocomposite for Dye-Sensitized Solar Cell Photoanodes. Electrochimica Acta, 2014, 131, 154-159.	5.2	56
29	Ultrasensitive Ag-coated TiO₂nanotube arrays for flexible SERS-based optofluidic devices. Journal of Materials Chemistry C, 2015, 3, 6868-6875.	5.5	54
30	Flexible and high temperature supercapacitor based on laser-induced graphene electrodes and ionic liquid electrolyte, a de-rated voltage analysis. Electrochimica Acta, 2020, 357, 136838.	5.2	54
31	Microfluidic sealing and housing system for innovative dye-sensitized solar cell architecture. Microelectronic Engineering, 2011, 88, 2308-2310.	2.4	47
32	Microfluidic photocatalytic device exploiting PDMS/TiO2 nanocomposite. Applied Surface Science, 2015, 335, 50-54.	6.1	47
33	An easy approach for the fabrication of TiO2 nanotube-based transparent photoanodes for Dye-sensitized Solar Cells. Solar Energy, 2013, 95, 90-98.	6.1	45
34	Vertically aligned TiO2 nanotube array for high rate Li-based micro-battery anodes with improved durability. Electrochimica Acta, 2013, 102, 233-239.	5.2	45
35	Flexible solid-state CuxO-based pseudo-supercapacitor by thermal oxidation of copper foils. International Journal of Hydrogen Energy, 2016, 41, 11700-11708.	7.1	44
36	Syngas production by electrocatalytic reduction of CO2 using Ag-decorated TiO2 nanotubes. International Journal of Hydrogen Energy, 2020, 45, 26458-26471.	7.1	42

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37	Immobilization of Oligonucleotides on Metal-Dielectric Nanostructures for miRNA Detection. Analytical Chemistry, 2016, 88, 9554-9563.	6.5	41
38	Metalâ€“elastomer nanostructures for tunable SERS and easy microfluidic integration. RSC Advances, 2015, 5, 4404-4410.	3.6	40
39	Leveraging ZnO morphologies in piezoelectric composites for mechanical energy harvesting. Nano Energy, 2015, 18, 212-221.	16.0	39
40	Solid phase DNA extraction on PDMS and direct amplification. Lab on A Chip, 2011, 11, 4029.	6.0	37
41	Surface energy tailoring of glass by contact printed PDMS. Applied Surface Science, 2012, 258, 9427-9431.	6.1	36
42	Cycling behaviour of sponge-like nanostructured ZnO as thin-film Li-ion battery anodes. Journal of Alloys and Compounds, 2014, 615, S454-S458.	5.5	35
43	Magnetoelastic Clock System for Nanomagnet Logic. IEEE Nanotechnology Magazine, 2014, 13, 963-973.	2.0	34
44	Coral-shaped ZnO nanostructures for dye-sensitized solar cell photoanodes. Progress in Photovoltaics: Research and Applications, 2014, 22, 189-197.	8.1	34
45	Easy Tuning of Surface and Optical Properties of PDMS Decorated by Ag Nanoparticles. Journal of Physical Chemistry B, 2015, 119, 8194-8200.	2.6	32
46	Surface-enhanced Raman spectroscopy on porous silicon membranes decorated with Ag nanoparticles integrated in elastomeric microfluidic chips. RSC Advances, 2016, 6, 21865-21870.	3.6	32
47	Flexible supercapacitor electrodes based on MoS 2 -intercalated rGO membranes on Ti mesh. Materials Science in Semiconductor Processing, 2018, 73, 106-110.	4.0	32
48	Combined experimental and theoretical investigation of the hemi-squaraine/TiO2 interface for dye sensitized solar cells. Physical Chemistry Chemical Physics, 2013, 15, 7198.	2.8	31
49	Graphene Oxide Finely Tunes the Bioactivity and Drug Delivery of Mesoporous ZnO Scaffolds. ACS Applied Materials & Interfaces, 2019, 11, 449-456.	8.0	31
50	An easy method for the room-temperature growth of spongelike nanostructured Zn films as initial step for the fabrication of nanostructured ZnO. Thin Solid Films, 2012, 524, 107-112.	1.8	30
51	Comparison of Hemi-Squaraine Sensitized TiO₂ and ZnO Photoanodes for DSSC Applications. Journal of Physical Chemistry C, 2013, 117, 22778-22783.	3.1	30
52	Binder Free and Flexible Asymmetric Supercapacitor Exploiting Mn3O4 and MoS2 Nanoflakes on Carbon Fibers. Nanomaterials, 2020, 10, 1084.	4.1	30
53	Facile fabrication of cuprous oxide nanocomposite anode films for flexible Li-ion batteries via thermal oxidation. Electrochimica Acta, 2012, 86, 323-329.	5.2	29
54	Enhancement of electron lifetime in dye-sensitized solar cells using anodically grown TiO2 nanotube/nanoparticle composite photoanodes. Microelectronic Engineering, 2013, 111, 137-142.	2.4	29

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55	Wetting Behavior of Hierarchical Oxide Nanostructures: TiO2Nanotubes from Anodic Oxidation Decorated with ZnO Nanostructures. Journal of the Electrochemical Society, 2014, 161, D484-D488.	2.9	29
56	Toxicity assessment of laser-induced graphene by zebrafish during development. JPhys Materials, 2020, 3, 034008.	4.2	28
57	Facile fabrication of cuprous oxide nanocomposite anode films for flexible Li-ion batteries via thermal oxidation. Electrochimica Acta, 2012, 70, 62-68.	5.2	25
58	In-plane 2D focusing of surface waves by ultrathin refractive structures. Optics Letters, 2014, 39, 6391.	3.3	25
59	Toward quasi-solid state Dye-sensitized Solar Cells: Effect of Î³-Al 2 O 3 nanoparticle dispersion into liquid electrolyte. Solar Energy, 2015, 111, 125-134.	6.1	24
60	Memristive behaviour in poly-acrylic acid coated TiO₂nanotube arrays. Nanotechnology, 2016, 27, 485208.	2.6	24
61	TiO 2 nanotube array as biocompatible electrode in view of implantable supercapacitors. Journal of Energy Storage, 2016, 8, 193-197.	8.1	23
62	High energy and high voltage integrated photo-electrochemical double layer capacitor. Sustainable Energy and Fuels, 2018, 2, 968-977.	4.9	23
63	An Integrated Device for the Solar-Driven Electrochemical Conversion of CO₂ to CO. ACS Sustainable Chemistry and Engineering, 2020, 8, 7563-7568.	6.7	22
64	Sponge-like ZnO nanostructures by low temperature water vapor-oxidation method as dye-sensitized solar cell photoanodes. Journal of Alloys and Compounds, 2014, 615, S487-S490.	5.5	20
65	Floating, Flexible Polymeric Dyeâ€Sensitized Solarâ€Cell Architecture: The Way of Nearâ€Future Photovoltaics. Advanced Materials Technologies, 2016, 1, .	5.8	20
66	Portable High Voltage Integrated Harvesting-Storage Device Employing Dye-Sensitized Solar Module and All-Solid-State Electrochemical Double Layer Capacitor. Frontiers in Chemistry, 2018, 6, 443.	3.6	20
67	Crystallization of TiO2 Nanotubes by In Situ Heating TEM. Nanomaterials, 2018, 8, 40.	4.1	20
68	Surface label-free sensing by means of a fluorescent multilayered photonic structure. Applied Physics Letters, 2012, 101, 131105.	3.3	19
69	Microfluidic housing system: a useful tool for the analysis of dye-sensitized solar cell components. Applied Physics A: Materials Science and Processing, 2012, 109, 377-383.	2.3	19
70	Synthesis of ferroelectric BaTiO₃tube-like arrays by hydrothermal conversion of a vertically aligned TiO₂nanotube carpet. New Journal of Chemistry, 2014, 38, 2024-2030.	2.8	19
71	Multifunctional flexible membranes based on reduced graphene oxide/tin dioxide nanocomposite and cellulose fibers. Electrochimica Acta, 2019, 306, 420-426.	5.2	19
72	A perspective on laser-induced graphene for micro-supercapacitor application. Applied Physics Letters, 2022, 120, .	3.3	19

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73	Photodetection and piezoelectric response from hard and flexible sponge-like ZnO-based structures. Nano Energy, 2013, 2, 1294-1302.	16.0	18
74	Anodically-grown TiO 2 nanotubes: Effect of the crystallization on the catalytic activity toward the oxygen reduction reaction. Applied Surface Science, 2017, 412, 447-454.	6.1	18
75	3D-printed microfluidics on thin poly(methyl methacrylate) substrates for genetic applications. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2018, 36, .	1.2	18
76	Tragacanth Gum as Green Binder for Sustainable Waterâ€Processable Electrochemical Capacitor. ChemSusChem, 2021, 14, 356-362.	6.8	18
77	Nanostructural evolution of one-dimensional BaTiO₃structures by hydrothermal conversion of vertically aligned TiO₂nanotubes. Nanoscale, 2016, 8, 6866-6876.	5.6	17
78	UVâ€Printable and Flexible Humidity Sensors Based on Conducting/Insulating Semiâ€Interpenetrated Polymer Networks. Macromolecular Materials and Engineering, 2017, 302, 1700161.	3.6	17
79	Tunable electromechanical actuation in silicone dielectric film. Smart Materials and Structures, 2014, 23, 105001.	3.5	16
80	Crown-Ether Functionalized Graphene Oxide Membrane for Lithium Recovery from Water. Membranes, 2022, 12, 233.	3.0	15
81	Piezoelectrically actuated MEMS microswitches for high current applications. Microelectronic Engineering, 2011, 88, 2208-2210.	2.4	14
82	Electric Characterization and Modeling of Microfluidic-Based Dye-Sensitized Solar Cell. International Journal of Photoenergy, 2012, 2012, 1-11.	2.5	14
83	Optofluidic chip for surface wave-based fluorescence sensing. Sensors and Actuators B: Chemical, 2015, 215, 225-230.	7.8	13
84	Magnetoelastic coupling in multilayered ferroelectric/ferromagnetic thin films: A quantitative evaluation. Applied Surface Science, 2012, 258, 8072-8077.	6.1	12
85	Laserâ€Induced Graphenization of PDMS as Flexible Electrode for Microsupercapacitors. Advanced Materials Interfaces, 2021, 8, 2101046.	3.7	11
86	Flexible wire-based electrodes exploiting carbon/ZnO nanocomposite for wearable supercapacitors. Ionics, 2017, 23, 1839-1847.	2.4	10
87	Graphene Oxide Membranes for Trace Hydrocarbon Contaminant Removal from Aqueous Solution. Nanomaterials, 2020, 10, 2242.	4.1	10
88	Consistent static and small-signal physics-based modeling of dye-sensitized solar cells under different illumination conditions. Physical Chemistry Chemical Physics, 2013, 15, 14634.	2.8	9
89	Novel spongelike nanostructured ZnO films: Properties and applications. Journal of Alloys and Compounds, 2014, 586, S331-S335.	5.5	9
90	A flow-through holed PDMS membrane as a reusable microarray spotter for biomedical assays. Lab on A Chip, 2015, 15, 67-71.	6.0	9

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91	Electrolytes based on Nâ€Butylâ€Nâ€Methylâ€Pyrrolidinium 4,5â€Dicyanoâ€2â€(Trifluoromethyl) Imidazole for High Voltage Electrochemical Double Layer Capacitors. ChemElectroChem, 2019, 6, 552-557.	3.4	9
92	Laser-induced graphenization of textile yarn for wearable electronics application. Smart Materials and Structures, 2021, 30, 105007.	3.5	9
93	Monitoring the dye impregnation time of nanostructured photoanodes for dye sensitized solar cells. Journal of Physics: Conference Series, 2013, 439, 012012.	0.4	8
94	Electric Clock for NanoMagnet Logic Circuits. Lecture Notes in Computer Science, 2014, , 73-110.	1.3	8
95	A long-term analysis of Pt counter electrodes for Dye-sensitized Solar Cells exploiting a microfluidic housing system. Materials Chemistry and Physics, 2015, 161, 74-83.	4.0	7
96	ZnO- and TiO2-Based Nanostructures. Nanomaterials, 2018, 8, 325.	4.1	7
97	Modeling of electrochemical capacitors under dynamical cycling. Electrochimica Acta, 2019, 296, 709-718.	5.2	7
98	TiO₂Nanotube Array as Efficient Transparent Photoanode in Dye-Sensitized Solar Cell with High Electron Lifetime. Acta Physica Polonica A, 2013, 123, 376-379.	0.5	6
99	Evolution of nanomechanical properties and crystallinity of individual titanium dioxide nanotube resonators. Nanotechnology, 2018, 29, 085702.	2.6	6
100	Graphene-Based Membrane Technology: Reaching Out to the Oil and Gas Industry. Geofluids, 2018, 2018, 1-13.	0.7	6
101	A facile, safe and controllable morphology synthesis of rGO_Cu2O nanocomposite as a binder-free electrode for electrochemical capacitors. Electrochimica Acta, 2021, 390, 138856.	5.2	6
102	Microfluidic electrochemical growth of vertically aligned TiO₂ nanotubes for SERS optofluidic devices. RSC Advances, 2015, 5, 105484-105488.	3.6	5
103	Real time monitoring of ultrafast sensitization for Dye-Sensitized Solar Cell photoanodes. Solar Energy, 2016, 130, 74-80.	6.1	5
104	Multiscale measurements of piezoelectric response of hydrothermal converted BaTiO3 1D vertical arrays. Applied Physics Letters, 2018, 113, .	3.3	5
105	Frequency dependence of the phenomenological parameters describing adsorption processes in supercapacitors. Electrochimica Acta, 2019, 316, 181-188.	5.2	5
106	Langmuir adsorption processes and ion transport under bias potential in capacitive deionisation cells. Electrochimica Acta, 2020, 348, 136288.	5.2	5
107	Electric Clock for NanoMagnet Logic Circuits. Lecture Notes in Computer Science, 2014, , 73-110.	1.3	5
108	Enhanced Capacitive Deionization Exploiting Novel Functionalized Graphene Oxide Electrodes. Advanced Materials Technologies, 2022, 7, .	5.8	5

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109	Fast TiO2Sensitization Using the Semisquaric Acid as Anchoring Group. International Journal of Photoenergy, 2013, 2013, 1-8.	2.5	4
110	TiO2 nanotube-based smart 3D electrodes by anodic oxidation of additively manufactured Ti6Al4V structures. Materials Today Communications, 2018, 15, 165-170.	1.9	4
111	Graphene as Barrier to Prevent Volume Increment of Air Bubbles over Silicone Polymer in Aqueous Environment. Langmuir, 2017, 33, 12865-12872.	3.5	2
112	Generalized Langmuir kinetic equation for ions adsorption model applied to electrical double layer capacitor. Electrochimica Acta, 2019, 323, 134700.	5.2	2
113	Electrode polarization in the presence of a first order ionic trapping reaction. Journal of Electroanalytical Chemistry, 2022, 918, 116499.	3.8	2
114	Sponge-like Porous ZnO Photoanodes for Highly Efficient dye-sensitized Solar Cells. Acta Physica Polonica A, 2013, 123, 386-389.	0.5	1
115	Scalable nanophotonic neural probes for multicolor and on-demand light delivery in brain tissue. Nanotechnology, 2021, 32, 265201.	2.6	1
116	Nanostructured photoelectrodes and polymeric nanointerfaces engineering: The critical transition from rigid to flexible dye-sensitized solar cells. , 2015, , .		0
117	SERS-active Metal-dielectric Nanostructures Integrated in Microfluidic Devices for Ultra-sensitive Label-free miRNA Detection. Procedia Technology, 2017, 27, 37-38.	1.1	0
118	Graphene-Metal Nanostructures as Surface Enhanced Raman Scattering Substrates for Biosensing. Procedia Technology, 2017, 27, 236-237.	1.1	0
119	Anodically Grown TiO2 Nanotube Membranes: Synthesis, Characterization, and Application in Dye-Sensitized Solar Cells. , 2015, , 1-23.		0
120	Anodically Grown TiO2 Nanotube Membranes: Synthesis, Characterization, and Application in Dye-Sensitized Solar Cells. , 2016, , 1299-1325.		0
121	Stable and Reversible Lithium Storage Properties of LiTiO _x Nanotubes for Electrochemical Recovery from Aqueous Solutions. ChemElectroChem, 0, , .	3.4	0