Elena Maria Tresso

List of Publications by Year
in descending order

105 papers	3,134 citations	159585 30 h-index	168389 53 g-index
105 all docs	105 docs citations	105 times ranked	4141 citing authors

#	Article	IF	Citations
1	Enhanced Capacitive Deionization Exploiting Novel Functionalized Graphene Oxide Electrodes. Advanced Materials Technologies, 2022, 7, .	5.8	5
2	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
3	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
4	Fiber-shaped asymmetric supercapacitor exploiting rGO/Fe2O3 aerogel and electrodeposited MnOx nanosheets on carbon fibers. Carbon, 2019, 144, 91-100.	10.3	61
5	High energy and high voltage integrated photo-electrochemical double layer capacitor. Sustainable Energy and Fuels, 2018, 2, 968-977.	4.9	23
6	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
7	New insights on laser-induced graphene electrodes for flexible supercapacitors: tunable morphology and physical properties. Nanotechnology, 2017, 28, 174002.	2.6	80
8	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
9	<i>In situ</i> MoS₂ Decoration of Laser-Induced Graphene as Flexible Supercapacitor Electrodes. ACS Applied Materials & Interfaces, 2016, 8, 10459-10465.	8.0	228
10	Self-assembly of graphene aerogel on copper wire for wearable fiber-shaped supercapacitors. Carbon, 2016, 105, 649-654.	10.3	67
11	Mixed 1Tâ€"2H Phase MoS₂/Reduced Graphene Oxide as Active Electrode for Enhanced Supercapacitive Performance. ACS Applied Materials & Interfaces, 2016, 8, 32842-32852.	8.0	132
12	Toward Totally Flexible Dye-Sensitized Solar Cells Based on Titanium Grids and Polymeric Electrolyte. IEEE Journal of Photovoltaics, 2016, 6, 498-505.	2.5	70
13	Dynamical analysis of microbial fuel cells based on planar and 3D-packed anodes. Chemical Engineering Journal, 2016, 288, 38-49.	12.7	29
14	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
15	Real time monitoring of ultrafast sensitization for Dye-Sensitized Solar Cell photoanodes. Solar Energy, 2016, 130, 74-80.	6.1	5
16	Anodically Grown TiO2 Nanotube Membranes: Synthesis, Characterization, and Application in Dye-Sensitized Solar Cells. , 2016, , 1299-1325.		0
17	<I>In-Situ</I> Spectroscopic Analyses of the Dye Uptake on ZnO and TiO₂ Photoanodes for Dye-Sensitized Solar Cells. Journal of Nanoscience and Nanotechnology, 2015, 15, 5993-6000.	0.9	4
18	Nanostructured photoelectrodes and polymeric nanointerfaces engineering: The critical transition from rigid to flexible dye-sensitized solar cells. , 2015, , .		0

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19	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
20	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
21	Anodically Grown TiO2 Nanotube Membranes: Synthesis, Characterization, and Application in Dye-Sensitized Solar Cells. , 2015, , 1-23.		0
22	Using a Stack Shunt to Mitigate Catalyst Support Carbon Corrosion in Polymer Electrolyte Membrane Fuel Cell Stacks During Start-Stop Cycling. Journal of Fuel Cell Science and Technology, 2014, 11, .	0.8	9
23	Coral-shaped ZnO nanostructures for dye-sensitized solar cell photoanodes. Progress in Photovoltaics: Research and Applications, 2014, 22, 189-197.	8.1	34
24	Multifunctional NIR-reflective and self-cleaning UV-cured coating for solar cell applications based on cycloaliphatic epoxy resin. Progress in Organic Coatings, 2014, 77, 458-462.	3.9	30
25	New Transparent Laser-Drilled Fluorine-doped Tin Oxide covered Quartz Electrodes for Photo-Electrochemical Water Splitting. Electrochimica Acta, 2014, 131, 184-194.	5.2	35
26	Novel spongelike nanostructured ZnO films: Properties and applications. Journal of Alloys and Compounds, 2014, 586, S331-S335.	5.5	9
27	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
28	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
29	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
30	Comparison of Hemi-Squaraine Sensitized TiO₂ and ZnO Photoanodes for DSSC Applications. Journal of Physical Chemistry C, 2013, 117, 22778-22783.	3.1	30
31	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
32	Physical description of the impregnation mechanism of dye molecules in contact with porous electrodes. Physics Letters, Section A: General, Atomic and Solid State Physics, 2013, 377, 915-919.	2.1	6
33	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
34	Characterization of photovoltaic modules for low-power indoor application. Applied Energy, 2013, 102, 1295-1302.	10.1	77
35	First Pseudohalogen Polymer Electrolyte for Dye-Sensitized Solar Cells Promising for <i>In Situ</i> Photopolymerization. Journal of Physical Chemistry C, 2013, 117, 20421-20430.	3.1	71
36	Electric Characterization and Modeling of Microfluidic-Based Dye-Sensitized Solar Cell. International Journal of Photoenergy, 2012, 2012, 1-11.	2.5	14

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37	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
38	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
39	High efficiency dye-sensitized solar cells exploiting sponge-like ZnO nanostructures. Physical Chemistry Chemical Physics, 2012, 14, 16203.	2.8	75
40	Nafion membranes with vertically-aligned CNTs for mixed proton and electron conduction. Journal of Membrane Science, 2012, 415-416, 346-352.	8.2	23
41	Small-signal ac response of an electrolytic cell with recombining space charge. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 4225-4225.	2.1	1
42	Microfluidic sealing and housing system for innovative dye-sensitized solar cell architecture. Microelectronic Engineering, 2011, 88, 2308-2310.	2.4	47
43	Analysis and Modelling of Negative Capacitance in p-Type a-SiC:H/Intrinsic a-Si:H/n-Type a-Si:H Heterostructures. Sensor Letters, 2011, 9, 2182-2185.	0.4	0
44	Morphological and structural modifications induced inÂa-Si1â^'x C x :H films by excimer laser annealing. Applied Physics A: Materials Science and Processing, 2010, 100, 1163-1168.	2.3	1
45	Nafion and carbon nanotube nanocomposites for mixed proton and electron conduction. Journal of Membrane Science, 2010, 363, 265-270.	8.2	64
46	Spark plasma sintering of self-propagating high-temperature synthesized TiC0.7/TiB2 powders and detailed characterization of dense product. Ceramics International, 2009, 35, 2587-2599.	4.8	15
47	Effect of defects on electrical properties of 4H-SiC Schottky diodes. Materials Science and Engineering C, 2008, 28, 799-804.	7.3	13
48	Influence of inhomogeneous contact in electrical properties of 4Hâ€"SiC based Schottky diode. Solid-State Electronics, 2008, 52, 1232-1236.	1.4	11
49	Hydrogen and nitrogen effects on optical and structural properties of amorphous carbon. Materials Science and Engineering C, 2008, 28, 795-798.	7.3	20
50	Static and dynamic electrical study of a-SiC:H based pâ€"iâ€"n structure, effect of hydrogen dilution of the intrinsic layer. Solid-State Electronics, 2007, 51, 159-163.	1.4	4
51	Modelling and analysis of a-SiC:H pâ€"iâ€"n photodetectors: Effect of hydrogen dilution on dynamic model. Solid-State Electronics, 2007, 51, 1067-1072.	1.4	4
52	Structural, optical and electrical properties of helium diluted a-Si1â^'xCx:H films deposited by PECVD. Journal of Non-Crystalline Solids, 2006, 352, 1388-1391.	3.1	10
53	Observation of negative capacitance in a-SiC:H/a-Si:H UV photodetectors. Solid-State Electronics, 2006, 50, 367-371.	1.4	40
54	R.F. SPUTTERING DEPOSITION OF BUFFER LAYERS FOR Si/YBCO INTEGRATED MICROELECTRONICS. International Journal of Modern Physics B, 2005, 19, 4605-4617.	2.0	4

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55	Transport Characterization of Silicon-YBCO Buffered Multilayers Deposited by Magnetron Sputtering. IEEE Transactions on Applied Superconductivity, 2005, 15, 3062-3065.	1.7	1
56	Characterization of siliconâ€“YBCO buffered multilayers grown by sputtering. Applied Surface Science, 2004, 238, 485-489.	6.1	3
57	New insights on amorphous silicon-nitride microcavities. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 16, 591-595.	2.7	5
58	Characterization of Si-CeO/sub 2/-YBCO tri-layers grown by magnetron sputtering. IEEE Transactions on Applied Superconductivity, 2003, 13, 2860-2863.	1.7	4
59	An automatic evaluation system for technical education at the University level. IEEE Transactions on Education, 2002, 45, 268-275.	2.4	31
60	Structural and optical properties of Fe1âˆ'xMxSi2 thin films (M=Co, Mn; 0â‰xâ‰0.20). Microelectronic Engineering, 2001, 55, 233-241.	2.4	16
61	Study of the optical properties and the density-of-states distribution of hydrogenated amorphous silicon-nitrogen alloy. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2001, 81, 1951-1962.	0.6	2
62	Verifying the learning process in physics. European Journal of Physics, 2001, 22, 257-265.	0.6	3
63	Photoluminescence and electronic density of states in a-C:H films. Applied Physics Letters, 1998, 72, 2520-2522.	3.3	39
64	Effects of power density and molecule dwell time on compositional and optoelectronic properties of a-SiC : H alloys. Solid State Communications, 1996, 98, 617-622.	1.9	7
65	Density of gap states in a-SiC:H films by means of photoconductive and photothermal spectroscopies. Physica B: Condensed Matter, 1995, 205, 169-174.	2.7	13
66	Boron and phosphorus doping of a-SiC:H thin films by means of ion implantation. Thin Solid Films, 1995, 265, 113-118.	1.8	5
67	Compositional and structural properties of hydrogenated amorphous silicon-carbon films prepared by ultra-high-vacuum plasma-enhanced chemical vapour deposition with different carbon sources. Philosophical Magazine A: Physics of Condensed Matter, Structure, Defects and Mechanical Properties, 1995, 72, 913-929.	0.6	39
68	Bonding structure and defects in wide band gap a-Si_{1âˆ'<i>x</i>}C_{<i>x</i>}:H films deposited in Hz diluted SiH₄+ CH₄gas mixtures. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1995, 71, 1015-1033.	0.6	30
69	Comparison between methane and acetylene as carbon sources for C-rich a-SiC: H films. Diamond and Related Materials, 1995, 4, 473-477.	3.9	31
70	Structural and optoelectronic properties of carbon-rich hydrogenated amorphous silicon-carbon films. Diamond and Related Materials, 1995, 4, 357-360.	3.9	3
71	Structural and optoelectronic properties of doped microcrystalline silicon carbide films. Semiconductor Science and Technology, 1994, 9, 1543-1548.	2.0	14
72	Optimization of a-Si1âˆ'xCx: H films prepared by ultrahigh vacuum plasma enhanced chemical vapour deposition for electroluminescent devices. Thin Solid Films, 1994, 241, 274-277.	1.8	30

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73	The influence of hydrogen dilution on the optoelectronic and structural properties of hydrogenated amorphous silicon carbide films. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1994, 69, 377-386.	0.6	35
74	Degree of crystallinity and electrical transport properties of microcrystalline silicon-carbon alloys. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1993, 67, 331-346.	0.6	42
75	Infrared vibrational spectra of hydrogenated amorphous and microcrystalline silicon-carbon alloys. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1993, 68, 329-340.	0.6	30
76	Differences in physical properties of hydrogenated and fluorinated amorphous silicon carbide prepared by reactive sputtering. Journal of Applied Physics, 1992, 71, 5641-5645.	2.5	22
77	Microcrystallization formation in silicon carbide thin films. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1992, 66, 135-146.	0.6	28
78	Influence of doping on the structural and optoelectronic properties of amorphous and microcrystalline silicon carbide. Journal of Applied Physics, 1992, 72, 1327-1333.	2.5	146
79	Differential scanning calorimetry (DSC) studies of hydrogenated amorphous semiconductor alloys. Physica B: Condensed Matter, 1992, 176, 73-77.	2.7	14
80	Hydrogen diffusion and related defects in hydrogenated amorphous silicon carbide. Journal of Non-Crystalline Solids, 1991, 128, 133-138.	3.1	18
81	Physical properties of undoped and doped hydrogenated amorphous silicon carbide. Semiconductor Science and Technology, 1991, 6, 1141-1146.	2.0	24
82	Influence of substrate temperature and annealing treatments on the properties of glow-discharge and sputtered a-SixC1â^'x:H films. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1991, 63, 1223-1233.	0.6	6
83	Hydrogen evolution in amorphous silicon carbide. Physica B: Condensed Matter, 1991, 170, 149-152.	2.7	5
84	Effects of temperature on structural properties of hydrogenated amorphous siliconâ€germanium and carbonâ€siliconâ€germanium alloys. Journal of Applied Physics, 1991, 69, 2029-2032.	2.5	9
85	Electron spin resonance and photoacoustic spectroscopy of a-CSi:H and a-SiGe:H alloys. Thin Solid Films, 1990, 190, 351-358.	1.8	5
86	Tetrahedrally bonded ternary amorphous semiconductor alloys. Physical Review B, 1989, 40, 1647-1651.	3.2	5
87	Urbach tail and gap state distribution in as-deposited and annealed a-(C-Si-Ge): H alloys. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1989, 60, 713-720.	0.6	2
88	Investigation on structure and optoelectronic properties of hydrogenated amorphous CSiGe:H alloys. Solid State Communications, 1989, 70, 381-384.	1.9	8
89	Investigation on physical properties and structure of amorphous hydrogenated carbon films. Journal of Non-Crystalline Solids, 1988, 101, 179-186.	3.1	2
90	Amorphous hydrogenated silicon-carbon-tin alloy films. Physical Review B, 1988, 37, 1231-1236.	3.2	13

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91	Recent progress in studies ofaâ€ƇSiSn:H alloys. Journal of Applied Physics, 1988, 64, 721-726.	2.5	4
92	Structure and optical properties of hydrogenated amorphous carbon-tin alloys prepared using the sputter-assisted plasma chemical deposition technique. Thin Solid Films, 1987, 150, 189-199.	1.8	3
93	Influence of film thickness on optical and electrical properties of hydrogenated amorphous silicon. Thin Solid Films, 1987, 150, 1-9.	1.8	17
94	Semiconductor properties of amorphous C-Sn thin films. Thin Solid Films, 1987, 146, L19-L22.	1.8	3
95	Physical properties and structure ofa-Si1â^'x C x : H alloy films. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1987, 9, 393-408.	0.4	9
96	Correlation between physical properties and hydrogen concentration in magnetron-sputtered amorphous silicon. Physical Review B, 1986, 33, 7022-7028.	3.2	5
97	An optimization model for amorphous solar cells in which optical, electrical and recombination properties are specified. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1986, 8, 447-463.	0.4	0
98	Optical properties of hydrogenated amorphous silicon. Journal of Applied Physics, 1986, 59, 611-618.	2.5	36
99	A model for amorphous solar cell analysis. Solar Cells, 1985, 14, 149-156.	0.6	16
100	Magnetronâ€sputtered amorphous silicon. Journal of Applied Physics, 1985, 57, 5424-5427.	2.5	11
101	Physical properties of chemically sprayed tin oxide and indium tin oxide transparent conductive films. Journal Physics D: Applied Physics, 1985, 18, 1825-1832.	2.8	32
102	Optical analysis of amorphous solar cells. Solar Cells, 1984, 11, 375-388.	0.6	11
103	Determination of optical properties of SnO2 films. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1984, 4, 68-78.	0.4	30
104	Photogenerated current improvement by optimization of amorphous solar cell optical parameters. Journal of Applied Physics, 1984, 55, 3140-3143.	2.5	6
105	Evaluation of thermophotovoltaic conversion efficiency. Journal of Applied Physics, 1982, 53, 9098-9104.	2.5	16