

Genene T Mola

List of Publications by Year in descending order

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122
times ranked

6323
citing authors

#	ARTICLE	IF	CITATIONS
1	An Ultra-compact Plasmonic Modulator Using Elasto-optic Effect and Resonance Phenomena. Journal of Optical Communications, 2024, 44, s751-s761.	4.0	3
2	Plasmonic nano-particles mediated energy harvesting in thin-film organic solar cells. Journal Physics D: Applied Physics, 2022, 55, 015102.	1.3	12
3	Effective energy harvesting in thin film organic solar cells using Ni:Zn as bimetallic nanoparticles. Journal of Physics and Chemistry of Solids, 2022, 161, 110405.	1.9	6
4	Numerical investigation of the effects of copper sulfide nanoparticles on hole transport layer of thin-film organic solar cells. Journal of Computational Electronics, 2022, 21, 128-136.	1.3	4
5	ZnO:Ag nano-particles decorated hole transport layer for improved photon harvesting. Applied Physics A: Materials Science and Processing, 2022, 128, 1.	1.1	1
6	Plasmon assisted optical absorption and reduced charge recombination for improved device performance in polymer solar cell. Journal of Physics and Chemistry of Solids, 2022, 165, 110662.	1.9	5
7	Engineering Non-fullerene Acceptors as a Mechanism to Control Film Morphology and Energy Loss in Organic Solar Cells. Energy & Fuels, 2022, 36, 4691-4707.	2.5	17
8	Local surface plasmon resonance assisted energy harvesting in thin film organic solar cells. Journal of Alloys and Compounds, 2021, 856, 158172.	2.8	33
9	High-performance as-cast non-fullerene polymer solar cells from benzo[1,2- <i>b</i> :4,5- <i>b'</i>]difuran polymer <i>via</i> a rational copolymer design. Journal of Materials Chemistry C, 2021, 9, 13617-13624.	2.7	3
10	7 Computational approach to the study of morphological properties of polymer/fullerene blends in photovoltaics. , 2021, , 205-226.		0
11	Rare-Earth Metal-Induced Plasmon Resonances for Enhanced Photons Harvesting in Inverted Thin Film Organic Solar Cell. Energy & Fuels, 2021, 35, 15010-15017.	2.5	8
12	Metal nano-composite induced light trapping and enhanced solar cell performances. Physica B: Condensed Matter, 2021, 622, 413321.	1.3	4
13	Mixed Halide Perovskite Solar Cells: Progress and Challenges. Critical Reviews in Solid State and Materials Sciences, 2020, 45, 85-112.	6.8	51
14	Organic solar cells: Materials and prospects of graphene for active and interfacial layers. Critical Reviews in Solid State and Materials Sciences, 2020, 45, 261-288.	6.8	10
15	Bio-inspired and biomaterials-based hybrid photocatalysts for environmental detoxification: A review. Chemical Engineering Journal, 2020, 382, 122937.	6.6	201
16	Metal nano-composite assisted photons harvesting in thin film organic photovoltaic. Physica B: Condensed Matter, 2020, 582, 411844.	1.3	16
17	An ultra-compact plasmonic Modulator/Switch using VO ₂ and elasto-optic effect. Optik, 2020, 201, 163531.	1.4	18
18	Nickel sulphide nano-composite assisted hole transport in thin film polymer solar cells. Solar Energy, 2020, 195, 310-317.	2.9	39

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19	A novel quasi-two-dimensional fused-perylenediimide electron acceptor for solvent additive-free non-fullerene organic solar cells. <i>Dyes and Pigments</i> , 2020, 175, 108119.	2.0	15
20	Cd doped Ba (NO ₃) ₂ nanoparticle as broadband solar absorber in thin film organic solar cell. <i>Polymer Composites</i> , 2020, 41, 1369-1375.	2.3	1
21	Polycrystal metals nano-composite assisted photons harvesting in thin film organic solar cell. <i>Solar Energy</i> , 2020, 208, 930-936.	2.9	6
22	Mg _{0.5} Ni _x Zn _{0.5-x} Fe ₂ O ₄ spinel as a sustainable magnetic nano-photocatalyst with dopant driven band shifting and reduced recombination for visible and solar degradation of Reactive Blue-19. <i>Advanced Powder Technology</i> , 2020, 31, 4585-4597.	2.0	32
23	Reduction of hazardous reactive oxygen species (ROS) production of ZnO through Mn inclusion for possible UV-radiation shielding application. <i>Heliyon</i> , 2020, 6, e04186.	1.4	21
24	Highly efficient non-fullerene polymer solar cells from a benzo[1,2- <i>b</i> :4,5- <i>b'</i>]-difuran-based conjugated polymer with improved stabilities. <i>Journal of Materials Chemistry A</i> , 2020, 8, 11381-11390.	5.2	13
25	Improved energy harvesting using well-aligned ZnS nanoparticles in bulk-heterojunction organic solar cell. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 9415-9422.	1.1	20
26	Visibly Active FeO/ZnO@PANI Magnetic Nano-photocatalyst for the Degradation of 3-Aminophenol. <i>Topics in Catalysis</i> , 2020, 63, 1302-1313.	1.3	17
27	Improved short-circuit current density in bulk heterojunction solar cells with reduced graphene oxide-germanium dioxide nanocomposite in the photoactive layer. <i>Materials Chemistry and Physics</i> , 2020, 254, 123448.	2.0	13
28	Highly stable thin film organic solar cells using poly crystallized silver doped LaPO ₄ . <i>Solar Energy</i> , 2020, 207, 157-164.	2.9	10
29	Silver sulphide nano-particles enhanced photo-current in polymer solar cells. <i>Applied Physics A: Materials Science and Processing</i> , 2020, 126, 1.	1.1	28
30	Light trapping using copper decorated nano-composite in the hole transport layer of organic solar cell. <i>Solar Energy</i> , 2020, 203, 83-90.	2.9	23
31	Enhanced performance of perovskite solar cells using p-type doped PFB:F4TCNQ composite as hole transport layer. <i>Journal of Alloys and Compounds</i> , 2019, 771, 25-32.	2.8	19
32	Fabrication of P3HT: PCBM bulk heterojunction organic solar cell. <i>IOP Conference Series: Earth and Environmental Science</i> , 2019, 331, 012028.	0.2	1
33	Copper sulphide as a mechanism to improve energy harvesting in thin film solar cells. <i>Journal of Alloys and Compounds</i> , 2019, 802, 252-258.	2.8	29
34	Bimetallic nanocomposites and the performance of inverted organic solar cell. <i>Composites Part B: Engineering</i> , 2019, 172, 660-665.	5.9	26
35	Fe/La/Zn nanocomposite with graphene oxide for photodegradation of phenylhydrazine. <i>Journal of Molecular Liquids</i> , 2019, 285, 362-374.	2.3	13
36	The effect of a trimetallic nanocomposite in the solar absorber layer of organic solar cells. <i>RSC Advances</i> , 2019, 9, 6070-6076.	1.7	17

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37	Up-Scalable Synthesis of Size-Controlled White-Green Emitting Behavior of Core/Shell (CdSe/ZnS) Quantum Dots for LED Applications. <i>Journal of Nanoscience and Nanotechnology</i> , 2019, 19, 4026-4032.	0.9	14
38	Effects of metal-decorated nanocomposite on inverted thin film organic solar cell. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 130, 120-126.	1.9	15
39	Metals decorated nanocomposite assisted charge transport in polymer solar cell. <i>Materials Science in Semiconductor Processing</i> , 2019, 91, 1-8.	1.9	32
40	Algal biochar reinforced trimetallic nanocomposite as adsorptional/photocatalyst for remediation of malachite green from aqueous medium. <i>Journal of Molecular Liquids</i> , 2019, 275, 499-509.	2.3	62
41	Improved charge extraction in polymer solar cell using metal nano-composite. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2019, 107, 154-159.	1.3	6
42	ZnO doped single wall carbon nanotube as an active medium for gas sensor and solar absorber. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 147-158.	1.1	88
43	Morphology-dependent performance of thin film organic solar cells. <i>Journal of Modern Optics</i> , 2019, 66, 399-406.	0.6	6
44	Near-field enhanced performance of organic photovoltaic cells. <i>Physica B: Condensed Matter</i> , 2019, 552, 78-83.	1.3	37
45	Metal nano-composite as charge transport co-buffer layer in perovskite based solar cell. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 126, 124-130.	1.9	17
46	Carbon nitride, metal nitrides, phosphides, chalcogenides, perovskites and carbides nanophotocatalysts for environmental applications. <i>Environmental Chemistry Letters</i> , 2019, 17, 655-682.	8.3	51
47	Novel development of nanoparticles to bimetallic nanoparticles and their composites: A review. <i>Journal of King Saud University - Science</i> , 2019, 31, 257-269.	1.6	431
48	Polymer solar cells with reduced graphene oxide-germanium quantum dots nanocomposite in the hole transport layer. <i>Journal of Materials Science: Materials in Electronics</i> , 2018, 29, 7820-7831.	1.1	14
49	Aerogels and metal-organic frameworks for environmental remediation and energy production. <i>Environmental Chemistry Letters</i> , 2018, 16, 797-820.	8.3	57
50	Computational approach to the study of morphological properties of polymer/fullerene blends in photovoltaics. <i>ChemistrySelect</i> , 2018, 3, .	0.7	1
51	ZnO:CNT assisted charge transport in PTB7:PCBM blend organic solar cell. <i>Journal of Alloys and Compounds</i> , 2018, 748, 216-222.	2.8	56
52	Graphene for Thermoelectric Applications: Prospects and Challenges. <i>Critical Reviews in Solid State and Materials Sciences</i> , 2018, 43, 133-157.	6.8	94
53	Applications of nanocomposite hydrogels for biomedical engineering and environmental protection. <i>Environmental Chemistry Letters</i> , 2018, 16, 113-146.	8.3	207
54	Evaluation on La ₂ O ₃ garlanded ceria heterostructured binary metal oxide nanoplates for UV/ visible light induced removal of organic dye from urban wastewater. <i>South African Journal of Chemical Engineering</i> , 2018, 26, 49-60.	1.2	124

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55	Surface Segregation of Cyclic Chains in Binary Melts of Thin Polymer Films: The Influence of Constituent Concentration. <i>Polymers</i> , 2018, 10, 324.	2.0	5
56	High-performance organic solar cells utilizing graphene oxide in the active and hole transport layers. <i>Solar Energy</i> , 2018, 171, 83-91.	2.9	42
57	Photocatalytic decomposition effect of erbium doped cerium oxide nanostructures driven by visible light irradiation: Investigation of cytotoxicity, antibacterial growth inhibition using catalyst. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2018, 185, 275-282.	1.7	155
58	Guar gum and its composites as potential materials for diverse applications: A review. <i>Carbohydrate Polymers</i> , 2018, 199, 534-545.	5.1	283
59	Equilibrium and kinetic studies of the adsorption of acid blue 9 and Safranin O from aqueous solutions by MgO decorated FLG coated Fuller's earth. <i>Journal of Physics and Chemistry of Solids</i> , 2018, 123, 43-51.	1.9	127
60	Perovskites photovoltaic solar cells: An overview of current status. <i>Renewable and Sustainable Energy Reviews</i> , 2018, 91, 1025-1044.	8.2	153
61	Germanium quantum dot/nitrogen-doped graphene nanocomposite for high-performance bulk heterojunction solar cells. <i>RSC Advances</i> , 2018, 8, 21841-21849.	1.7	9
62	Structural, Optical, Morphological and Microbial Studies on SnO ₂ Nanoparticles Prepared by Co-Precipitation Method. <i>Journal of Nanoscience and Nanotechnology</i> , 2018, 18, 3511-3517.	0.9	68
63	Carbon Quantum Dot Composites for Photocatalytic Degradation of Organic Pollutants. <i>Materials Research Foundations</i> , 2018, , 123-148.	0.2	0
64	Facile hetero-assembly of superparamagnetic Fe ₃ O ₄ /BiVO ₄ stacked on biochar for solar photo-degradation of methyl paraben and pesticide removal from soil. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2017, 337, 118-131.	2.0	158
65	Zinc oxide doped single wall carbon nanotubes in hole transport buffer layer. <i>Journal of Alloys and Compounds</i> , 2017, 706, 344-350.	2.8	49
66	Unravelling the surface composition of symmetric linear-cyclic polymer blends. <i>Fluid Phase Equilibria</i> , 2017, 441, 33-42.	1.4	6
67	Fabrication and characterization of sodium dodecyl sulphate@iron silicophosphate nanocomposite: Ion exchange properties and selectivity for binary metal ions. <i>Materials Chemistry and Physics</i> , 2017, 193, 129-139.	2.0	79
68	The effect of uni- and binary solvent additives in PTB7:PC61BM based solar cells. <i>Solar Energy</i> , 2017, 150, 66-72.	2.9	36
69	Tailoring the structural and optical characteristics of InGaN/GaN multilayer thin films by 12 MeV Si ions irradiations. <i>Materials Science in Semiconductor Processing</i> , 2017, 64, 95-100.	1.9	13
70	Antiproliferative effects on human lung cell lines A549 activity of cadmium selenide nanoparticles extracted from cytotoxic effects: Investigation of bio-electronic application. <i>Materials Science and Engineering C</i> , 2017, 76, 1012-1025.	3.8	133
71	Conductivity of CH ₃ NH ₃ PbI ₃ thin film perovskite stored in ambient atmosphere. <i>Physica B: Condensed Matter</i> , 2017, 514, 85-88.	1.3	11
72	Photocatalytic performance and antimicrobial activities of HAp-TiO ₂ nanocomposite thin films by sol-gel method. <i>Surfaces and Interfaces</i> , 2017, 6, 247-255.	1.5	128

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73	Reduced graphene oxide-germanium quantum dot nanocomposite: electronic, optical and magnetic properties. <i>Nanotechnology</i> , 2017, 28, 495703.	1.3	15
74	Low temperature synthesis of multiwalled carbon nanotubes and incorporation into an organic solar cell. <i>Journal of Experimental Nanoscience</i> , 2017, 12, 363-383.	1.3	11
75	Bimetallic nanocomposite as hole transport co-buffer layer in organic solar cell. <i>Applied Physics A: Materials Science and Processing</i> , 2017, 123, 1.	1.1	9
76	Synthesis and characterization of CuO-NiO-ZnO mixed metal oxide nanocomposite. <i>Journal of Alloys and Compounds</i> , 2017, 723, 866-872.	2.8	118
77	Elucidation of photocatalysis, photoluminescence and antibacterial studies of ZnO thin films by spin coating method. <i>Journal of Photochemistry and Photobiology B: Biology</i> , 2017, 173, 466-475.	1.7	218
78	Properties of functional layers in inverted thin film organic solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2017, 160, 241-256.	3.0	50
79	Improved, Photon Conversion Efficiency of (SnO ₂) Doped Cesium Oxide (Cs) Nanofibers for Photocatalytic Application Under Solar Irradiation. <i>Springer Proceedings in Physics</i> , 2017, , 113-128.	0.1	5
80	Revolution from monometallic to trimetallic nanoparticle composites, various synthesis methods and their applications: A review. <i>Materials Science and Engineering C</i> , 2017, 71, 1216-1230.	3.8	195
81	Nano-scale morphology dependent performance of thin film organic solar cells. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 214-221.	1.1	1
82	Growth and characterization of V ₂ O ₅ thin film on conductive electrode. <i>Journal of Microscopy</i> , 2017, 265, 214-221.	0.8	38
83	Photocatalytic activity of ZrO ₂ doped lead dioxide nanocomposites: Investigation of structural and optical microscopy of RhB organic dye. <i>Applied Surface Science</i> , 2017, 421, 234-239.	3.1	128
84	Co-solvent additives influence on the performance of PTB7:PCBM based Thin film organic solar cell. <i>Materials Today: Proceedings</i> , 2017, 4, 12558-12564.	0.9	23
85	Organic Solar Cells with Boron- or Nitrogen-Doped Carbon Nanotubes in the P3HT:PCBM Photoactive Layer. <i>Journal of Nanomaterials</i> , 2016, 2016, 1-11.	1.5	9
86	The effect of interfacial layers on charge transport in organic solar cell. <i>Physica B: Condensed Matter</i> , 2016, 496, 34-37.	1.3	6
87	Improving optical absorption bandwidth using bi-layer bulkheterojunction organic photoactive medium. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 11628-11633.	1.1	9
88	The effect of skin-depth interfacial defect layer in perovskite solar cell. <i>Applied Physics B: Lasers and Optics</i> , 2016, 122, 1.	1.1	4
89	Photoluminescence of well-aligned ZnO doped CeO ₂ nanoplatelets by a solvothermal route. <i>Materials Letters</i> , 2016, 183, 351-354.	1.3	103
90	Surface enrichment driven by polymer topology. <i>Physical Review E</i> , 2016, 93, 050501.	0.8	16

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91	Synthesis and some surface studies of laminated ZnO/TiO ₂ transparent bilayer by two-step growth. <i>Materials Science in Semiconductor Processing</i> , 2016, 44, 85-90.	1.9	7
92	V ₂ O ₅ thin film deposition for application in organic solar cells. <i>Applied Physics A: Materials Science and Processing</i> , 2016, 122, 1.	1.1	41
93	Surface structure and photoemission studies of nanocrystalline TiO ₂ layer/ITO coated glass interface. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2016, 207, 1-6.	0.8	6
94	Stable δ -MnS thin film deposited by two-electrode cell: synthesis, structural characterization and photoemission spectroscopic studies. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 120, 959-965.	1.1	17
95	Enhanced photon harvesting in OPV using optical reflective surface. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 118, 425-429.	1.1	8
96	Ternary molecules blend organic bulk heterojunction solar cell. <i>Materials Science in Semiconductor Processing</i> , 2015, 40, 158-161.	1.9	13
97	Bulk Heterojunction Solar Cell with Nitrogen-Doped Carbon Nanotubes in the Active Layer: Effect of Nanocomposite Synthesis Technique on Photovoltaic Properties. <i>Materials</i> , 2015, 8, 2415-2432.	1.3	15
98	Charge extracting buffer layers in bulk heterojunction organic solar cell. <i>Journal of Materials Science: Materials in Electronics</i> , 2015, 26, 9891-9897.	1.1	2
99	Microstructural and optical properties of nanocrystalline MgS thin film as wide band gap barrier material. <i>Applied Physics A: Materials Science and Processing</i> , 2015, 118, 539-545.	1.1	10
100	Environmental stability of PTB7:PCBM bulk heterojunction solar cell. <i>Journal of Modern Optics</i> , 2014, 61, 1749-1753.	0.6	33
101	Improved charge transport in P3HT:PCBM bulk heterojunction PV cell under ambient environment. <i>Physica B: Condensed Matter</i> , 2014, 437, 63-66.	1.3	3
102	Correlation between LUMO offset of donor/acceptor molecules to an open circuit voltage in bulk heterojunction solar cell. <i>Physica B: Condensed Matter</i> , 2014, 445, 56-59.	1.3	32
103	Synthesis and microstructural studies of annealed Cu ₂ O/Cu _x S bilayer as transparent electrode material for photovoltaic and energy storage devices. <i>Journal of Microscopy</i> , 2014, 256, 61-71.	0.8	8
104	XPS and some surface characterizations of electrodeposited MgO nanostructure. <i>Surface and Interface Analysis</i> , 2014, 46, 372-377.	0.8	43
105	Temperature-dependent hyperfine interactions at ¹¹¹ Cd-C complex in germanium. <i>Applied Physics A: Materials Science and Processing</i> , 2013, 112, 835-838.	1.1	0
106	Compositional dependence of the performance of bulk heterojunction solar cells based on PTOPT and PCBM. <i>Canadian Journal of Physics</i> , 2013, 91, 89-92.	0.4	0
107	Nonlinear photonics properties of porphyrins nanocomposites and self-assembled porphyrins. <i>Journal of Porphyrins and Phthalocyanines</i> , 2012, 16, 985-995.	0.4	22
108	Charge transport across bulk heterojunction organic thin film. <i>Applied Physics A: Materials Science and Processing</i> , 2012, 106, 53-57.	1.1	27

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109	CONCENTRATION DEPENDENT OPTICAL PROPERTIES OF PORPHYRINS IN NAFION MATRIX. Journal of Nonlinear Optical Physics and Materials, 2011, 20, 175-182.	1.1	5
110	Growth of germanium-carbide thin film on crystal substrate. Journal of Materials Science: Materials in Electronics, 2010, 21, 1144-1148.	1.1	6
111	STRESS AND TEMPERATURE DEPENDENCE OF THE HYPERFINE INTERACTIONS AT POINT DEFECTS IN SEMICONDUCTORS. International Journal of Modern Physics B, 2010, 24, 1111-1127.	1.0	1
112	Hole transport parameters in a PTOPT based organic solar cell. Canadian Journal of Physics, 2010, 88, 253-256.	0.4	1
113	Nonlinear optical absorption properties of porphyrins confined in Nafion membrane. Applied Physics A: Materials Science and Processing, 2009, 96, 685-689.	1.1	10
114	THERMALLY INDUCED RE-TRAPPING OF IMPURITY PAIRS IN SILICON. International Journal of Modern Physics B, 2007, 21, 3797-3807.	1.0	1
115	Effects of external stress on defect complexes in semiconductors. Journal of Physics Condensed Matter, 2007, 19, 266201.	0.7	1
116	Uniaxial compressive stress induced nuclear quadrupole interaction at the ¹¹¹ Cd nucleus in n-doped silicon. Physica B: Condensed Matter, 2006, 373, 28-32.	1.3	1
117	The study of the influence of uniaxial stress on impurity complexes in silicon. Applied Surface Science, 2005, 240, 146-154.	3.1	6
118	The study of the interaction of indium with tellurium in silicon. Applied Physics A: Materials Science and Processing, 2005, 81, 1471-1476.	1.1	7
119	Formation and properties of In-Te pairs in Si. Physica B: Condensed Matter, 2003, 340-342, 613-616.	1.3	3
120	Indium-carbon pairs in germanium. Journal of Physics Condensed Matter, 2003, 15, 5297-5306.	0.7	10
121	Dopants in Semiconductors Studied by Perturbed Angular Correlation. Acta Physica Polonica A, 2001, 100, 585-602.	0.2	1
122	Nanocomposite for Solar Energy Application. Nano Hybrids and Composites, 0, 20, 90-107.	0.8	23