Ayman M Darwish

List of Publications by Year in Descending Order

83 papers	1,997 citations	30 h-index	41 g-index
91 ext. papers	2,706 ext. citations	4 avg, IF	6.73 L-index

#	Paper	IF	Citations
83	Improvement in electrical conductivity characterization of chitosan/Poly (ethylene oxide) incorporated with V2O5 NPs via laser ablation. *Journal of Materials Research and Technology*, **2022**, 16, 1272-1282	5.5	2
82	New Liquid Crystals Based on Terminal Fatty Chains and Polymorphic Phase Formation from Their Mixtures. *Crystals*, **2022**, 12, 350	2.3	1
81	Garlic peel as promising low-cost support for the cobalt nanocatalyst; synthesis and catalytic studies.. *Journal of Environmental Management*, **2022**, 312, 114919	7.9	1
80	Structural, linear and nonlinear optical properties of NiO nanoparticles/multi-walled carbon nanotubes nanocomposite for optoelectronic applications. *Radiation Physics and Chemistry*, **2022**, 195, 110088	2.5	2
79	Catalytic performance of NiO nanoparticles decorated carbon nanotubes via one-pot laser ablation method against methyl orange dye. *Journal of Materials Research and Technology*, **2022**, 18, 3336-3346	5.5	2
78	Removal of methylene blue dye from aqueous solution using carbon nanotubes decorated by nickel oxide nanoparticles via pulsed laser ablation method. *Radiation Physics and Chemistry*, **2022**, 198, 110268	2.5	0
77	Superior nonlinear optical and optical limiting properties of cross-linked and thermally stable HiPCO-SWCNTs@PVA films. *Optical Materials*, **2021**, 122, 111732	3.3	1
76	Novel laser-assisted method for synthesis of SnO2/MWCNTs nanocomposite for water treatment from Cu (II). *Diamond and Related Materials*, **2021**, 113, 108287	3.5	14
75	Catalytic activity of Ag nanoparticles and Au/Ag nanocomposite prepared by pulsed laser ablation technique against 4-nitrophenol for environmental applications. *Journal of Materials Science: Materials in Electronics*, **2021**, 32, 11978-11988	2.1	9
74	Molecularly Imprinted Electrochemical Sensor-Based FeO@MWCNTs for Ivabradine Drug Determination in Pharmaceutical Formulation, Serum, and Urine Samples. *Frontiers in Bioengineering and Biotechnology*, **2021**, 9, 648704	5.8	7
73	Au@Ag core/shell nanoparticles prepared by laser-assisted method for optical limiting applications. *Journal of Materials Science: Materials in Electronics*, **2021**, 32, 14728	2.1	9
72	Optical and Thermal Investigations of New Schiff Base/Ester Systems in Pure and Mixed States. *Polymers*, **2021**, 13,	4.5	14
71	Preparation, characterization, and nonlinear optical properties of graphene oxide thin film doped with low chirality metallic SWCNTs. *Journal of Materials Research and Technology*, **2021**, 12, 1461-1472	5.5	12
70	Preparation and study of nonlinear response of embedding ZnO nanoparticles in PVA thin film by pulsed laser ablation. *Journal of Molecular Structure*, **2021**, 1223, 129007	3.4	28
69	Linear and nonlinear optical studies of Ag/Zn/ZnO nanocomposite thin film prepared by pulsed laser deposition technique. *Radiation Physics and Chemistry*, **2021**, 179, 109233	2.5	12
68	Gallic acid-assisted growth of cuprous oxide within polyvinyl alcohol; a separable catalyst for oxidative and reductive degradation of water pollutants. *Journal of Cleaner Production*, **2021**, 279, 123826	10.3	7
67	The enhancement of nonlinear absorption of Zn/ZnO thin film by creation oxygen vacancies via infrared laser irradiation and coating with Ag thin film via pulsed laser deposition. *Journal of Molecular Structure*, **2021**, 1226, 129407	3.4	19

66	The effect of reaction temperature on structural, optical and electrical properties of tunable ZnO nanoparticles synthesized by hydrothermal method. *Journal of Physics and Chemistry of Solids*, **2021**, 154, 110089	3.9	16
65	Induced Smectic Phases from Supramolecular H-Bonded Complexes Based on Non-Mesomorphic Components. *Crystals*, **2021**, 11, 940	2.3	4
64	Synthesis of Ag Nanoparticles-Decorated CNTs via Laser Ablation Method for the Enhancement the Photocatalytic Removal of Naphthalene from Water. *Nanomaterials*, **2021**, 11,	5.4	7
63	Role of laser fluence on ionic emission characteristics from steel plasmas induced in atmospheric air. *Radiation Physics and Chemistry*, **2021**, 185, 109515	2.5	2
62	Effect of liquid media and laser energy on the preparation of Ag nanoparticles and their nanocomposites with Au nanoparticles via laser ablation for optoelectronic applications. *Optik*, **2021**, 241, 167217	2.5	15
61	Thermal and Mesomorphic Investigations of 1:1 Supramolecular Assemblies of 4-[(4-(n-Alkoxy)phenylimino)methyl]benzoic Acids Having Symmetrical and Un-Symmetrical Terminal Chain Lengths. *Symmetry*, **2021**, 13, 1785	2.7	4
60	ZnO nanoparticles decorated carbon nanotubes via pulsed laser ablation method for degradation of methylene blue dyes. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 627, 127204	5.1	16
59	Synthesis of multi-walled carbon nanotubes decorated with silver metallic nanoparticles as a catalytic degradable material via pulsed laser ablation in liquid media. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 626, 126992	5.1	12
58	Zinc oxide/carbon nanotubes nanocomposite: Synthesis, characterization and catalytic reduction of 4-nitrophenol via laser assistant method. *Surfaces and Interfaces*, **2021**, 26, 101406	4.1	7
57	Catalytic activity of multi-walled carbon nanotubes decorated with tungsten trioxides nanoparticles against 4-nitrophenol. *Journal of Physics and Chemistry of Solids*, **2021**, 158, 110252	3.9	10
56	Facile synthesis of Cu2O nanoparticles using pulsed laser ablation method for optoelectronic applications. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2021**, 630, 127562	5.1	7
55	Multifunctional leather surface embedded with zinc oxide nanoparticles by pulsed laser ablation method.. *Microscopy Research and Technique*, **2021**,	2.8	2
54	Ag doped CuO thin film prepared via pulsed laser deposition for 4-nitrophenol degradation. *Journal of Environmental Chemical Engineering*, **2020**, 8, 104104	6.8	43
53	Tailored CNTs Buckypaper Membranes for the Removal of Humic Acid and Separation of Oil-in-Water Emulsions. *Membranes*, **2020**, 10,	3.8	6
52	Spectroscopic studies of the interaction between isolated polyphenols from coffee and the milk proteins. *Surfaces and Interfaces*, **2020**, 20, 100558	4.1	13
51	Laser-assisted for preparation ZnO/CdO thin film prepared by pulsed laser deposition for catalytic degradation. *Radiation Physics and Chemistry*, **2020**, 176, 109020	2.5	35
50	t-Butyl calixarene/FeO@MWCNTs composite-based potentiometric sensor for determination of ivabradine hydrochloride in pharmaceutical formulations. *Materials Science and Engineering C*, **2020**, 116, 111110	8.3	15
49	Synthesis of ZnO/CdO thin film for catalytic degradation of 4-nitrophenol. *Journal of Molecular Structure*, **2020**, 1221, 128872	3.4	33

48	Laser-assisted for preparation Ag/CdO nanocomposite thin film: Structural and optical study. *Optical Materials*, **2020**, 107, 110124	3.3	33
47	Enhancing the Performance of Polygon Monopole Antenna Using Graphene/TMDCs Heterostructures. *IEEE Nanotechnology Magazine*, **2020**, 19, 269-273	2.6	5
46	Mechanical hardness estimation of heat-treated DIN50Cr3 spring steel utilizing laser-induced breakdown spectroscopy (LIBS) inverse calibration. *Applied Physics A: Materials Science and Processing*, **2020**, 126, 1	2.6	6
45	Preparation, characterization, and thermal conductivity of polyvinyl-formaldehyde/MWCNTs foam: A low cost heat sink substrate. *Journal of Materials Research and Technology*, **2020**, 9, 2934-2945	5.5	11
44	Ultra-thin silver nanoparticles film prepared via pulsed laser deposition: Synthesis, characterization, and its catalytic activity on reduction of 4-nitrophenol. *Surfaces and Interfaces*, **2020**, 19, 100438	4.1	68
43	Synthesis of ZnO and Au@ZnO core/shell nano-catalysts by pulsed laser ablation in different liquid media. *Journal of Materials Research and Technology*, **2020**, 9, 3241-3248	5.5	54
42	Fabrication of magnesium metallic nanoparticles by liquid-assisted laser ablation. *Journal of the Optical Society of America B: Optical Physics*, **2020**, 37, 2620	1.7	21
41	The effect of laser fluence for enhancing the antibacterial activity of NiO nanoparticles by pulsed laser ablation in liquid media. *Environmental Nanotechnology, Monitoring and Management*, **2020**, 14, 100382	3.3	9
40	Impact of CuO doping on the properties of CdO thin films on the catalytic degradation by using pulsed-Laser deposition technique. *Optical Materials*, **2020**, 100, 109663	3.3	65
39	Effect of nanostructured metal oxides (CdO, Al2O3, Cu2O) embedded in PVA via Nd:YAG pulsed laser ablation on their optical and structural properties. *Journal of Molecular Structure*, **2020**, 1203, 127374	3.4	60
38	Influence of coating by Cu and Ag nanoparticles via pulsed laser deposition technique on optical, electrical and mechanical properties of cellulose paper. *Journal of Molecular Structure*, **2020**, 1203, 127472	3.4	31
37	High performance graphene-based PVF foam for lead removal from water. *Journal of Materials Research and Technology*, **2020**, 9, 11861-11875	5.5	11
36	Effects of post-laser irradiation on the optical and structure properties of Al2O3 nanoparticles produced by laser ablation. *Journal of Applied Physics*, **2020**, 128, 153104	2.5	18
35	Effect of dual-beam laser radiation for synthetic SnO2/Au nanoalloy for antibacterial activity. *Journal of Molecular Structure*, **2020**, 1222, 128913	3.4	32
34	Tailored MWCNTs/SnO2 decorated cellulose nanofiber adsorbent for the removal of Cu (II) from waste water. *Radiation Physics and Chemistry*, **2020**, 177, 109172	2.5	29
33	Terahertz, Infrared, and UV–Vis Spectroscopy Study on Silver@Polyaniline Core@Shell Nanocomposites: Optical and Electronic Properties. *Journal of Physical Chemistry C*, **2020**, 124, 18243-18256	3.8	5
32	Efficient removal of Cu (II) by SnO2/MWCNTs nanocomposite by pulsed laser ablation method. *Nano Structures Nano Objects*, **2020**, 24, 100591	5.6	25
31	Synthesis of antimicrobial cellulosic derivative and its catalytic activity. *Journal of King Saud University - Science*, **2020**, 32, 436-442	3.6	41

30	One-pot synthesis of nanostructured CdS, CuS, and SnS by pulsed laser ablation in liquid environment and their antimicrobial activity. *Optics and Laser Technology*, **2020**, 121, 105824	4.2	65
29	Unmanned aerial vehicle (UAV) manufacturing materials: Synthesis, spectroscopic characterization and dynamic mechanical analysis (DMA). *Journal of Molecular Structure*, **2020**, 1201, 127211	3.4	35
28	Polyvinyl Alcohol/Silver nanoparticles film prepared via pulsed laser ablation: An eco-friendly nano-catalyst for 4-nitrophenol degradation. *Journal of Molecular Structure*, **2020**, 1212, 128125	3.4	52
27	Optical, electrical and mechanical studies of paper sheets coated by metals (Cu and Ag) via pulsed laser deposition. *Journal of Molecular Structure*, **2019**, 1198, 126927	3.4	34
26	A comparative study on the color change of pigments due to the consolidation of conventional spectroscopic techniques and laser-induced breakdown spectroscopy. *Applied Physics A: Materials Science and Processing*, **2019**, 125, 1	2.6	30
25	Cadmium oxide/TEMPO-oxidized cellulose nanocomposites produced by pulsed laser ablation in liquid environment: Synthesis, characterization, and antimicrobial activity. *Optics and Laser Technology*, **2019**, 120, 105744	4.2	77
24	Clean production of powdery silver nanoparticles using Zingiber officinale: The structural and catalytic properties. *Journal of Cleaner Production*, **2019**, 241, 118398	10.3	58
23	UV-induced macromolecular and optical modifications in gelatin solid films with transition metal chlorides. *Journal of Molecular Structure*, **2019**, 1182, 181-190	3.4	22
22	WO3 quantum dot: Synthesis, characterization and catalytic activity. *Journal of Molecular Structure*, **2019**, 1185, 351-356	3.4	54
21	Fascinating thermo-mechanical features of layered hydroxides/MWCNTs nanocomposites. *Journal of Alloys and Compounds*, **2019**, 788, 912-924	5.7	11
20	An Eco-friendly Synthesis of V2O5 Nanoparticles and Their Catalytic Activity for the Degradation of 4-Nitrophrnol. *Journal of Inorganic and Organometallic Polymers and Materials*, **2019**, 29, 1324-1330	3.2	33
19	Fabrication Of Gold Nanoparticles In Absence Of Surfactant As In Vitro Carrier Of Plasmid DNA. *International Journal of Nanomedicine*, **2019**, 14, 8399-8408	7.3	7
18	Luminescent plant root: A step toward electricity-free natural lighting plants. *Journal of Molecular Structure*, **2019**, 1176, 249-253	3.4	33
17	Wet chemistry route for the decoration of carbon nanotubes with iron oxide nanoparticles for gas sensing. *Beilstein Journal of Nanotechnology*, **2019**, 10, 105-118	3	6
16	Advanced analyses of solid waste raw materials from cement plant using dual spectroscopy techniques towards co-processing. *Optics and Laser Technology*, **2019**, 111, 338-346	4.2	10
15	Multi walled carbon nanotube decorated cadmium oxide nanoparticles via pulsed laser ablation in liquid media. *Optics and Laser Technology*, **2019**, 111, 249-254	4.2	62
14	Effect of laser shock peening on the hardness of AL-7075 alloy. *Journal of King Saud University - Science*, **2019**, 31, 472-478	3.6	34
13	Preparation of highly conductive, transparent, and flexible graphene/silver nanowires substrates using non-thermal laser photoreduction. *Optics and Laser Technology*, **2018**, 103, 367-372	4.2	47

12	Optical emission spectroscopy for concrete strength evaluation utilizing calcium lines. *Optics and Laser Technology*, **2018**, 106, 69-75	4.2	12
11	Comparative study of LIBS and mechanically evaluated hardness of graphite/ rubber composites. *Materials Chemistry and Physics*, **2018**, 207, 30-35	4.4	25
10	Limit of detection and hardness evaluation of some steel alloys utilizing optical emission spectroscopic techniques. *Optics and Laser Technology*, **2018**, 108, 634-641	4.2	29
9	Eco-friendly cellulose nano fibers via first reported Egyptian Humicola fuscoatra Egyptia X4: Isolation and characterization. *Environmental Nanotechnology, Monitoring and Management*, **2018**, 10, 409-418	3.3	48
8	Tuning the plasmon resonance and work function of laser-scribed chemically doped graphene. *Carbon*, **2017**, 120, 44-53	10.4	14
7	Au@CdO core/shell nanoparticles synthesized by pulsed laser ablation in Au precursor solution. *Applied Physics A: Materials Science and Processing*, **2017**, 123, 1	2.6	48
6	Synthesis of cadmium oxide nanoparticles by pulsed laser ablation in liquid environment. *Optik*, **2017**, 144, 679-684	2.5	58
5	Investigation of factors affecting the synthesis of nano-cadmium sulfide by pulsed laser ablation in liquid environment. *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*, **2016**, 153, 315-20	4.4	56
4	Indium(III) phthalocyanine eka-conjugated polymer as high-performance optical limiter upon nanosecond laser irradiation. *High Performance Polymers*, **2016**, 28, 651-659	1.6	33
3	Synthesis and nonlinear optical properties of a novel indium phthalocyanine highly branched polymer. *Polymers for Advanced Technologies*, **2015**, 26, 1014-1019	3.2	35
2	Synthesis of Nano-Cadmium Sulfide by Pulsed Laser Ablation in Liquid Environment. *Spectroscopy Letters*, **2015**, 48, 638-645	1.1	53
1	Ecofriendly sustainable synthetized nano-composite for removal of heavy metals from aquatic environment. *Applied Nanoscience (Switzerland)*,1	3.3	1