

Ahmed A Al-Hossainy

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/254203/publications.pdf>

Version: 2024-02-01

100
papers

2,862
citations

94269

37
h-index

243296

44
g-index

101
all docs

101
docs citations

101
times ranked

833
citing authors

#	ARTICLE	IF	CITATIONS
1	Combined experimental thin film, DFT-TDDFT computational study, flow and heat transfer in [PG-MoS ₂ /ZrO ₂] hybrid nanofluid. Waves in Random and Complex Media, 2023, 33, 1-26.	1.6	40
2	Synthesis, characterization, and photosensitizer applications for dye-based on ZrO ₂ - acriflavine nanocomposite thin film [ZrO ₂ +ACF]C. Journal of Molecular Structure, 2022, 1250, 131827.	1.8	16
3	Combined experimental and TDDFT computational studies of the optical and electrical characteristic of luminol films-doped TiO ₂ with 9.027% power conversion efficiency. Journal of Materials Science: Materials in Electronics, 2022, 33, 5244.	1.1	4
4	Fabrication, characterization, TD-DFT, optical and electrical properties of poly (aniline-co-para) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 627 Chemistry, 2022, 109, 230-244.	2.9	16
5	High-performance one and two-dimensional doped polypyrrole nanostructure for polymer solar cells applications. Journal of Materials Science: Materials in Electronics, 2022, 33, 10165-10182.	1.1	8
6	Physical properties and DFT calculations of the hybrid organic polymeric nanocomposite thin film [P(An+o-Aph)+Glycine/TiO ₂]HNC with 7.42% power conversion efficiency. Journal of Molecular Structure, 2022, 1262, 133001.	1.8	11
7	Combined Experimental Thin Film, DFT-TDDFT Computational Study, structure properties for [FeO+P ₂ O ₅] bio-nanocomposite by Geotrichum candidum and Environmental application. Journal of Molecular Structure, 2022, 1258, 132635.	1.8	13
8	Synthesis, characterization, physicochemical properties, and in-vitro anti-bacterial evaluation for doped Fe-Fusarium oxysporum bio-nanocomposite. Journal of Molecular Structure, 2022, 1259, 132643.	1.8	8
9	Geotrichum candidum Mediated [Cu ₈ O ₇ +P ₂ O ₅] Nanocomposite Bio Fabrication, Characterization, Physicochemical Properties, and its In-Vitro Biocompatibility Evaluation. Journal of Inorganic and Organometallic Polymers and Materials, 2022, 32, 2398-2415.	1.9	8
10	Kinetics and Mechanism Studies of Oxidation of Dibromothymolsulphonphthalein Toxic Dye by Potassium Permanganate in Neutral Media with the Synthesis of 2-Bromo-6-isopropyl-3-methyl-cyclohexa-2,5-dienone. ACS Omega, 2022, 7, 16109-16115.	1.6	12
11	Synthesis and intriguing single-component white-light emission from oxadiazole or thiadiazole integrated with coumarin luminescent core. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 431, 113992.	2.0	12
12	Physical structure, TD-DFT computations, and optical properties of hybrid nanocomposite thin film as optoelectronic devices. Journal of Industrial and Engineering Chemistry, 2022, 112, 106-124.	2.9	12
13	Development of azithromycin-Pd mono nanocomposite: Synthesis, physicochemical, characterization and TD-DFT calculations. Journal of Molecular Structure, 2022, 1263, 133126.	1.8	24
14	A comparative study of Cu-anchored 0D and 1D ZnO nanostructures for the reduction of organic pollutants in water. RSC Advances, 2022, 12, 16496-16509.	1.7	19
15	TD-DFT calculations and two-dimensional poly (ortho phenylenediamine-co-meta-phenylene diamine) for polymeric solar cell applications. Chemical Papers, 2022, 76, 6175-6191.	1.0	7
16	Characterization and optical behavior of a new indole Schiff base using experimental data and TD-DFT/DMO3 computations. Optical Materials, 2022, 131, 112594.	1.7	15
17	Removal of bromothymol blue dye by the oxidation method using KMnO ₄ : Accelerating the oxidation reaction by Ru (III) catalyst. Journal of Molecular Structure, 2022, 1268, 133679.	1.8	11
18	DFT and experimental study on adsorption of dyes on activated carbon prepared from apple leaves. Carbon Letters, 2021, 31, 863-878.	3.3	58

#	ARTICLE	IF	CITATIONS
19	Novel synthesis, structure characterization, DFT and investigation of the optical properties of diphenylphosphine compound/zinc oxide [DPPB+ZnO]C nanocomposite thin film. Composite Interfaces, 2021, 28, 879-904.	1.3	31
20	Synthesis, structural characterization, DFT, kinetics and mechanism of oxidation of bromothymol blue: application to textile industrial wastewater treatment. Chemical Papers, 2021, 75, 297-309.	1.0	40
21	Novel synthesis, structure characterization, DFT and investigation of the optical properties of cyanine dye/zinc oxide [4-CHMQI/ZnO]C nanocomposite thin film. Journal of Molecular Structure, 2021, 1224, 128989.	1.8	36
22	Synthesis and characterization of Poly (ortho-aminophenol-co-para-toluidine) and its application as semiconductor thin film. Journal of Molecular Structure, 2021, 1225, 129131.	1.8	17
23	Combined experimental and theoretical study, characterization, and nonlinear optical properties of doped-poly (p-nitroaniline -co- o-aminophenol) thin films. Journal of Molecular Structure, 2021, 1227, 129712.	1.8	12
24	Doped-poly (anthranilic acid-co-o-phenylene diamine) thin film for optoelectronic applications. Optical Materials, 2021, 111, 110621.	1.7	31
25	One-Dimensional Nanocomposites Based on Polypyrrole-Carbon Nanotubes and Their Thermoelectric Performance. Polymers, 2021, 13, 278.	2.0	33
26	Synthesis of novel keto-bromothymol blue in different media using oxidation-reduction reactions: combined experimental and DFT-TDDFT computational studies. Chemical Papers, 2021, 75, 3103-3118.	1.0	19
27	Combined Experimental and DFT-TDDFT Characterization Studies of Crystalline Mesoporous-Assembled [ZrO ₂]NPs and [DPPP+Gly/ZrO ₂]C Nanocomposite Thin Film. Electronic Materials Letters, 2021, 17, 188-206.	1.0	14
28	Facile synthesis of single-crystal of o-phenylene diamine dihydrochloride as a polychloride and fabrication of high-performance semiconductor thin film. Optical Materials, 2021, 112, 110758.	1.7	10
29	Conducting polymer thin film for optoelectronic devices applications. Polymers for Advanced Technologies, 2021, 32, 2588-2596.	1.6	17
30	Fabrication, characterization and optical properties of poly(p-phenylenediamine-co-o-aminophenol) nanostructure thin film. Applied Physics A: Materials Science and Processing, 2021, 127, 1.	1.1	5
31	Combined experimental thin films, TDDFT-DFT theoretical method, and spin effect on [PEG-H ₂ O/ZrO ₂ +MgO]h hybrid nanofluid flow with higher chemical rate. Surfaces and Interfaces, 2021, 23, 100971.	1.5	48
32	Enhancement of heavy metals recovery from aqueous solutions by cementation on a rotating cylinder using a stationary wiper. Journal of Industrial and Engineering Chemistry, 2021, 97, 460-465.	2.9	13
33	Combined Experimental and TDDFT-DFT Computation, Characterization, and Optical Properties for Synthesis of Keto-Bromothymol Blue Dye Thin Film as Optoelectronic Devices. Journal of Electronic Materials, 2021, 50, 3800-3813.	1.0	14
34	Base-catalyzed oxidation of sugarcane molasses by potassium ferricyanide in alkaline solutions. International Journal of Chemical Kinetics, 2021, 53, 1101-1112.	1.0	10
35	Homogeneous-heterogeneous catalysis on electromagnetic radiative Prandtl fluid flow: Darcy-Forchheimer substance scheme. Surfaces and Interfaces, 2021, 24, 101119.	1.5	24
36	High-performance nanofluid synthesis and DFT-TDDFT study of graphene nanosheets along bent surface for enhanced oil-recovery implementations. Case Studies in Thermal Engineering, 2021, 25, 100983.	2.8	25

#	ARTICLE	IF	CITATIONS
37	Experimental characterization, TDDFT-DFT, and spin effect on [PEG/H ₂ O@ZrO ₂ /TiO ₂] hybrid nanofluid 3D flow as potential ceramic industry application. International Journal of Chemical Reactor Engineering, 2021, 19, 1135-1149.	0.6	13
38	Combined experimental and DFT-TDDFT computational, structural and study effect of inter-diffusion Cu into CdTe thick film by annealing for optoelectronics. Journal of Molecular Structure, 2021, 1238, 130411.	1.8	7
39	Effect of implanted copper into 1 μ m cadmium telluride thick film by heat treatment for optoelectronics: Structural, optical, and electrical properties. International Journal of Energy Research, 2021, 45, 20258-20269.	2.2	11
40	Polypyrrole/functionalized multi-walled carbon nanotube composite for optoelectronic device application. Chemical Papers, 2021, 75, 6575-6589.	1.0	18
41	A combined experimental and TDDFT-DFT investigation of structural and optical properties of novel pyrazole-1, 2, 3-triazole hybrids as optoelectronic devices. Phase Transitions, 2021, 94, 794-814.	0.6	19
42	Synthesis of a novel coumarin heterocyclic derivative and fabrication of hybrid nanocomposite thin film with CoOFe ₂ O ₄ for optoelectronic applications. Journal of Molecular Structure, 2021, 1241, 130640.	1.8	11
43	Synthesis, spectral characterization, optical properties and X-ray structural studies of S centrosymmetric N ₂ S ₂ or N ₂ S ₂ O ₂ donor Schiff base ligand and its binuclear transition metal complexes. Journal of Molecular Structure, 2021, 1244, 130974.	1.8	10
44	Synthesis, characterization, DFT-TDDFT calculations and optical properties of a novel pyrazole-1,2,3-triazole hybrid thin film. Optik, 2021, 247, 167971.	1.4	13
45	Combined experimental and TDDFT computations for the structural and optical properties for poly (ortho phenylene diamine) thin film with different surfactants. Journal of Materials Science: Materials in Electronics, 2021, 32, 5489-5503.	1.1	8
46	Oxidation process and kinetics of bromothymol blue by alkaline permanganate. International Journal of Chemical Kinetics, 2021, 53, 675-684.	1.0	11
47	HCl-doped poly (para-nitro aniline-co-para-toluidine) thin film as a gamma ray dosimeter. Radiation Effects and Defects in Solids, 2021, 176, 940-954.	0.4	1
48	Thermal Analysis of a Metal-Organic Framework Zn _x Co _{1-x} -ZIF-8 for Recent Applications. Polymers, 2021, 13, 4051.	2.0	11
49	Fabrication and Characterization of Polypyrrole/Multi-Walled Carbon Nanotubes Thin Films Using Thermal Evaporation. Polymers, 2021, 13, 4045.	2.0	4
50	Synthesis and characterization of Co-Al mixed oxide nanoparticles via thermal decomposition route of layered double hydroxide. Journal of Molecular Structure, 2020, 1206, 127679.	1.8	43
51	Influence of Gamma-Irradiation on Structural, Optical and Photocatalytic Performance of TiO ₂ Nanoparticles Under Controlled Atmospheres. Journal of Electronic Materials, 2020, 49, 1904-1921.	1.0	32
52	Synthesis, characterization and DFT molecular modeling of doped poly (para-nitroaniline-co-para-toluidine) thin film for optoelectronic devices applications. Optical Materials, 2020, 99, 109593.	1.7	51
53	Doped poly (o-phenylenediamine -co- p-toluidine) fibers for polymer solar cells applications. Solar Energy, 2020, 195, 194-209.	2.9	52
54	Performance estimation of a mini-passive solar still via machine learning. Renewable Energy, 2020, 162, 489-503.	4.3	26

#	ARTICLE	IF	CITATIONS
55	Kinetics and mechanism of oxidation of bromothymol blue by permanganate ion in acidic medium: Application to textile industrial wastewater treatment. <i>Journal of Molecular Liquids</i> , 2020, 318, 114041.	2.3	20
56	Combined experimental and DFT-TDDFT computational studies of doped [PoDA+PpT/ZrO ₂]C nanofiber composites and its applications. <i>Vacuum</i> , 2020, 182, 109777.	1.6	47
57	Facile synthesis of spin-coated poly (4-nitroaniline) thin film: Structural and optical properties. <i>Optical Materials</i> , 2020, 109, 110378.	1.7	32
58	Synthesis, DFT calculations, and heat transfer performance large-surface TiO ₂ : ethylene glycol nanofluid and coolant applications. <i>European Physical Journal Plus</i> , 2020, 135, 1.	1.2	45
59	Structure, DFT calculations and heat transfer enhancement in [ZnO/PG+H ₂ O]C hybrid nanofluid flow as a potential solar cell coolant application in a double-tube. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 15243-15257.	1.1	43
60	Novel synthesis, DFT and investigation of the optical and electrical properties of carboxymethyl cellulose/thiobarbituric acid/copper oxide [CMC+TBA/CuO]C nanocomposite film. <i>Journal of Polymer Research</i> , 2020, 27, 1.	1.2	55
61	Polymer solar cell based on doped o-anthranilic acid and o-aminophenol copolymer. <i>Optical Materials</i> , 2020, 104, 109947.	1.7	39
62	Synthesis, DFT studies, fabrication, and optical characterization of the [ZnCMC] ^{TF} polymer (organic/inorganic) as an optoelectronic device. <i>New Journal of Chemistry</i> , 2020, 44, 8621-8637.	1.4	66
63	Improvement of the thermal stability and optical properties for poly (ortho phenylene diamine) using soft templates. <i>Journal of Molecular Structure</i> , 2020, 1221, 128792.	1.8	15
64	Structural and optical characterization of novel [ZnKCMC]TF for optoelectronic device applications. <i>Journal of Materials Science: Materials in Electronics</i> , 2020, 31, 8690-8704.	1.1	34
65	Synthesis, characterization, and DFT modeling of novel organic compound thin films derived from 2-amino-4-(2-hydroxy-3-methoxyphenyl)-4H-thiazolo[3,2-a][1,3,5]triazin-6(7H)-one. <i>Optical Materials</i> , 2020, 105, 109915.	1.7	59
66	Structure and photoluminescence characteristics of mixed nickel–chromium oxides nanostructures. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	1.1	40
67	Effects of neutron–gamma radiation on the free radical contents in epoxy resin: upconversion luminescence and structural stabilization. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	1.1	44
68	Prediction of Molecular Characteristics and Molecular Spectroscopy of Hydrochloric Acid-Doped Poly(ortho-Anthranilic Acid-co-para Nitroaniline) Thin Film. <i>Journal of Electronic Materials</i> , 2019, 48, 8107-8115.	1.0	17
69	SQLM for external yield stress effect on 3D MHD nanofluid flow in a porous medium. <i>Physica Scripta</i> , 2019, 94, 105208.	1.2	33
70	Synthesis and characterization of mixed metal oxide nanoparticles derived from Co–Cr layered double hydroxides and their thin films. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 11627-11642.	1.1	41
71	Fabrication of heterojunction diode using doped-poly (ortho-aminophenol) for solar cells applications. <i>Physica B: Condensed Matter</i> , 2019, 566, 6-16.	1.3	48
72	Structural, DFT, optical dispersion characteristics of novel [DPPA-Zn-MR(Cl)(H ₂ O)] nanostructured thin films. <i>Materials Chemistry and Physics</i> , 2019, 232, 180-192.	2.0	50

#	ARTICLE	IF	CITATIONS
73	Doped-poly (para-nitroaniline- co-aniline): Synthesis, semiconductor characteristics, density, functional theory and photoelectric properties. Journal of Alloys and Compounds, 2019, 789, 670-683.	2.8	59
74	Density functional theory for investigation of optical and spectroscopic properties of zinc-quinonoid complexes as semiconductor materials. Structural Chemistry, 2019, 30, 1365-1380.	1.0	41
75	FEM for Blood-Based SWCNTs Flow Through a Circular Cylinder in a Porous Medium with Electromagnetic Radiation*. Communications in Theoretical Physics, 2019, 71, 1425.	1.1	52
76	Synthesis, structural and optical properties of gold nanoparticle-graphene-selenocysteine composite bismuth ultrathin film electrode and its application to Pb(II) and Cd(II) determination. Arabian Journal of Chemistry, 2019, 12, 2853-2863.	2.3	42
77	Synthesis and optoelectronic properties of conductive nanostructured poly(aniline-co-o-aminophenol) thin film. Journal of Materials Science: Materials in Electronics, 2018, 29, 8431-8445.	1.1	43
78	Structural, optical, and electrical properties of multi-walled carbon nanotubes/polyaniline/Fe ₃ O ₄ ternary nanocomposites thin film. Synthetic Metals, 2018, 238, 1-13.	2.1	75
79	Spectroscopic, DFT, optical band gap, powder X-ray diffraction and bleomycin-dependant DNA studies of Co(II), Ni(II) and Cu(II) complexes derived from macrocyclic Schiff base. Journal of Molecular Structure, 2018, 1165, 177-195.	1.8	53
80	New organic semiconductor thin film derived from p-toluidine monomer. Journal of Molecular Structure, 2018, 1156, 83-90.	1.8	50
81	Eco-friendly method to synthesize and characterize 2D nanostructured (1,2-bis(diphenyl-phosphino)ethyl) tungsten tetracarbonyl methyl red/copper oxide di-layer thin films. Bulletin of Materials Science, 2018, 41, 1.	0.8	14
82	Facile synthesis and fabrication of a poly(ortho-anthranilic acid) emeraldine salt thin film for solar cell applications. New Journal of Chemistry, 2018, 42, 10386-10395.	1.4	48
83	Synthesis, characterization and optical properties of multi-walled carbon nanotubes/aniline-o-anthranilic acid copolymer nanocomposite thin films. Journal of Materials Science: Materials in Electronics, 2018, 29, 16702-16714.	1.1	33
84	Poly(o-phenylenediamine) thin film for organic solar cell applications. Journal of Solid State Electrochemistry, 2018, 22, 3673-3687.	1.2	58
85	Elucidation of Electrical and Optical Parameters of Poly(o-anthranilic acid)-poly(o-amino) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 5 and Materials, 2018, 28, 2572-2583.	1.9	47
86	Conductive thin films based on poly (aniline-co- o -anthranilic acid)/magnetite nanocomposite for photovoltaic applications. Synthetic Metals, 2017, 231, 34-43.	2.1	39
87	The effects of annealing temperature on the structural properties and optical constants of a novel DPEA-MR-Zn organic crystalline semiconductor nanostructure thin films. Optical Materials, 2017, 73, 138-153.	1.7	42
88	Determination of cadmium and lead in perch fish samples by differential pulse anodic stripping voltammetry and furnace atomic absorption spectrometry. Arabian Journal of Chemistry, 2017, 10, S347-S354.	2.3	30
89	Synthesis, spectral, thermal, optical dispersion and dielectric properties of nanocrystalline dimer complex (PEPyrâ€“diCd) thin films as novel organic semiconductor. Bulletin of Materials Science, 2016, 39, 209-222.	0.8	46
90	Simultaneous determination of Cd(II) and Cu(II) using stripping voltammetry in groundwater, soil and Alhagi maurorum plants in industrial and urban areas in Northern Border, Saudi Arabia with luminol as a chelating agent. Water Science and Technology, 2015, 72, 1127-1139.	1.2	7

