

Omar A Al-Hartomy

List of Publications by Year
in descending order

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115
papers

2,036
citations

257429
24
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315719
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117
all docs

117
docs citations

117
times ranked

2183
citing authors

#	ARTICLE	IF	CITATIONS
1	Combined effect of Phoenix dactylifera biodiesel and multiwalled carbon nanotubeâ€“titanium dioxide nanoparticles for modified diesel engines. International Journal of Environmental Science and Technology, 2022, 19, 515-540.	3.5	12
2	Ionized cocatalyst to promote CO ₂ photoreduction activity over coreâ€“triple-shell ZnO hollow spheres. Rare Metals, 2022, 41, 1077-1079.	7.1	20
3	Characteristics, properties, synthesis and advanced applications of 2D graphdiyne <i>versus</i> graphene. Materials Chemistry Frontiers, 2022, 6, 528-552.	5.9	14
4	Two-dimensional material-based printed photonics: a review. 2D Materials, 2022, 9, 042003.	4.4	5
5	Synthesis, Nanoformulations, and In Vitro Anticancer Activity of N-Substituted Side Chain Neocryptolepine Scaffolds. Molecules, 2022, 27, 1024.	3.8	5
6	Vanadium Disulfide Nanosheets Synthesized by Facile Liquidâ€“Phase Exfoliation for Ammonia Detection with High Selectivity. Advanced Electronic Materials, 2022, 8, .	5.1	9
7	Molecular engineering control defects within carbon nitride for optimized co-catalyst Pt induced photocatalytic CO ₂ reduction and NO ₂ oxidation reaction. International Journal of Hydrogen Energy, 2022, 47, 14280-14293.	7.1	24
8	Twoâ€“Dimensional Nitrogenâ€“Doped Ti₃C₂ Promoted Catalysis Performance of Silver Nanozyme for Ultrasensitive Detection of Hydrogen Peroxide. ChemElectroChem, 2022, 9, .	3.4	8
9	New insights to atherosclerosis management: Role of nanomaterials. Applied Materials Today, 2022, 27, 101466.	4.3	3
10	TRAVELING WAVE SOLUTIONS TO A MATHEMATICAL MODEL OF FRACTIONAL ORDER (2+1)-DIMENSIONAL BREAKING SOLITON EQUATION. Fractals, 2022, 30, .	3.7	5
11	A facile molecular aggregation of isoquinoline based g-C ₃ N ₄ for high photocatalytic performance under visible light illumination. Materials Research Bulletin, 2022, 152, 111865.	5.2	27
12	A CRISPR/Cas12a-empowered surface plasmon resonance platform for rapid and specific diagnosis of the Omicron variant of SARS-CoV-2. National Science Review, 2022, 9, .	9.5	56
13	Optical-intensity modulators with PbTe thermoelectric nanopowders for ultrafast photonics. Applied Materials Today, 2022, 28, 101546.	4.3	38
14	Enhanced photocatalytic overall water splitting from an assembly of donorâ€“acceptor conjugated polymeric carbon nitride. Journal of Colloid and Interface Science, 2022, 624, 411-422.	9.4	26
15	Microwave Irradiation and Glutamic Acid-Assisted Phytotreatment of Textile and Surgical Industrial Wastewater by Sorghum. Molecules, 2022, 27, 4004.	3.8	3
16	Silver Nanowires Digital Printing for Inverted Flexible Semiâ€“Transparent Solar Cells. Advanced Engineering Materials, 2021, 23, 2001305.	3.5	16
17	Solvothermal synthesis of kesterite Cu ₂ ZnSnS ₄ nanocrystals: Influence of glycine complexing agent concentration on properties. Ceramics International, 2021, 47, 11568-11573.	4.8	8
18	Digital printing of a novel electrode for stable flexible organic solar cells with a power conversion efficiency of 8.5%. Scientific Reports, 2021, 11, 14212.	3.3	10

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19	Synthesis of Ti3C2Fx MXene with controllable fluorination by electrochemical etching for lithium-ion batteries applications. <i>Ceramics International</i> , 2021, 47, 28642-28649.	4.8	38
20	MXene-based mixed-dimensional Schottky heterojunction towards self-powered flexible high-performance photodetector. <i>Materials Today Physics</i> , 2021, 21, 100479.	6.0	13
21	2D materials for bone therapy. <i>Advanced Drug Delivery Reviews</i> , 2021, 178, 113970.	13.7	23
22	From phosphorus to phosphorene: Applications in disease theranostics. <i>Coordination Chemistry Reviews</i> , 2021, 446, 214110.	18.8	77
23	Advanced opportunities and insights on the influence of nitrogen incorporation on the physico-/electro-chemical properties of robust electrocatalysts for electrocatalytic energy conversion. <i>Coordination Chemistry Reviews</i> , 2021, 449, 214209.	18.8	28
24	Tailoring the ultrafast and nonlinear photonics of MXenes through elemental replacement. <i>Nanoscale</i> , 2021, 13, 15891-15898.	5.6	11
25	Molecular Dynamics and Energy Transfer in Pure Aniline and Rh101⁺/Aniline Mixed Solution Measured by Ultrafast Spectroscopy. <i>ChemistrySelect</i> , 2021, 6, 10998-11001.	1.5	0
26	Mathematical modeling and optimal control of the COVID-19 dynamics. <i>Results in Physics</i> , 2021, 31, 105028.	4.1	82
27	Strategic Design of Intelligent-Responsive Nanogel Carriers for Cancer Therapy. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 54621-54647.	8.0	43
28	CdS@CdSe Core/Shell Quantum Dots for Highly Improved Self-Powered Photodetection Performance. <i>Inorganic Chemistry</i> , 2021, 60, 18608-18613.	4.0	28
29	Size-controlling of Cu ₂ ZnSnS ₄ nanoparticles: Effects of stabilizing/reducing agents on material properties. <i>Results in Physics</i> , 2020, 19, 103407.	4.1	6
30	Highly conductive polyaniline/graphene nano-platelet composite sensor towards detection of toluene and benzene gases. <i>Applied Physics A: Materials Science and Processing</i> , 2019, 125, 1.	2.3	36
31	Microwave properties of natural rubber based composites containing carbon black-magnetite hybrid fillers. <i>Science and Engineering of Composite Materials</i> , 2018, 25, 611-620.	1.4	2
32	Preparation and Characterisation of Natural Rubber Composites Comprising Hybrid Fillers of Activated Carbon / in situ Synthesised Magnetite. <i>Journal of Rubber Research (Kuala Lumpur, Malaysia)</i> , 2018, 21, 94-118.	1.1	3
33	Investigation on the Influence of Various Kinds of Soaps on the Mechanical Properties of Silica Filled Composites Based on Natural Rubber. <i>Polymers and Polymer Composites</i> , 2018, 26, 325-334.	1.9	2
34	Highly sensitive ethylene glycol-doped PEDOTâ€“PSS organic thin films for LPG sensing. <i>RSC Advances</i> , 2018, 8, 18074-18083.	3.6	40
35	Characterization of hybrid fillers based on carbon black of different types obtained by impregnation. <i>Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications</i> , 2017, 231, 584-599.	1.1	4
36	Microemulsion synthesis, structural characterization and dielectric properties of Ba 1-x Pb x ZrO 3 (0.05 â€” x â€” 0.20) nanoparticles. <i>Materials Research Bulletin</i> , 2017, 89, 185-192.	5.2	10

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37	Enhancing antenna performance and SAR reduction by a conductive composite loaded with carbon-silica hybrid filler. AEU - International Journal of Electronics and Communications, 2017, 72, 184-191.	2.9	19
38	Optical properties of nanostructured ruthenium dioxide thin films via sol-gel approach. Journal of Materials Science: Materials in Electronics, 2017, 28, 52-59.	2.2	17
39	Reverse micellar synthesis, structural characterization and dielectric properties of Sr-doped BaZrO ₃ nanoparticles. Materials Chemistry and Physics, 2017, 185, 31-38.	4.0	13
40	Solvothermal synthesis of Zn-Mn O nanoparticles using oxalate precursor route: Optical and magnetic properties. Arabian Journal of Chemistry, 2017, 10, S2138-S2144.	4.9	3
41	Effect of Silica Phase on Certain Properties of Natural Rubber Based Composites Reinforced by Carbon Black/Silica Hybrid Fillers. Progress in Rubber, Plastics and Recycling Technology, 2017, 33, 221-242.	1.8	3
42	Effect of carbon-silica dual phase filler obtained by impregnation method on the properties of SBR-based composites. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2016, 230, 116-120.	1.1	4
43	Synthesis, characterization, dielectric and rectification properties of PANI/Nd ₂ O ₃ :Al ₂ O ₃ nanocomposites. Polymers for Advanced Technologies, 2016, 27, 1064-1071.	3.2	28
44	Conductivity and dielectric properties of PEDOT-PSS doped DMSO nano composite thin films. Journal of Materials Science: Materials in Electronics, 2016, 27, 8332-8339.	2.2	47
45	Microwave properties of natural rubber based composites comprising conductive carbon black/silica hybrid fillers. Journal of Polymer Research, 2016, 23, 1.	2.4	7
46	Influence of bis(triethoxysilylpropyl) tetrasulfide amount on the properties of silica-filled epoxidized natural rubber-based composites. Science and Engineering of Composite Materials, 2016, 23, 357-362.	1.4	0
47	Dielectric and microwave properties of elastomer composites loaded with carbon-silica hybrid fillers. Journal of Applied Polymer Science, 2016, 133, .	2.6	6
48	Conductive carbon black/magnetite hybrid fillers in microwave absorbing composites based on natural rubber. Composites Part B: Engineering, 2016, 96, 231-241.	12.0	80
49	Influence of carbon black/silica ratio on the physical and mechanical properties of composites based on epoxidized natural rubber. Journal of Composite Materials, 2016, 50, 377-386.	2.4	16
50	Preparation and Characterization of Natural Rubber Composites Comprising Conductive Carbon Black/Magnetite Hybrid Fillers Obtained by Impregnation Technology. Polymer-Plastics Technology and Engineering, 2016, 55, 1344-1356.	1.9	2
51	Synthesis, characterization, and dielectric studies of ortho-chloropolyaniline-graphite oxide composites. Journal of Materials Research, 2015, 30, 2310-2318.	2.6	8
52	Effect of the Carbon-Silica Reinforcing Filler Obtained from the Pyrolysis-Cum-Water Vapour of Waste Green Tyres upon the Properties of Natural Rubber Based Composites. Progress in Rubber, Plastics and Recycling Technology, 2015, 31, 25-41.	1.8	7
53	Frequency Dependent Dielectric and I-V Properties of Polyaniline/Ta ₂ O ₅ Composites. Ferroelectrics, Letters Section, 2015, 42, 122-131.	1.0	1
54	Humidity sensing properties of surface modified polyaniline ZnO nanocomposites. Sensor Review, 2015, 35, 366-373.	1.8	4

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55	Characterization of carbon silica hybrid fillers obtained by pyrolysis of waste green tires by the STEM-EDX method. <i>Materials Characterization</i> , 2015, 101, 90-96.	4.4	8
56	Comparison of the Dielectric Thermal Properties and Dynamic Mechanical Thermal Properties of Natural Rubber-Based Composites Comprising Multiwall Carbon Nanotubes and Graphene Nanoplatelets. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2015, 23, 1001-1007.	2.1	8
57	Low temperature chemical synthesis and comparative studies of silver oxide nanoparticles. <i>Journal of Molecular Structure</i> , 2015, 1084, 9-15.	3.6	25
58	Novel polyvinyl alcohol/silver hybrid nanocomposites for high performance electromagnetic wave shielding effectiveness. <i>Microsystem Technologies</i> , 2015, 21, 859-868.	2.0	25
59	Synthesis and characterization of poly(vinyl alcohol)-acid salt polymer electrolytes. <i>Materials Express</i> , 2014, 4, 483-490.	0.5	11
60	Effects of Multi-walled Carbon Nanotubes on the Dielectric and Microwave Properties of Natural Rubber-based Composites. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2014, 22, 618-629.	2.1	6
61	Improvement of photoresponse properties of NiO/p-Si photodiodes by copper dopant. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2014, 56, 288-295.	2.7	38
62	Effect of gold ion concentration on size and properties of gold nanoparticles in TritonX-100 based inverse microemulsions. <i>Applied Nanoscience (Switzerland)</i> , 2014, 4, 491-498.	3.1	49
63	Semiconducting properties of Al doped ZnO thin films. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 131, 512-517.	3.9	129
64	Fabrication and gas sensitivity in heterostructures of ortho-chloropolyaniline-ZnO nanocomposites. <i>RSC Advances</i> , 2014, 4, 39844-39852.	3.6	11
65	The electrical characterization of ZnO/GaAs heterojunction diode. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2014, 64, 240-245.	2.7	23
66	Dielectric and Microwave Properties of Fullerenes Containing Natural Rubber-based Nanocomposites. <i>Fullerenes Nanotubes and Carbon Nanostructures</i> , 2014, 22, 332-345.	2.1	4
67	High performance organic-on-inorganic hybrid photodiodes based on organic semiconductor-graphene oxide blends. <i>Synthetic Metals</i> , 2014, 195, 217-221.	3.9	29
68	Dielectric and microwave properties of polyvinyl chloride/graphite/nickel composites and its applications. <i>Journal of Thermoplastic Composite Materials</i> , 2014, 27, 528-540.	4.2	5
69	On the prospects of conducting polyaniline/natural rubber composites for electromagnetic shielding effectiveness applications. <i>Journal of Thermoplastic Composite Materials</i> , 2014, 27, 765-782.	4.2	14
70	Synthesis, characterization, photocatalytic and photovoltaic performance of Ag-doped TiO ₂ loaded on the Pt-carbon spheres. <i>Materials Science in Semiconductor Processing</i> , 2014, 27, 71-78.	4.0	9
71	Synthesis and characterisation of double-walled carbon nanotube/cobalt oxide nanocomposite for the application of anode material for lithium ion batteries. <i>International Journal of Nanoparticles</i> , 2014, 7, 133.	0.3	2
72	Metal Organic Precursor Route for Pb-Substituted BaZrO ₃ Nanoceramics: Structural Characterization and Properties. <i>Advanced Science Letters</i> , 2014, 20, 1354-1359.	0.2	9

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73	Preparation of Tungsten Trioxide Nanorods by Hydrothermal Route: W^{6+} -Tungsten Trioxide Nanorods/ SiO_2 -Silicon p-n Junction. Journal of Nanoelectronics and Optoelectronics, 2014, 9, 327-333.	0.5	9
74	Electromagnetic wave shielding and microwave absorbing properties of hybrid epoxy resin/foiled graphite nanocomposites. Journal of Applied Polymer Science, 2013, 127, 2227-2234.	2.6	30
75	Novel photoconductive Ag/nanostructure ruthenium oxide/p-type silicon Schottky barrier diode by sol-gel method. Journal of Sol-Gel Science and Technology, 2013, 67, 368-375.	2.4	15
76	A pentacene thin film transistor with good performance using sol-gel derived SiO_2 gate dielectric layer. Solid State Sciences, 2013, 16, 111-116.	3.2	14
77	Effect of nanocrystallization on the structural and electrical conductivity enhancement of vanadium-based glasses. Journal of Materials Science, 2013, 48, 3067-3074.	3.7	2
78	Effect of Matrix Chemical Nature on the Properties of Composites for Microwave Absorbers. Polymer-Plastics Technology and Engineering, 2013, 52, 1113-1121.	1.9	9
79	Synthesis, magnetic and ethanol gas sensing properties of semiconducting magnetite nanoparticles. Solid State Sciences, 2013, 19, 111-116.	3.2	19
80	Threshold voltage under white light illumination of zinc oxide based TFT in saturation regime. Superlattices and Microstructures, 2013, 62, 12-20.	3.1	6
81	Controlling of photoresponse properties of pentacene thin film phototransistors by dielectric layer thickness and channel widths. Synthetic Metals, 2013, 179, 94-115.	3.9	12
82	Characterization and modeling of TIPS-pentacene-poly(3-hexyl) thiophene blend organic thin film transistor. Synthetic Metals, 2013, 185-186, 153-158.	3.9	10
83	Controlling of conduction mechanism and electronic parameters of silicon-metal junction by mixed Methylene Blue/2,7-dichlorofluorescein. Microelectronics Reliability, 2013, 53, 1901-1906.	1.7	21
84	Comparison of microwave absorbing properties of chloroprene rubber composites containing carbon black and nickel/cobalt powder. Journal of Elastomers and Plastics, 2013, 45, 471-485.	1.5	6
85	Effect of high manganese substitution at ZnO host lattice using solvothermal method: Structural characterization and properties. Materials Chemistry and Physics, 2013, 138, 519-528.	4.0	20
86	Dielectric and microwave properties of natural rubber-based composites tailored by the fillers specific features. Proceedings of the Institution of Mechanical Engineers, Part L: Journal of Materials: Design and Applications, 2013, 227, 168-176.	1.1	0
87	Dielectric properties of $\text{Ba}_{1-x}\text{Sr}_x\text{ZrO}_3$ ($0 \leq x \leq 1$) TiO_2 0.784314 1070-1077.	2.6	22
88	Effect of carbon nanotubes and graphene nanoplatelets on the dielectric and microwave properties of natural rubber composites. Advanced Composite Materials, 2013, 22, 361-376.	1.9	16
89	Dielectric and microwave properties of carbon nanotubes/carbon black filled natural rubber composites. Plastics, Rubber and Composites, 2012, 41, 408-412.	2.0	5
90	Electrocatalytic Reduction of Oxygen on Ni/Graphite Nanoparticles. Journal of Fuel Cell Science and Technology, 2012, 9, .	0.8	2

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91	Synthesis, characterization, and dielectric properties of nanocrystalline $\text{Ba}_{1-x}\text{Pb}_x\text{ZrO}_3$ ($0 \leq x \leq 0.75$) by polymeric citrate precursor route. <i>Journal of Materials Research</i> , 2012, 27, 2479-2488.	2.6	15
92	Controlling of crystal size and optical band gap of CdO nanopowder semiconductors by low and high Fe contents. <i>Journal of Electroceramics</i> , 2012, 29, 155-162.	2.0	47
93	Synthesis and characterization of nanostructured aluminum borate by sol-gel method. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 64, 100-103.	2.4	17
94	Fabrication and electrical characterization of transparent NiO/ZnO p-n junction by the sol-gel spin coating method. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 64, 219-223.	2.4	19
95	Optical properties of nanostructure boron doped NiO thin films. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 64, 728-733.	2.4	37
96	Photodiodes based on graphene oxide-silicon junctions. <i>Solar Energy</i> , 2012, 86, 2961-2966.	6.1	93
97	Dynamic charge transport in pentacene and zinc oxide thin-film transistors: Dark and UV illumination conditions. <i>Synthetic Metals</i> , 2012, 162, 1681-1688.	3.9	5
98	Dynamic mechanical thermal analysis and dielectric thermal analysis of siloxane rubber-based composites filled with carbon black. <i>Journal of Composite Materials</i> , 2012, 46, 1765-1770.	2.4	6
99	Influence of matrices chemical nature on the dynamic mechanical and dielectric properties of rubber composites comprising conductive carbon black. <i>Journal of Polymer Research</i> , 2012, 19, 1.	2.4	3
100	Properties of Natural Rubber-Based Composites Containing Fullerene. <i>International Journal of Polymer Science</i> , 2012, 2012, 1-8.	2.7	16
101	Some Factors Determining the Volume Resistivity of Filled Natural-Rubber-Based Nanocomposites. <i>Progress in Rubber, Plastics and Recycling Technology</i> , 2012, 28, 95-110.	1.8	5
102	Novel electromagnetic interference shielding effectiveness in the microwave band of magnetic nitrile butadiene rubber/magnetite nanocomposites. <i>Journal of Applied Polymer Science</i> , 2012, 125, 2604-2613.	2.6	30
103	A novel synthesis and optical properties of cuprous oxide nano octahedrons via microwave hydrothermal route. <i>Journal of Sol-Gel Science and Technology</i> , 2012, 63, 187-193.	2.4	8
104	Thermophysical properties of foliated graphite/nickel reinforced polyvinyl chloride nanocomposites. <i>Journal of Applied Polymer Science</i> , 2012, 124, 1144-1153.	2.6	7
105	A DNA Biosensor Based Interface States of a Metal-Insulator-Semiconductor Diode for Biotechnology Applications. <i>Acta Physica Polonica A</i> , 2012, 121, 673-677.	0.5	8
106	Pressure Sensors Based on Polyvinyl Chloride/Graphite/Nickel Nanocomposites. <i>Journal of Elastomers and Plastics</i> , 2011, 43, 137-153.	1.5	6
107	Dielectric and Microwave Properties of Siloxane Rubber/Carbon Black Nanocomposites and Their Correlation. <i>International Journal of Polymer Science</i> , 2011, 2011, 1-7.	2.7	10
108	Influence of Carbon Black Structure and Specific Surface Area on the Mechanical and Dielectric Properties of Filled Rubber Composites. <i>International Journal of Polymer Science</i> , 2011, 2011, 1-8.	2.7	24

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109	Synthesis of Double Wall Carbon Nanotubes Using Sulfur as Catalyst. Journal of Electronic Packaging, Transactions of the ASME, 2011, 133, .	1.8	0
110	Influence of graphite nanosheets on the structure and properties of PVC-based nanocomposites. Journal of Applied Polymer Science, 2011, 120, 3628-3634.	2.6	25
111	New Resistive Switching and Self-Regulating Heating in Foliated Graphite/Nickel Polyvinyl Chloride Nanocomposites. Journal of Nanomaterials, 2011, 2011, 1-10.	2.7	2
112	Preparation of Copper Oxide (CuO) Nanoparticles and their Bactericidal Activity. International Journal of Manufacturing, Materials, and Mechanical Engineering, 2011, 1, 58-64.	0.4	1
113	Investigation of the 4Hâ€SiC surface. Applied Surface Science, 2008, 254, 8098-8105.	6.1	25
114	Role of triethanolamine in forming Cu ₂ ZnSnS ₄ nanoparticles during solvothermal processing for solar cell applications. International Journal of Energy Research, 0, , .	4.5	3
115	Two-dimensional Material based Printed Photonics: A Review. 2D Materials, 0, , .	4.4	0