Mohammad Ajmal Ali

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7445244/publications.pdf

Version: 2024-02-01

112 papers 2,599 citations

28 h-index 233125 45 g-index

112 all docs

112 docs citations

112 times ranked 3343 citing authors

#	Article	IF	CITATIONS
1	Silver nanoparticles synthesized from Adenium obesum leaf extract induced DNA damage, apoptosis and autophagy via generation of reactive oxygen species. Colloids and Surfaces B: Biointerfaces, 2016, 141, 158-169.	2.5	142
2	Unravelling lead antiviral phytochemicals for the inhibition of SARS-CoV-2 Mpro enzyme through in silico approach. Life Sciences, 2020, 255, 117831.	2.0	132
3	Antimicrobial efficacy of green synthesized drug blended silver nanoparticles against dental caries and periodontal disease causing microorganisms. Materials Science and Engineering C, 2015, 56, 374-379.	3.8	108
4	An Updated Review of Computer-Aided Drug Design and Its Application to COVID-19. BioMed Research International, 2021, 2021, 1-18.	0.9	95
5	Detection of Pesticide Residues (Fenitrothion) in Fruit Samples Based On Niobium Carbide@Molybdenum Nanocomposite: An Electrocatalytic Approach. Analytica Chimica Acta, 2018, 1030, 52-60.	2.6	80
6	The changing epitome of species identification – DNA barcoding. Saudi Journal of Biological Sciences, 2014, 21, 204-231.	1.8	77
7	Palladium nanoparticles decorated on activated fullerene modified screen printed carbon electrode for enhanced electrochemical sensing of dopamine. Journal of Colloid and Interface Science, 2015, 448, 251-256.	5.0	74
8	Green synthesized silver nanoparticles decorated on reduced graphene oxide for enhanced electrochemical sensing of nitrobenzene in waste water samples. RSC Advances, 2015, 5, 31139-31146.	1.7	73
9	Green biosynthesis of silver nanoparticles and nanomolar detection of p-nitrophenol. Journal of Solid State Electrochemistry, 2014, 18, 1847-1854.	1.2	70
10	A highly sensitive and selective electrochemical determination of non-steroidal prostate anti-cancer drug nilutamide based on f-MWCNT in tablet and human blood serum sample. Journal of Colloid and Interface Science, 2017, 487, 289-296.	5.0	61
11	Determination of Neurotransmitter in Biological and Drug Samples Using Gold Nanorods Decorated <i>f < /i > MWCNTs Modified Electrode. Journal of the Electrochemical Society, 2018, 165, B370-B377.</i>	1.3	56
12	Sonochemical synthesis of bismuth(III) oxide decorated reduced graphene oxide nanocomposite for detection of hormone (epinephrine) in human and rat serum. Ultrasonics Sonochemistry, 2019, 51, 103-110.	3.8	56
13	Direct electrochemistry of glucose oxidase immobilized on ZrO ₂ nanoparticles-decorated reduced graphene oxide sheets for a glucose biosensor. RSC Advances, 2014, 4, 30358-30367.	1.7	51
14	Enhanced electrocatalytic oxidation of isoniazid at electrochemically modified rhodium electrode for biological and pharmaceutical analysis. Colloids and Surfaces B: Biointerfaces, 2014, 121, 444-450.	2.5	50
15	Hierarchically structured CuFe ₂ O ₄ ND@RGO composite for the detection of oxidative stress biomarker in biological fluids. Inorganic Chemistry Frontiers, 2018, 5, 944-950.	3.0	49
16	An electrocatalytic oxidation and voltammetric method using a chemically reduced graphene oxide film for the determination of caffeic acid. Journal of Colloid and Interface Science, 2014, 423, 33-40.	5.0	48
17	A sensitive and selective enzyme-free amperometric glucose biosensor using a composite from multi-walled carbon nanotubes and cobalt phthalocyanine. RSC Advances, 2015, 5, 26762-26768.	1.7	46
18	Reduced graphene oxide supported raspberry-like SrWO4 for sensitive detection of catechol in green tea and drinking water samples. Journal of the Taiwan Institute of Chemical Engineers, 2018, 89, 215-223.	2.7	46

#	ARTICLE	IF	CITATIONS
19	Sonochemically recovered silver oxide nanoparticles from the wastewater of photo film processing units as an electrode material for supercapacitor and sensing of 2, 4, 6-trichlorophenol in agricultural soil samples. Ultrasonics Sonochemistry, 2019, 50, 255-264.	3.8	46
20	Determination of 8-hydroxy-2′-deoxyguanosine oxidative stress biomarker using dysprosium oxide nanoparticles@reduced graphene oxide. Inorganic Chemistry Frontiers, 2018, 5, 2885-2892.	3.0	45
21	Synthesis and application of bismuth ferrite nanosheets supported functionalized carbon nanofiber for enhanced electrochemical detection of toxic organic compound in water samples. Journal of Colloid and Interface Science, 2018, 514, 59-69.	5.0	45
22	Simultaneous determination of dopamine and uricÂacid in the presence of high ascorbic acid concentration using cetyltrimethylammonium bromide–polyaniline/activated charcoal composite. RSC Advances, 2016, 6, 100605-100613.	1.7	40
23	Highly sensing graphene oxide/poly-arginine-modified electrode for the simultaneous electrochemical determination of buspirone, isoniazid and pyrazinamide drugs. Ionics, 2015, 21, 547-555.	1.2	38
24	Flame synthesis of nitrogen doped carbon for the oxygen reduction reaction and non-enzymatic methyl parathion sensor. RSC Advances, 2016, 6, 71507-71516.	1.7	38
25	Ultrasonic-assisted preparation and characterization of magnetic ZnFe2O4/g-C3N4 nanomaterial and their applications towards electrocatalytic reduction of 4-nitrophenol. Ultrasonics Sonochemistry, 2020, 68, 105071.	3.8	38
26	Metallated porphyrin noncovalent interaction with reduced graphene oxideâ€modified electrode for amperometric detection of environmental pollutant hydrazine. Applied Organometallic Chemistry, 2017, 31, e3703.	1.7	36
27	A novel hybrid construction of MnMoO4 nanorods anchored graphene nanosheets; an efficient electrocatalyst for the picomolar detection of ecological pollutant ornidazole in water and urine samples. Chemosphere, 2021, 273, 129665.	4.2	35
28	Molecular docking and dynamics simulation study of bioactive compounds from Ficus carica L. with important anticancer drug targets. PLoS ONE, 2021, 16, e0254035.	1.1	32
29	Mechanochemical synthesis of ternary heterojunctions TiO2(A)/TiO2(R)/ZnO and TiO2(A)/TiO2(R)/SnO2 for effective charge separation in semiconductor photocatalysis: A comparative study. Environmental Research, 2022, 203, 111841.	3.7	32
30	Facile synthesis of copper ferrite nanoparticles with chitosan composite for high-performance electrochemical sensor. Ultrasonics Sonochemistry, 2020, 63, 104902.	3.8	30
31	Structure-based virtual screening of phytochemicals and repurposing of FDA approved antiviral drugs unravels lead molecules as potential inhibitors of coronavirus 3C-like protease enzyme. Journal of King Saud University - Science, 2020, 32, 2845-2853.	1.6	30
32	Determination of the antioxidant propyl gallate in meat by using a screen-printed electrode modified with CoSe2 nanoparticles and reduced graphene oxide. Mikrochimica Acta, 2018, 185, 520.	2.5	28
33	Electrochemical determination of selected antihypertensive and antituberculosis drugs at a tyrosine-modified electrode. Analytical Methods, 2014, 6, 6774-6782.	1.3	26
34	Ethnomedicinal assessment of Irula tribes of Walayar valley of Southern Western Ghats, India. Saudi Journal of Biological Sciences, 2018, 25, 760-775.	1.8	26
35	Seed Priming with Jasmonic Acid Counteracts Root Knot Nematode Infection in Tomato by Modulating the Activity and Expression of Antioxidative Enzymes. Biomolecules, 2020, 10, 98.	1.8	26
36	Development of electrochemical sensor for the determination of palladium ions (Pd2+) using flexible screen printed un-modified carbon electrode. Journal of Colloid and Interface Science, 2017, 485, 123-128.	5.0	24

#	Article	IF	CITATIONS
37	Evaluating Ternary Metal Oxide (TMO) core-shell nanocomposites for the rapid determination of the anti-neoplastic drug Chlorambucil (Leukeranâ,,¢) by electrochemical approaches. Materials Science and Engineering C, 2019, 103, 109724.	3.8	24
38	A disposable modified screen-printed electrode using egg white/ZnO rice structured composite as practical tool electrochemical sensor for formaldehyde detection and its comparative electrochemical study with Chitosan/ZnO nanocomposite. Chemosphere, 2022, 288, 132560.	4.2	23
39	Poly(basic red 9) doped functionalized multi-walled carbon nanotubes as composite films for neurotransmitters biosensors. Colloids and Surfaces B: Biointerfaces, 2014, 118, 133-139.	2.5	22
40	Electrochemical oxidation and determination of norepinephrine in the presence of acetaminophen using MnO2 nanoparticle decorated reduced graphene oxide sheets. Analytical Methods, 2014, 6, 6504-6513.	1.3	19
41	Binding of small molecules at interface of protein–protein complex – A newer approach to rational drug design. Saudi Journal of Biological Sciences, 2017, 24, 379-388.	1.8	19
42	Tailoring of bismuth vanadate impregnated on molybdenum/graphene oxide sheets for sensitive detection of environmental pollutants 2, 4, 6 trichlorophenol. Ecotoxicology and Environmental Safety, 2021, 211, 111934.	2.9	19
43	Taxonomic significance of trichomes micromorphology in cucurbits. Saudi Journal of Biological Sciences, 2011, 18, 87-92.	1.8	18
44	A Green Approach to the Synthesis of Wellâ€structured Prussian Blue Cubes for the Effective Electrocatalytic Reduction of Antiprotozoal Agent Coccidiostat Nicarbazin. Electroanalysis, 2018, 30, 1669-1677.	1.5	18
45	In silico screening of FDA approved drugs reveals ergotamine and dihydroergotamine as potential coronavirus main protease enzyme inhibitors. Saudi Journal of Biological Sciences, 2020, 27, 2674-2682.	1.8	18
46	An Amperometric Biological Toxic Hydrazine Sensor Based on Multiwalled Carbon Nanotubes and Iron Tetrasulfonated Phthalocyanine Composite Modified Electrode. Electroanalysis, 2015, 27, 1403-1410.	1.5	17
47	One-pot synthesis of three-dimensional Mn3O4 microcubes for high-level sensitive detection of head and neck cancer drug nimorazole. Journal of Colloid and Interface Science, 2017, 505, 1193-1201.	5.0	17
48	A feasible sonochemical approach to synthesize CuO@CeO2 nanomaterial and their enhanced non-enzymatic sensor performance towards neurotransmitter. Ultrasonics Sonochemistry, 2020, 63, 104903.	3.8	17
49	Ultrasonic preparation and nanosheets supported binary metal oxide nanocomposite for the effective application towards the electrochemical sensor. Ultrasonics Sonochemistry, 2020, 64, 105007.	3.8	17
50	Enzymatic glucose biosensor based on bismuth nanoribbons electrochemically deposited onÂreduced graphene oxide. Mikrochimica Acta, 2015, 182, 2165-2172.	2.5	16
51	High-performance SERS detection of pesticides using BiOCl-BiOBr@Pt/Au hybrid nanostructures on styrofoams as 3D functional substrate. Mikrochimica Acta, 2020, 187, 580.	2.5	14
52	In silico analyses of major active constituents of fingerroot (Boesenbergia rotunda) unveils inhibitory activities against SARS-CoV-2 main protease enzyme. Saudi Journal of Biological Sciences, 2022, 29, 65-74.	1.8	14
53	Reactive Oxygen Species-Mediated Cytotoxicity in Liver Carcinoma Cells Induced by Silver Nanoparticles Biosynthesized Using SchinusÂmolle Extract. Nanomaterials, 2022, 12, 161.	1.9	14
54	A non-covalent interaction of Schiff base copper alanine complex with green synthesized reduced graphene oxide for highly selective electrochemical detection of nitrite. RSC Advances, 2016, 6, 107416-107425.	1.7	13

#	Article	IF	CITATIONS
55	Synthesis and characterization of manganese diselenide nanoparticles (MnSeNPs): Determination of capsaicin by using MnSeNP-modified glassy carbon electrode. Mikrochimica Acta, 2018, 185, 313.	2.5	13
56	Platelet-structured strontium titanate perovskite decorated on graphene oxide as a nanocatalyst for electrochemical determination of neurotransmitter dopamine. New Journal of Chemistry, 2020, 44, 18431-18441.	1.4	13
57	Identification of SARS-CoV-2 inhibitors from extracts of Houttuynia cordata Thunb Saudi Journal of Biological Sciences, 2021, 28, 7517-7527.	1.8	13
58	Temperature-enabled reversible "On/Off―switch-like hazardous herbicide picloram voltammetric sensor in agricultural and environmental samples based on thermo-responsive PVCL-tethered MWCNT@Au catalyst. Journal of Hazardous Materials, 2021, 402, 123672.	6.5	13
59	Detection of real sample DNA at a cadmium sulfide – chitosan/gelatin modified electrode. Colloids and Surfaces B: Biointerfaces, 2014, 113, 85-91.	2.5	12
60	Evaluation of traditional medicinal plant, Cissus setosa Roxb. (Vitaceae) for antiulcer property. Saudi Journal of Biological Sciences, 2018, 25, 293-297.	1.8	12
61	Cytogenotoxic effects of Adenium obesum seeds extracts on breast cancer cells. Saudi Journal of Biological Sciences, 2019, 26, 547-553.	1.8	12
62	Green sonochemical synthesis and fabrication of cubic MnFe2O4 electrocatalyst decorated carbon nitride nanohybrid for neurotransmitter detection in serum samples. Ultrasonics Sonochemistry, 2021, 70, 105305.	3.8	12
63	Reduction of multiple antibiotics from the waste water using coated glutathione S-transferase producing biocatalyst. Environmental Research, 2022, 206, 112262.	3.7	12
64	Sonochemical synthesis of graphitic carbon nitridesâ€wrapped bimetal oxide nanoparticles hybrid materials and their electrocatalytic activity for xanthine electro-oxidation. Ultrasonics Sonochemistry, 2020, 64, 105006.	3.8	11
65	The potential of Paritaprevir and Emetine as inhibitors of SARS-CoV-2 RdRp. Saudi Journal of Biological Sciences, 2021, 28, 1426-1432.	1.8	11
66	Identification of potential SARS-CoV-2 entry inhibitors by targeting the interface region between the spike RBD and human ACE2. Journal of Infection and Public Health, 2021, 14, 227-237.	1.9	11
67	An in silico approach unveils the potential of antiviral compounds in preclinical and clinical trials as SARS-CoV-2 omicron inhibitors. Saudi Journal of Biological Sciences, 2022, 29, 103297.	1.8	11
68	Electropolymerized Diphenylamine on Functionalized Multiwalled Carbon Nanotube Composite Film and Its Application to Develop a Multifunctional Biosensor. Electroanalysis, 2014, 26, 399-408.	1.5	10
69	Electrochemical sensing base for hazardous herbicide aclonifen using gadolinium niobate (GdNbO4) nanoparticles-actual river water and soil sample analysis. Ecotoxicology and Environmental Safety, 2021, 207, 111285.	2.9	10
70	Molecular modelling studies unveil potential binding sites on human serum albumin for selected experimental and in silico COVID-19 drug candidate molecules. Saudi Journal of Biological Sciences, 2022, 29, 53-64.	1.8	10
71	Pharmacological credence of the folklore use of Bauhinia malabarica in the management of jaundice. Saudi Journal of Biological Sciences, 2018, 25, 22-26.	1.8	9
72	Structural and functional insights into the major mutations of SARS-CoV-2 Spike RBD and its interaction with human ACE2 receptor. Journal of King Saud University - Science, 2022, 34, 101773.	1.6	9

#	Article	IF	Citations
73	Electrocatalytic detection of noxious antioxidant diphenylamine in fruit samples with support of Cu@nanoporous carbon modified sensor. Chemosphere, 2022, 292, 133400.	4.2	9
74	Surface engineering of gadolinium oxide nanoseeds with nitrogen-doped carbon quantum dots: an efficient nanocomposite for precise detection of antibiotic drug clioquinol. New Journal of Chemistry, 2022, 46, 4090-4102.	1.4	9
75	Effect of Electrostatic Interaction on Electrodeposition of Nickel Hexacyanoferrate with Functional MWCNTs and Their Application for the Determination of Persulfate and Tannic Acid. Electroanalysis, 2014, 26, 971-979.	1.5	8
76	Potentiostatic Electrochemical Preparation of Bismuth Nanoribbons and its Application in Biologically Poisoning Lead and Cadmium Heavy Metal Ions Detection. Electroanalysis, 2015, 27, 2341-2346.	1.5	8
77	The potential of antioxidant activity of methanolic extract of Coscinium fenestratum (Goetgh.) Colebr (Menispermaceae). Saudi Journal of Biological Sciences, 2019, 26, 1037-1042.	1.8	8
78	Artesunate induces substantial topological alterations in the SARS-CoV-2 Nsp1 protein structure. Journal of King Saud University - Science, 2022, 34, 101810.	1.6	8
79	Assessment of biological activity and UPLC–MS based chromatographic profiling of ethanolic extract of Ochradenus arabicus. Saudi Journal of Biological Sciences, 2016, 23, 229-236.	1.8	7
80	Evaluation of anti-nociceptive, anti-inflammatory and antipyretic potential of Mikania cordata (Burm.) Tj ETQq0	0 0 rgBT /0	Overlock 10 Tf
81	A novel triterpenoid 16-hydroxy betulinic acid isolated from Mikania cordata attributes multi-faced pharmacological activities. Saudi Journal of Biological Sciences, 2019, 26, 554-562.	1.8	7
82	Molecular systematic study of Cardamine glechomifolia Levl. (Brassicaceae) using internal transcribed spacer sequence of nuclear ribosomal DNA (ITS) and chloroplast trnL and trnL-F sequences. Saudi Journal of Biological Sciences, 2010, 17, 275-290.	1.8	6
83	Sonochemical synthesis of novel thermo-responsive polymer and tungsten dioxide composite for the temperature-controlled reversible "on-off―electrochemical detection of β-Blocker metoprolol. Ultrasonics Sonochemistry, 2020, 64, 105008.	3.8	6
84	Sonochemical preparation of carbon nanosheets supporting cuprous oxide architecture for highâ€performance and non-enzymatic electrochemical sensor in biological samples. Ultrasonics Sonochemistry, 2020, 66, 105072.	3.8	6
85	Molecular docking elucidates the plausible mechanisms underlying the anticancer properties of acetyldigitoxigenin from Adenium obesum. Saudi Journal of Biological Sciences, 2020, 27, 1907-1911.	1.8	6
86	Protective Effect of Capparis spinosa Extract against Potassium Bromate Induced Oxidative Stress and Genotoxicity in Mice. Evidence-based Complementary and Alternative Medicine, 2021, 2021, 1-15.	0.5	6
87	Sonochemical approach to the synthesis of metal tungstate/nafion composite with electrocatalytic properties and its electrochemical sensing performance. Ultrasonics Sonochemistry, 2020, 66, 104901.	3.8	5
88	Plastome of Saraca asoca (Detarioideae, Fabaceae): Annotation, comparison among subfamily and molecular typing. Saudi Journal of Biological Sciences, 2021, 28, 1487-1493.	1.8	5
89	Physiological, Biochemical and Reproductive Studies on Valeriana wallichii, a Critically Endangered Medicinal Plant of the Himalayan Region Grown under In-Situ and Ex-Situ Conditions. Plants, 2020, 9, 131.	1.6	4
90	The cp genome characterization of Adenium obesum: Gene content, repeat organization and phylogeny. Saudi Journal of Biological Sciences, 2021, 28, 3768-3775.	1.8	4

#	Article	IF	CITATIONS
91	Maternal and developmental toxicity of Bisphenol-A in SWR/J mice. Saudi Journal of Biological Sciences, 2022, 29, 1543-1549.	1.8	4
92	Plastome comparison and evolution within the tribes of Plantaginaceae: Insights from an Asian gypsyweed. Saudi Journal of Biological Sciences, 2020, 27, 3489-3498.	1.8	3
93	Amelioration of indole acetic acid-induced cytotoxicity in mice using zinc nanoparticles biosynthesized with Ochradenus arabicus leaf extract. Saudi Journal of Biological Sciences, 2021, 28, 7190-7201.	1.8	3
94	Species-specific molecular signature of Commiphora species of Saudi Arabia inferred from internal transcribed spacer sequences of nuclear ribosomal DNA. Saudi Journal of Biological Sciences, 2018, 25, 1298-1301.	1.8	2
95	Molecular authentication of Anthemis deserti Boiss. (Asteraceae) based on ITS2 region of nrDNA gene sequence. Saudi Journal of Biological Sciences, 2019, 26, 155-159.	1.8	2
96	Comparative analysis of cp genome of Fagonia indica growing in desert and its implications in pattern of similarity and variations. Saudi Journal of Biological Sciences, 2020, 27, 229-232.	1.8	2
97	Complete chloroplast genome of medicinally important poisonous shrub Adenium obesum (Forssk.) Roem. & Schult. (Apocynaceae). Mitochondrial DNA Part B: Resources, 2020, 5, 568-569.	0.2	2
98	Potential of antiviral peptide-based SARS-CoV-2 inactivators to combat COVID-19. PLoS ONE, 2022, 17, e0268919.	1.1	2
99	The binding proximity of methyl \hat{l}^2 -lilacinobioside isolated from Caralluma retrospiciens with topoisomerase II attributes apoptosis in breast cancer cell line. Saudi Journal of Biological Sciences, 2018, 25, 1826-1833.	1.8	1
100	Complete chloroplast genome of vulnerable medicinal plant Saraca asoca (Fabaceae). Mitochondrial DNA Part B: Resources, 2020, 5, 754-755.	0.2	1
101	Phylotranscriptomic analysis of Dillenia indica L. (Dilleniales, Dilleniaceae) and its systematics implication. Saudi Journal of Biological Sciences, 2021, 28, 1557-1560.	1.8	1
102	Phytochemical profiling and GC–MS analysis of Vitis rotundifolia pulp extract (Jumbo muscadine). Applied Nanoscience (Switzerland), 2023, 13, 685-692.	1.6	1
103	Identification of novel drug candidates for the inhibition of catalytic cleavage activity of coronavirus 3CL-like protease enzyme. Current Pharmaceutical Biotechnology, 2021, 22, .	0.9	1
104	Detection of trizole contaminated waste water using biocatalyst and effective biodegradation potential of flubendiamide. Environmental Research, 2022, 206, 112264.	3.7	1
105	Sensory, functional characteristics and ⟨i⟩in vitro⟨/i⟩ digestibility of snacks supplemented with nonâ€traditional ingredient raw and processed fenugreek. International Journal of Food Science and Technology, 2022, 57, 4716-4725.	1.3	1
106	Transcriptome characterization of Larrea tridentata and identification of genes associated with phenylpropanoid metabolic pathways. PLoS ONE, 2022, 17, e0265231.	1.1	1
107	Complete chloroplast genome of the hot desert herb Fagonia indica (Zygophyllaceae) from south-central Arabia. Mitochondrial DNA Part B: Resources, 2019, 4, 3904-3905.	0.2	0
108	Evaluation of a labdane diterpene forskolin isolated from Solena amplexicaulis (Lam.) Gandhi (Cucurbitaceae) revealed promising antidiabetic and antihyperlipidemic pharmacological properties. Saudi Journal of Biological Sciences, 2019, 26, 1710-1715.	1.8	0

#	Article	IF	CITATIONS
109	Insights into plastome of Fagonia indica Burm.f. (Zygophyllaceae): organization, annotation and phylogeny. Saudi Journal of Biological Sciences, 2022, 29, 1313-1321.	1.8	О
110	Differential gene expression analysis following olfactory learning in honeybee (Apis mellifera L.). PLoS ONE, 2022, 17, e0262441.	1.1	0
111	Plastome data analysis of Cucumis melo subsp. agrestis. Bioinformation, 2021, 17, 646-651.	0.2	0
112	Comparative plastome data analysis of Dendrosicyos socotranus and Corallocarpus boehmii. Bioinformation, 2021, 17, 662-666.	0.2	0