Chaudhery Mustansar Hussain

List of Publications by Year
in descending order

122 papers	4,606 citations	101384 36 h-index	128067 60 g-index
264 all docs	264 docs citations	264 times ranked	3444 citing authors

#	Article	IF	Citations
1	Environmental perspective of COVID-19. Science of the Total Environment, 2020, 728, 138870.	3.9	637
2	Application of MOF materials as drug delivery systems for cancer therapy and dermal treatment. Coordination Chemistry Reviews, 2022, 451, 214262.	9.5	253
3	Functionalized nanomaterials in dispersive solid phase extraction: Advances & prospects. TrAC - Trends in Analytical Chemistry, 2020, 127, 115893.	5.8	134
4	Recent developments in sustainable corrosion inhibitors: design, performance and industrial scale applications. Materials Advances, 2021, 2, 3806-3850.	2.6	129
5	Environmental and health impacts of contaminants of emerging concerns: Recent treatment challenges and approaches. Chemosphere, 2021, 272, 129492.	4.2	129
6	Advancement in bioanalytical science through nanotechnology: Past, present and future. TrAC - Trends in Analytical Chemistry, 2019, 110, 259-276.	5.8	103
7	Impact of COVID-19 on greenhouse gases emissions: A critical review. Science of the Total Environment, 2022, 806, 150349.	3.9	101
8	Graphene-based field-effect transistor biosensors for the rapid detection and analysis of viruses: A perspective in view of COVID-19. Carbon Trends, 2021, 2, 100011.	1.4	97
9	Graphene and its derivatives for Analytical Lab on Chip platforms. TrAC - Trends in Analytical Chemistry, 2019, 114, 326-337.	5.8	90
10	Recent innovations in functionalized layered double hydroxides: Fabrication, characterization, and industrial applications. Advances in Colloid and Interface Science, 2020, 283, 102216.	7.0	89
11	Functionalized nanomaterial for forensic sample analysis. TrAC - Trends in Analytical Chemistry, 2019, 120, 115661.	5.8	88
12	Self-Assembly of Carbon Nanotubes via Ethanol Chemical Vapor Deposition for the Synthesis of Gas Chromatography Columns. Analytical Chemistry, 2010, 82, 5184-5188.	3.2	86
13	State-of-the-art of 3D printing technology of alginate-based hydrogelsâ€"An emerging technique for industrial applications. Advances in Colloid and Interface Science, 2021, 293, 102436.	7.0	79
14	Smart nanomaterials in pharmaceutical analysis. Arabian Journal of Chemistry, 2020, 13, 3319-3343.	2.3	71
15	Surface modifications and analytical applications of graphene oxide: A review. TrAC - Trends in Analytical Chemistry, 2021, 144, 116448.	5.8	66
16	Microtrapping characteristics of single and multi-walled carbon nanotubes. Journal of Chromatography A, 2008, 1185, 161-166.	1.8	62
17	Altering the polarity of self-assembled carbon nanotubes stationary phase via covalent functionalization. RSC Advances, 2011, 1, 685.	1.7	62
18	Modifying the sorption properties of multi-walled carbon nanotubes via covalent functionalization. Analyst, The, 2009, 134, 1928.	1.7	60

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19	Environmentally benign production of cupric oxide nanoparticles and various utilizations of their polymeric hybrids in different technologies. Coordination Chemistry Reviews, 2020, 419, 213378.	9.5	60
20	Progress on the photocatalytic reduction of hexavalent Cr (VI) using engineered graphitic carbon nitride. Chemical Engineering Research and Design, 2021, 152, 663-678.	2.7	57
21	Recent Progress of Imprinted Nanomaterials in Analytical Chemistry. International Journal of Analytical Chemistry, 2018, 2018, 1-18.	0.4	54
22	Recent breakthroughs of antibacterial and antiviral protective polymeric materials during COVID-19 pandemic and after pandemic: Coating, packaging, and textile applications. Current Opinion in Colloid and Interface Science, 2021, 55, 101480.	3.4	54
23	Recent advancements in 3D bioprinting technology of carboxymethyl cellulose-based hydrogels: Utilization in tissue engineering. Advances in Colloid and Interface Science, 2021, 292, 102415.	7.0	52
24	Micropreconcentration units based on carbon nanotubes (CNT). Analytical and Bioanalytical Chemistry, 2011, 399, 75-89.	1.9	51
25	Recent developments in sustainable corrosion inhibition using ionic liquids: A review. Journal of Molecular Liquids, 2021, 321, 114484.	2.3	51
26	Green miniaturized technologies in analytical and bioanalytical chemistry. TrAC - Trends in Analytical Chemistry, 2021, 143, 116383.	5.8	51
27	Recent progress on solution and materials chemistry for the removal of hydrogen sulfide from various gas plants. Journal of Molecular Liquids, 2020, 297, 111886.	2.3	50
28	3D and 4D printing: From innovation to evolution. Advances in Colloid and Interface Science, 2021, 294, 102482.	7.0	48
29	Current perspective in metal oxide based photocatalysts for virus disinfection: A review. Journal of Environmental Management, 2022, 308, 114617.	3.8	46
30	Degradation mechanism and toxicity reduction of methyl orange dye by a newly isolated bacterium Pseudomonas aeruginosa MZ520730. Journal of Water Process Engineering, 2021, 43, 102300.	2.6	44
31	Experimental and computational studies on hydroxamic acids as environmental friendly chelating corrosion inhibitors for mild steel in aqueous acidic medium. Journal of Molecular Liquids, 2020, 314, 113651.	2.3	42
32	Molecularly imprinted polymer-carbon paste electrode (MIP-CPE)-based sensors for the sensitive detection of organic and inorganic environmental pollutants: A review. Trends in Environmental Analytical Chemistry, 2021, 32, e00144.	5.3	42
33	Microstructural and mechano-tribological behavior of Al reinforced SiC-TiC hybrid metal matrix composite. Materials Today: Proceedings, 2020, 21, 1417-1420.	0.9	41
34	Chitosan, alginate, hyaluronic acid, gums, and Î²-glucan as potent adjuvants and vaccine delivery systems for viral threats including SARS-CoV-2: A review. International Journal of Biological Macromolecules, 2021, 182, 1931-1940.	3.6	41
35	Utilization and recycling of end of life plastics for sustainable and clean industrial processes including the iron and steel industry. Materials Science for Energy Technologies, 2019, 2, 634-646.	1.0	39
36	The latest strategies in the fight against the COVID-19 pandemic: the role of metal and metal oxide nanoparticles. New Journal of Chemistry, 2021, 45, 6167-6179.	1.4	38

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37	Gravimetric, electrochemical, and morphological studies of an isoxazole derivative as corrosion inhibitor for mild steel in 1M HCl. Arabian Journal of Chemistry, 2020, 13, 7744-7758.	2.3	36
38	Functionalized magnetic nanoparticles as powerful sorbents and stationary phases for the extraction and chromatographic applications. TrAC - Trends in Analytical Chemistry, 2021, 143, 116380.	5.8	36
39	Recent advances in analytical, bioanalytical and miscellaneous applications of green nanomaterial. TrAC - Trends in Analytical Chemistry, 2020, 133, 116109.	5.8	33
40	A journey to the world of fascinating ZnO nanocomposites made of chitosan, starch, cellulose, and other biopolymers: Progress in recent achievements in eco-friendly food packaging, biomedical, and water remediation technologies. International Journal of Biological Macromolecules, 2021, 170, 701-716.	3.6	33
41	Carbon nanotubes as sorbents for the gas phase preconcentration of semivolatile organics in a microtrap. Analyst, The, 2008, 133, 1076.	1.7	32
42	Recent progress on the modifications of ultra-small perovskite nanomaterials for sensing applications. TrAC - Trends in Analytical Chemistry, 2021, 144, 116432.	5.8	32
43	Strategies and perspectives of tailored SnS2 photocatalyst for solar driven energy applications. Solar Energy, 2022, 231, 546-565.	2.9	32
44	Current advances on polymer-layered double hydroxides/metal oxides nanocomposites and bionanocomposites: Fabrications and applications in the textile industry and nanofibers. Applied Clay Science, 2021, 206, 106054.	2.6	31
45	Sawdust, a versatile, inexpensive, readily available bio-waste: From mother earth to valuable materials for sustainable remediation technologies. Advances in Colloid and Interface Science, 2021, 295, 102492.	7.0	31
46	MOF/COF-based materials using 3D printing technology: applications in water treatment, gas removal, biomedical, and electronic industries. New Journal of Chemistry, 2021, 45, 13247-13257.	1.4	29
47	The environmental impact of mass coronavirus vaccinations: A point of view on huge COVID-19 vaccine waste across the globe during ongoing vaccine campaigns. Science of the Total Environment, 2022, 813, 151881.	3.9	29
48	Fabrication of air filters with advanced filtration performance for removal of viral aerosols and control the spread of COVID-19. Advances in Colloid and Interface Science, 2022, 303, 102653.	7.0	28
49	The use of magnetic nanoparticles in sample preparation devices and tools. , 2020, , 75-95.		27
50	Protection, disinfection, and immunization for healthcare during the COVID-19 pandemic: Role of natural and synthetic macromolecules. Science of the Total Environment, 2021, 776, 145989.	3.9	27
51	Graphene-based analytical lab-on-chip devices for detection of viruses: A review. Carbon Trends, 2021, 4, 100072.	1.4	26
52	Poly(acrylamide-co-acrylic acid) hydrophilization of porous polypropylene membrane for dehumidification. Separation and Purification Technology, 2013, 107, 54-60.	3.9	25
53	Nanoâ€Graphene as Groundbreaking Miracle Material: Catalytic and Commercial Perspectives. ChemistrySelect, 2018, 3, 9533-9544.	0.7	25
54	Physicochemical and biological assessment of flowable resin composites incorporated with farnesol loaded halloysite nanotubes for dental applications. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 104, 103675.	1.5	25

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55	Recent advancements in corrosion inhibitor systems through carbon allotropes: Past, present, and future. Nano Select, 2021, 2, 2237-2255.	1.9	24
56	The practicality and prospects for disinfection control by photocatalysis during and post-pandemic: A critical review. Environmental Research, 2022, 209, 112814.	3.7	24
57	Carbon nanomaterials to combat virus: A perspective in view of COVID-19. Carbon Trends, 2021, 2, 100019.	1.4	23
58	A new trend of using poly(vinyl alcohol) in 3D and 4D printing technologies: Process and applications. Advances in Colloid and Interface Science, 2022, 301, 102605.	7.0	23
59	Fight against COVID-19 pandemic with the help of carbon-based nanomaterials. New Journal of Chemistry, 2021, 45, 8832-8846.	1.4	22
60	Sustainable plant and microbes-mediated preparation of Fe3O4 nanoparticles and industrial application of its chitosan, starch, cellulose, and dextrin-based nanocomposites as catalysts. International Journal of Biological Macromolecules, 2021, 179, 429-447.	3.6	22
61	MXenes-based materials: Structure, synthesis, and various applications. Ceramics International, 2021, 47, 26585-26597.	2.3	22
62	Recent advancements in synthesis and drug delivery utilization of polysaccharides-based nanocomposites: The important role of nanoparticles and layered double hydroxides. International Journal of Biological Macromolecules, 2021, 193, 183-204.	3.6	20
63	Chitosan/carbon nanotube hybrids: recent progress and achievements for industrial applications. New Journal of Chemistry, 2021, 45, 3756-3777.	1.4	19
64	Carbon nanotube-immobilized super-absorbent membrane for harvesting water from the atmosphere. Environmental Science: Water Research and Technology, 2015, 1, 753-760.	1.2	18
65	Photocatalytic Inactivation of Viruses Using Graphitic Carbon Nitride-Based Photocatalysts: Virucidal Performance and Mechanism. Catalysts, 2021, 11, 1448.	1.6	18
66	Micro total analysis systems with nanomaterials. , 2020, , 185-198.		17
67	Photocatalytic transition-metal-oxides-based pâ€“n heterojunction materials: synthesis, sustainable energy and environmental applications, and perspectives. Journal of Nanostructure in Chemistry, 2023, 13, 129-166.	5.3	17
68	Constructing carbon nanotubes@CuBi2O4/AgBiO3 all solid-state mediated Z-scheme photocatalyst with enhanced photocatalytic activity. Materials Letters, 2022, 320, 132374.	1.3	17
69	Review on matrix-assisted laser desorption/ionization time-of-flight mass spectrometry for the rapid screening of microbial species: A promising bioanalytical tool. Microchemical Journal, 2020, 159, 105387.	2.3	16
70	Emerging new-generation hybrids based on covalent organic frameworks for industrial applications. New Journal of Chemistry, 2021, 45, 7014-7046.	1.4	16
71	Green Carbon Materials for the Analysis of Environmental Pollutants. Trends in Environmental Analytical Chemistry, 2022, 33, e00156.	5.3	16
72	Green micro total analysis systems (GÎ¼TAS) for environmental samples. Trends in Environmental Analytical Chemistry, 2021, 31, e00128.	5.3	15

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73	Green Nanomaterials: A Sustainable Perspective. Advanced Structured Materials, 2020, , 23-41.	0.3	15
74	Switchable Graphene-Based Bioelectronics Interfaces. Chemosensors, 2020, 8, 45.	1.8	14
75	Metalâ€“organic frameworks/biopolymer nanocomposites: from fundamentals toward recent applications in modern technology. New Journal of Chemistry, 2021, 45, 8409-8426.	1.4	14
76	Potential of graphene based photocatalyst for antiviral activity with emphasis on COVID-19: A review. Journal of Environmental Chemical Engineering, 2022, 10, 107527.	3.3	14
77	Membrane applications of nanomaterials. , 2020, , 159-182.		13
78	Environmental impact of COVID-19 Vaccine waste: A perspective on potential role of natural and biodegradable materials. Journal of Environmental Chemical Engineering, 2022, 10, 107894.	3.3	13
79	Current achievements in 3D bioprinting technology of chitosan and its hybrids. New Journal of Chemistry, 2021, 45, 10565-10576.	1.4	12
80	MIP-based extraction techniques for the determination of antibiotic residues in edible meat samples: Design, performance & recent developments. Trends in Food Science and Technology, 2022, 119, 164-178.	7.8	12
81	Worldwide fight against COVID-19 using nanotechnology, polymer science, and 3D printing technology. Polymer Bulletin, 2023, 80, 165-183.	1.7	12
82	Ethical, legal, social and economics issues of graphene. Comprehensive Analytical Chemistry, 2020, 91, 263-279.	0.7	11
83	Green aspects of photocatalysts during corona pandemic: a promising role for the deactivation of COVID-19 virus. RSC Advances, 2022, 12, 13609-13627.	1.7	11
84	Green synthesis of nano-Al₂O₃, recent functionalization, and fabrication of synthetic or natural polymer nanocomposites: various technological applications. New Journal of Chemistry, 2021, 45, 4885-4920.	1.4	10
85	CHAPTER 19. Magnetic Nanomaterials for Environmental Analysis. RSC Detection Science, 0, , 1-13.	0.0	9
86	Declining carbon emission/concentration during COVID-19: A critical review on temporary relief. Carbon Trends, 2021, 5, 100131.	1.4	9
87	Environmental, safety and economic risks of Covid-19 pandemic in petroleum industries: A prospective. Journal of Petroleum Science and Engineering, 2021, 198, 108161.	2.1	8
88	Polymer nanocompositesâ€”An intro. , 2018, , xxi-xxv.		7
89	Modern age of analytical chemistry: nanomaterials. , 2020, , 29-40.		7
90	Sustainable chemical preventive models in COVID-19: Understanding, innovation, adaptations, and impact. Journal of the Indian Chemical Society, 2021, 98, 100164.	1.3	7

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91	Future of analytical chemistry with graphene. Comprehensive Analytical Chemistry, 2020, 91, 355-389.	0.7	7
92	Management of waste tyres: properties, life cycle assessment and energy generation. Environmental Sustainability, 2021, 4, 261-271.	1.4	6
93	Sustainable solutions for indoor pollution abatement during COVID phase: A critical study on current technologies & challenges. Journal of Hazardous Materials Advances, 2022, 7, 100097.	1.2	6
94	Environmental Management and Sustainable Development: A Vision for the Future. , 2018, , 1-17.		5
95	Functionalized nanographene for catalysis. , 2020, , 111-129.		5
96	MULTIVARIATE STATISTICAL ANALYSIS AND USE OF GEOGRAPHIC INFORMATION SYSTEMS IN RAW WATER QUALITY ASSESSMENT. Brazilian Journal of Environmental Sciences (Online), 2019, , 1-15.	0.1	5
97	Prospective pathways of green graphene-based lab-on-chip devices: the pursuit toward sustainability. Mikrochimica Acta, 2022, 189, 177.	2.5	5
98	Single-Atoms on Covalent or Metalâ€“Organic Frameworks: Current Findings and Perspectives for Pollutants Abatement, Hydrogen Evolution, and Reduction of CO2. Topics in Current Chemistry, 2022, 380, 7.	3.0	5
99	Potential of tragacanth gum in the industries: a short journey from past to the future. Polymer Bulletin, 2023, 80, 4643-4662.	1.7	5
100	Sustainable Biomedical Waste Management. , 2018, , 1-23.		4
101	Nanomembranes for Environment. , 2018, , 1-24.		4
102	Future of the modern age of analytical chemistry: Nanominiaturization. , 2020, , 277-296.		4
103	Thin-film nanocomposite devices for renewable energy current status and challenges. Sustainable Materials and Technologies, 2020, 26, e00233.	1.7	4
104	ZnAl-LDH and B-impregnated polymeric semiconductor (g-C3N4) for solar light-driven photocatalysis to treat phenolic effluent. Sustainable Materials and Technologies, 2021, 28, e00266.	1.7	4
105	A review of deciphering the successes and learning from the failures in preventive and health policies to stop the COVID-19 pandemic. , 2021, , 269-303.		4
106	Greenness of lab-on-a-chip devices for analytical processes: Advances & future prospects. Journal of Pharmaceutical and Biomedical Analysis, 2022, 219, 114914.	1.4	4
107	Enhanced preconcentration of selected chlorofluorocarbons on multiwalled carbon nanotubes with polar functionalities. Journal of Separation Science, 2015, 38, 426-432.	1.3	3
108	Lab-On-Chip Platforms for Environmental Analysis. , 2018, , 267-267.		3

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109	Future of Industrial Development and Nanomaterials. , 2018, , 1073-1076.		3
110	Lab-on-chip for chromatographic techniques. , 2020, , 129-137.		1
111	Smartphone: A new perspective in analysis. , 2021, , 1-18.		1
112	Sample Preparation with Conductive Polymers. ACS Symposium Series, 0, , 119-140.	0.5	1
113	Tailor-Made Molecular Traps for the Treatment of Environmental Samples. , 2018, , 1-22.		0
114	Modern Social Media in Environmental Management and Sustainability. , 2018, , 1-22.		0
115	Nanochromatographyâ€"Concluding Account. , 2018, , 519-523.		0
116	Nanomaterials, Ecomaterials, and Wide Vision of Material Science. , 2019, , 3-31.		0
117	Era of nano-lab-on-a-chip (LOC) technology. , 2020, , 1-17.		0
118	Future of smartphone-based analysis. , 2021, , 417-430.		0
119	Applications of Graphene-Based Nanomaterials. , 2021, , 1-26.		0
120	Applications of Graphene-Based Nanomaterials. , 2021, , 1069-1093.		0
121	Smartphone-based optical and electrochemical sensing. , 2021, , 19-36.		0
122	Conductive Polymer-Based Nanocomposites as Powerful Sorbents: Design, Preparation and Extraction Applications.. Critical Reviews in Analytical Chemistry, 2022, , 1-14.	1.8	0