

Kumar Vikrant

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/1215155/kumar-vikrant-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

62

papers

2,127

citations

26

h-index

45

g-index

63

ext. papers

2,869

ext. citations

10.7

avg, IF

5.97

L-index

#	Paper	IF	Citations
62	Photocatalytic destruction of volatile aromatic compounds by platinumized titanium dioxide in relation to the relative effect of the number of methyl groups on the benzene ring.. <i>Science of the Total Environment</i> , 2022 , 822, 153605	10.2	4
61	Magnesium/aluminum layered double hydroxides intercalated with starch for effective adsorptive removal of anionic dyes. <i>Journal of Hazardous Materials</i> , 2022 , 424, 127454	12.8	4
60	Multifunctional applications of biochar beyond carbon storage. <i>International Materials Reviews</i> , 2022 , 1-51	16.1	58
59	Deep oxidation of gaseous formaldehyde at room-temperature by a durable catalyst formed through the controlled addition of potassium to platinum supported on waste eggshell. <i>Chemical Engineering Journal</i> , 2022 , 428, 131177	14.7	10
58	Evidence of the dominant role of particle size in controlling the dynamic adsorption breakthrough behavior of gaseous benzene in a microporous carbon bed system. <i>Chemical Engineering Journal</i> , 2022 , 427, 130977	14.7	2
57	Thermocatalytic oxidation of gaseous benzene by a titanium dioxide supported platinum catalyst. <i>Chemical Engineering Journal</i> , 2022 , 428, 131090	14.7	4
56	Carbon Dioxide Capture through Physical and Chemical Adsorption Using Porous Carbon Materials: A Review. <i>Atmosphere</i> , 2022 , 13, 397	2.7	4
55	Low-temperature oxidative removal of gaseous formaldehyde by an eggshell waste supported silver-manganese dioxide bimetallic catalyst with ultralow noble metal content.. <i>Journal of Hazardous Materials</i> , 2022 , 434, 128857	12.8	0
54	Unveiling the collective effects of moisture and oxygen on the photocatalytic degradation of m-Xylene using a titanium dioxide supported platinum catalyst. <i>Chemical Engineering Journal</i> , 2022 , 439, 135747	14.7	1
53	Trends in advanced materials for sustainable environmental remediation 2022 , 1-29		
52	Photocatalytic degradation of gaseous benzene using metal oxide nanocomposites. <i>Advances in Colloid and Interface Science</i> , 2022 , 102696	14.3	2
51	Regeneration strategies for metal-organic frameworks post acidic gas capture. <i>Coordination Chemistry Reviews</i> , 2022 , 467, 214629	23.2	
50	Progress in bioremediation of pesticide residues in the environment. <i>Environmental Engineering Research</i> , 2021 , 26, 200446-0	3.6	5
49	Reactive adsorption and catalytic oxidation of gaseous formaldehyde at room temperature by a synergistic copper-magnesium bimetal oxide biochar composite. <i>Chemical Engineering Journal</i> , 2021 , 433, 133497	14.7	1
48	Air Pollution and Its Association with the Greenland Ice Sheet Melt. <i>Sustainability</i> , 2021 , 13, 65	3.6	1
47	Thermocatalytic oxidation of a three-component mixture of volatile organic compounds by a titanium dioxide-supported platinum catalyst. <i>Journal of Cleaner Production</i> , 2021 , 325, 129279	10.3	3
46	Platinumized titanium dioxide (Pt/TiO ₂) as a multi-functional catalyst for thermocatalysis, photocatalysis, and photothermal catalysis for removing air pollutants. <i>Applied Materials Today</i> , 2021 , 23, 100993	6.6	11

45	Advances in nanomaterial-based electrochemical biosensors for the detection of microbial toxins, pathogenic bacteria in food matrices. <i>Journal of Hazardous Materials</i> , 2021 , 401, 123379	12.8	50
44	A quantitation method for gaseous formaldehyde based on gas chromatography with metal-organic framework cold-trap sorbent as an effective alternative for HPLC-based standard protocol. <i>Microchemical Journal</i> , 2021 , 160, 105624	4.8	3
43	Facile green synthesis of ZnO-CdWO nanoparticles and their potential as adsorbents to remove organic dye. <i>Environmental Pollution</i> , 2021 , 271, 116401	9.3	21
42	Scrolled titanate nanosheet composites with reduced graphite oxide for photocatalytic and adsorptive removal of toxic vapors. <i>Chemical Engineering Journal</i> , 2021 , 415, 128907	14.7	8
41	Graphitic carbon nitride composites as electro catalysts: Applications in energy conversion/storage and sensing system. <i>Journal of Cleaner Production</i> , 2021 , 320, 128693	10.3	1
40	Adsorptive removal of an eight-component volatile organic compound mixture by Cu-, Co-, and Zr-metal-organic frameworks: Experimental and theoretical studies. <i>Chemical Engineering Journal</i> , 2020 , 397, 125391	14.7	36
39	Advances in thermocatalytic and photocatalytic techniques for the room/low temperature oxidative removal of formaldehyde in air. <i>Chemical Engineering Journal</i> , 2020 , 399, 125759	14.7	23
38	Utilization of metal-organic frameworks for the adsorptive removal of an aliphatic aldehyde mixture in the gas phase. <i>Nanoscale</i> , 2020 , 12, 8330-8343	7.7	16
37	Critical role of water stability in metal-organic frameworks and advanced modification strategies for the extension of their applicability. <i>Environmental Science: Nano</i> , 2020 , 7, 1319-1347	7.1	36
36	An efficient strategy for the enhancement of adsorptivity of microporous carbons against gaseous formaldehyde: Surface modification with aminosilane adducts. <i>Science of the Total Environment</i> , 2020 , 743, 140761	10.2	13
35	Photocatalytic Platforms for Removal of Ammonia from Gaseous and Aqueous Matrixes: Status and Challenges. <i>ACS Catalysis</i> , 2020 , 10, 8683-8716	13.1	29
34	Metal-Organic Frameworks for the Adsorptive Removal of Gaseous Aliphatic Ketones. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 10317-10331	9.5	18
33	Solar-light-active silver phosphate/titanium dioxide/silica heterostructures for photocatalytic removal of organic dye. <i>Journal of Cleaner Production</i> , 2020 , 254, 120031	10.3	58
32	Adsorption performance of standard biochar materials against volatile organic compounds in air: A case study using benzene and methyl ethyl ketone. <i>Chemical Engineering Journal</i> , 2020 , 387, 123943	14.7	32
31	An efficient tool for the continuous monitoring on adsorption of sub-ppm level gaseous benzene using an automated analytical system based on thermal desorption-gas chromatography/mass spectrometry approach. <i>Environmental Research</i> , 2020 , 182, 109024	7.9	10
30	Chemisorption of hydrogen sulfide by metal-organic frameworks and covalent-organic polymers based on experimental/theoretical evaluation. <i>Journal of Cleaner Production</i> , 2020 , 250, 119486	10.3	20
29	Insights into critical sources of bias in quantitation of volatile organic compounds based on headspace extraction approach. <i>Microchemical Journal</i> , 2020 , 157, 105114	4.8	2
28	Amine-functionalized microporous covalent organic polymers for adsorptive removal of a gaseous aliphatic aldehyde mixture. <i>Environmental Science: Nano</i> , 2020 , 7, 3447-3468	7.1	9

27	Evidence of inter-species swing adsorption between aromatic hydrocarbons. <i>Environmental Research</i> , 2020 , 181, 108814	7.9	7
26	Recent advancements in photocatalyst-based platforms for the destruction of gaseous benzene: Performance evaluation of different modes of photocatalytic operations and against adsorption techniques. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , 2019 , 41, 100316	16.4	52
25	Identifying the best materials for the removal of airborne toluene based on performance metrics - A critical review. <i>Journal of Cleaner Production</i> , 2019 , 241, 118408	10.3	44
24	Biodegradation of methylene blue dye in a batch and continuous mode using biochar as packing media. <i>Environmental Research</i> , 2019 , 171, 356-364	7.9	99
23	Advances in colorimetric and optical sensing for gaseous volatile organic compounds. <i>TrAC - Trends in Analytical Chemistry</i> , 2019 , 118, 502-516	14.6	34
22	Nanomaterials as efficient platforms for sensing DNA. <i>Biomaterials</i> , 2019 , 214, 119215	15.6	32
21	Nanomaterials for the abatement of cadmium (II) ions from water/wastewater. <i>Nano Research</i> , 2019 , 12, 1489-1507	10	38
20	Photocatalytic mineralization of hydrogen sulfide as a dual-phase technique for hydrogen production and environmental remediation. <i>Applied Catalysis B: Environmental</i> , 2019 , 259, 118025	21.8	54
19	Adsorption properties of advanced functional materials against gaseous formaldehyde. <i>Environmental Research</i> , 2019 , 178, 108672	7.9	38
18	Evidence for superiority of conventional adsorbents in the sorptive removal of gaseous benzene under real-world conditions: Test of activated carbon against novel metal-organic frameworks. <i>Journal of Cleaner Production</i> , 2019 , 235, 1090-1102	10.3	44
17	Insights into the storage stability of ammonia in polyester aluminum bags. <i>Environmental Research</i> , 2019 , 177, 108596	7.9	6
16	Use of graphene-based structures as platforms for the trace-level detection of gaseous formaldehyde and insights into their superior sensing potentials. <i>TrAC - Trends in Analytical Chemistry</i> , 2019 , 121, 115694	14.6	11
15	Application of Zr-Cluster-Based MOFs for the Adsorptive Removal of Aliphatic Aldehydes (C to C) from an Industrial Solvent. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 44270-44281	9.5	14
14	The retrograde adsorption phenomenon at the onset of breakthrough and its quantitation: An experimental case study for gaseous toluene on activated carbon surface. <i>Environmental Research</i> , 2019 , 178, 108737	7.9	12
13	Nanomaterials for the adsorptive treatment of Hg(II) ions from water. <i>Chemical Engineering Journal</i> , 2019 , 358, 264-282	14.7	197
12	Potential Utility of Metal-Organic Framework-Based Platform for Sensing Pesticides. <i>ACS Applied Materials & Interfaces</i> , 2018 , 10, 8797-8817	9.5	135
11	Recent advancements in bioremediation of dye: Current status and challenges. <i>Bioresource Technology</i> , 2018 , 253, 355-367	11	287
10	Biofiltration of hydrogen sulfide: Trends and challenges. <i>Journal of Cleaner Production</i> , 2018 , 187, 131-147	7.3	75

9	Engineered/designer biochar for the removal of phosphate in water and wastewater. <i>Science of the Total Environment</i> , 2018 , 616-617, 1242-1260	10.2	185
8	Removal of Patent Blue (V) Dye Using Indian Bael Shell Biochar: Characterization, Application and Kinetic Studies. <i>Sustainability</i> , 2018 , 10, 2669	3.6	29
7	Graphene materials as a superior platform for advanced sensing strategies against gaseous ammonia. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 22391-22410	13	39
6	Metal-organic framework (MOF)-based advanced sensing platforms for the detection of hydrogen sulfide. <i>TrAC - Trends in Analytical Chemistry</i> , 2018 , 105, 263-281	14.6	53
5	Metal-organic frameworks (MOFs): potential and challenges for capture and abatement of ammonia. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 22877-22896	13	112
4	Bio-filters for the Treatment of VOCs and Odors - A Review. <i>Asian Journal of Atmospheric Environment</i> , 2017 , 11, 139-152	1.3	27
3	Metal-organic framework micromotors: perspectives for environmental applications. <i>Catalysis Science and Technology</i> ,	5.5	2
2	Harnessing Adsorption-Catalysis Synergy: Efficient Oxidative Removal of Gaseous Formaldehyde by a Manganese Dioxide/Metal-Organic Framework Nanocomposite at Room Temperature. <i>Advanced Functional Materials</i> , 2107922	15.6	2
1	Metal-organic frameworks and their derivatives as anode material in lithium-ion batteries: Recent advances towards novel configurations. <i>International Journal of Energy Research</i> ,	4.5	0