Lalit Mohan Pandey

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3192279/publications.pdf

Version: 2024-02-01

112 papers 3,390 citations

34 h-index 54 g-index

119 all docs

119 docs citations

119 times ranked 3420 citing authors

#	Article	IF	CITATIONS
1	Engineered nanomaterials and their surface functionalization for the removal of heavy metals: A review. Journal of Water Process Engineering, 2020, 33, 101009.	2.6	187
2	Nano-biocomposite scaffolds of chitosan, carboxymethyl cellulose and silver nanoparticle modified cellulose nanowhiskers for bone tissue engineering applications. International Journal of Biological Macromolecules, 2018, 111, 923-934.	3.6	179
3	Recent advances in conventional and contemporary methods for remediation of heavy metal-contaminated soils. 3 Biotech, 2018, 8, 216.	1.1	124
4	Isolation and characterization of biosurfactant producing and oil degrading Bacillus subtilis MG495086 from formation water of Assam oil reservoir and its suitability for enhanced oil recovery. Bioresource Technology, 2018, 270, 439-448.	4.8	111
5	Enhanced adsorption capacity of designed bentonite and alginate beads for the effective removal of methylene blue. Applied Clay Science, 2019, 169, 102-111.	2.6	111
6	Removal of methylene blue dye from aqueous solution using immobilized Agrobacterium fabrum biomass along with iron oxide nanoparticles as biosorbent. Environmental Science and Pollution Research, 2018, 25, 21605-21615.	2.7	108
7	Fabrication and characterization of chitosan, polyvinylpyrrolidone, and cellulose nanowhiskers nanocomposite films for wound healing drug delivery application. Journal of Biomedical Materials Research - Part A, 2017, 105, 2391-2404.	2.1	107
8	Engineered Nanomaterial Assisted Signalâ€amplification Strategies for Enhancing Analytical Performance of Electrochemical Biosensors. Electroanalysis, 2019, 31, 1615-1629.	1.5	102
9	Surface Functionalization of Ti6Al4V via Self-assembled Monolayers for Improved Protein Adsorption and Fibroblast Adhesion. Langmuir, 2018, 34, 3494-3506.	1.6	97
10	Production of biosurfactant by Bacillus subtilis RSL-2 isolated from sludge and biosurfactant mediated degradation of oil. Bioresource Technology, 2020, 307, 123261.	4.8	92
11	Effect of Functional Groups of Self-Assembled Monolayers on Protein Adsorption and Initial Cell Adhesion. ACS Biomaterials Science and Engineering, 2018, 4, 3224-3233.	2.6	74
12	Hybrid surface from self-assembled layer and its effect on protein adsorption. Applied Surface Science, 2011, 257, 4731-4737.	3.1	66
13	Properties of Adsorbed Bovine Serum Albumin and Fibrinogen on Self-Assembled Monolayers. Journal of Physical Chemistry C, 2013, 117, 6151-6160.	1.5	64
14	Engineered nanoporous materials mediated heterogeneous catalysts and their implications in biodiesel production. Materials Science for Energy Technologies, 2018, 1, 11-21.	1.0	60
15	Kinetic studies of attachment and re-orientation of octyltriethoxysilane for formation of self-assembled monolayer on a silica substrate. Materials Science and Engineering C, 2016, 68, 423-429.	3.8	58
16	Synthesis, characterization and in vitro analysis of \hat{l}_{\pm} -Fe2O3-GdFeO3 biphasic materials as therapeutic agent for magnetic hyperthermia applications. Materials Science and Engineering C, 2018, 92, 932-941.	3.8	58
17	A novel bio-sorbent comprising encapsulated Agrobacterium fabrum (SLAJ731) and iron oxide nanoparticles for removal of crude oil co-contaminant, lead Pb(II). Journal of Environmental Chemical Engineering, 2017, 5, 442-452.	3.3	56
18	Conformational and Organizational Insights into Serum Proteins during Competitive Adsorption on Self-Assembled Monolayers. Langmuir, 2018, 34, 8178-8194.	1.6	56

#	Article	lF	CITATIONS
19	Review: Polymers, Surface-Modified Polymers, and Self Assembled Monolayers as Surface-Modifying Agents for Biomaterials. Polymer-Plastics Technology and Engineering, 2015, 54, 1358-1378.	1.9	54
20	Production of novel rhamnolipids via biodegradation of waste cooking oil using Pseudomonas aeruginosa MTCC7815. Biodegradation, 2019, 30, 301-312.	1.5	54
21	Nanoengineered material based biosensing electrodes for enzymatic biofuel cells applications. Materials Science for Energy Technologies, 2018, 1, 38-48.	1.0	53
22	Design and characterization of novel Al-doped ZnO nanoassembly as an effective nanoantibiotic. Applied Nanoscience (Switzerland), 2018, 8, 1925-1941.	1.6	52
23	Surface chemistry at the nanometer scale influences insulin aggregation. Colloids and Surfaces B: Biointerfaces, 2012, 100, 69-76.	2.5	49
24	Oil washing proficiency of biosurfactant produced by isolated Bacillus tequilensis MK 729017 from Assam reservoir soil. Journal of Petroleum Science and Engineering, 2020, 195, 107612.	2.1	49
25	Crude oil degradation and biosurfactant production abilities of isolated Agrobacterium fabrum SLAJ731. Biocatalysis and Agricultural Biotechnology, 2019, 21, 101322.	1.5	48
26	Edible oil nanoemulsion: An organic nanoantibiotic as a potential biomolecule delivery vehicle. International Journal of Polymeric Materials and Polymeric Biomaterials, 2018, 67, 410-419.	1.8	47
27	Effect of Zn/ZnO integration with hydroxyapatite: a review. Materials Technology, 2018, 33, 79-92.	1.5	47
28	Laser cladding with HA and functionally graded TiO2-HA precursors on Ti–6Al–4V alloy for enhancing bioactivity and cyto-compatibility. Surface and Coatings Technology, 2018, 352, 420-436.	2.2	45
29	Mechano-tribological properties and in vitro bioactivity of biphasic calcium phosphate coating on Ti-6Al-4V. Journal of the Mechanical Behavior of Biomedical Materials, 2018, 86, 143-157.	1.5	43
30	Design of engineered surfaces for prospective detection of SARS-CoV-2 using quartz crystal microbalance-based techniques. Expert Review of Proteomics, 2020, 17, 425-432.	1.3	42
31	Properties of competitively adsorbed BSA and fibrinogen from their mixture on mixed and hybrid surfaces. Applied Surface Science, 2013, 264, 832-837.	3.1	41
32	Yttrium iron garnet for hyperthermia applications: Synthesis, characterization and in-vitro analysis. Materials Science and Engineering C, 2020, 116, 111163.	3.8	40
33	Surface engineering of personal protective equipments (PPEs) to prevent the contagious infections of SARS-CoV-2. Surface Engineering, 2020, 36, 901-907.	1.1	39
34	Surface engineering of nano-sorbents for the removal of heavy metals: Interfacial aspects. Journal of Environmental Chemical Engineering, 2021, 9, 104586.	3.3	39
35	Experimental investigation of molasses as a sole nutrient for the production of an alternative metabolite biosurfactant. Journal of Water Process Engineering, 2020, 38, 101632.	2.6	38
36	Bimetallic assembly of Fe(III) doped ZnO as an effective nanoantibiotic and its ROS independent antibacterial mechanism. Journal of Trace Elements in Medicine and Biology, 2020, 57, 126416.	1.5	36

#	Article	IF	Citations
37	Relation between the Wetting Effect and the Adsorbed Amount of Water-Soluble Polymers or Proteins at Various Interfaces. Journal of Chemical & Data, 2013, 58, 3440-3446.	1.0	35
38	Deposition of biphasic calcium phosphate film on laser surface textured Ti–6Al–4V and its effect on different biological properties for orthopedic applications. Journal of Alloys and Compounds, 2020, 842, 155683.	2.8	34
39	Coating of bioactive glass on magnesium alloys to improve its degradation behavior: Interfacial aspects. Journal of Magnesium and Alloys, 2020, 8, 999-1015.	5.5	34
40	3D printing for cardiovascular tissue engineering: a review. Materials Technology, 2018, 33, 433-442.	1.5	31
41	Proline functionalized gold nanoparticles modulates lysozyme fibrillation. Colloids and Surfaces B: Biointerfaces, 2019, 174, 401-408.	2.5	27
42	Application of bimetallic Al-doped ZnO nano-assembly for heavy metal removal and decontamination of wastewater. Water Science and Technology, 2019, 80, 2067-2078.	1.2	26
43	Neuronal SNARE complex: A protein folding system with intricate protein-protein interactions, and its common neuropathological hallmark, SNAP25. Neurochemistry International, 2019, 122, 196-207.	1.9	26
44	Antibacterial nano-biocomposite scaffolds of Chitosan, Carboxymethyl Cellulose and Zn & Description (Chitosan-CMC-FZO@HAp) for bone tissue engineering. Cellulose, 2021, 28, 9207-9226.	2.4	26
45	Therapeutic Advancement in Alzheimer Disease: New Hopes on the Horizon?. CNS and Neurological Disorders - Drug Targets, 2018, 17, 571-589.	0.8	26
46	Fe(III) doped ZnO nano-assembly as a potential heterogeneous nano-catalyst for the production of biodiesel. Materials Letters, 2019, 237, 232-235.	1.3	25
47	Surface modification of Ti6Al4V by forming hybrid self-assembled monolayers and its effect on collagen-I adsorption, osteoblast adhesion and integrin expression. Applied Surface Science, 2020, 505, 144611.	3.1	25
48	Surface Design for Immobilization of an Antimicrobial Peptide Mimic for Efficient Antiâ€Biofouling. Chemistry - A European Journal, 2020, 26, 5789-5793.	1.7	25
49	Performance study of a sterilization box using a combination of heat and ultraviolet light irradiation for the prevention of COVID-19. Environmental Research, 2021, 198, 111309.	3.7	24
50	Biofilm formation and electron transfer in bioelectrochemical systems. Environmental Technology Reviews, 2018, 7, 220-234.	2.1	23
51	Self-Assembly of Minimal Peptoid Sequences. ACS Macro Letters, 2020, 9, 494-499.	2.3	21
52	Thermomechanical process induces unfolding and fibrillation of bovine serum albumin. Food Hydrocolloids, 2021, 112, 106294.	5.6	21
53	Superhydrophobic Self-Cleaning Composite of a Metal–Organic Framework with Polypropylene Fabric for Efficient Removal of Oils from Oil–Water Mixtures and Emulsions. ACS Applied Nano Materials, 2022, 5, 10003-10014.	2.4	21
54	Effect of surface functionalization on the heating efficiency of magnetite nanoclusters for hyperthermia application. Journal of Alloys and Compounds, 2021, 854, 157248.	2.8	20

#	Article	IF	CITATIONS
55	Degradation kinetics and surface properties of bioceramic hydroxyapatite coated AZ31 magnesium alloys for biomedical applications. Materials Letters, 2020, 270, 127732.	1.3	19
56	Enhanced melanoidin removal by amine-modified Phyllanthus emblica leaf powder. Bioresource Technology, 2021, 339, 125572.	4.8	19
57	A comparative investigation of normal and inverted exchange bias effect for magnetic fluid hyperthermia applications. Scientific Reports, 2020, 10, 18666.	1.6	18
58	Integration of biological control with engineered heterojunction nano-photocatalysts for sustainable and effective management of water hyacinth weed. Journal of Environmental Chemical Engineering, 2022, 10, 106976.	3.3	18
59	Chain-End Modifications and Sequence Arrangements of Antimicrobial Peptoids for Mediating Activity and Nano-Assembly. Frontiers in Chemistry, 2020, 8, 416.	1.8	17
60	Effect of polymer–surfactant structure on its solution viscosity. Asia-Pacific Journal of Chemical Engineering, 2011, 6, 78-84.	0.8	16
61	Deciphering the mechanistic insight into the stoichiometric ratio dependent behavior of Cu(II) on BSA fibrillation. International Journal of Biological Macromolecules, 2017, 97, 662-670.	3.6	16
62	Lipopeptide and essential oil based nanoemulsion for controlled drug delivery. Polymer-Plastics Technology and Materials, 2020, 59, 2076-2086.	0.6	16
63	Bulk synthesis of tungsten-oxide nanomaterials by a novel, plasma chemical reactor configuration, studies on their performance for waste-water treatment and hydrogen evolution reactions. Chemical Engineering Journal, 2022, 428, 131111.	6.6	16
64	Biodegradation of waste cooking oil and simultaneous production of rhamnolipid biosurfactant by Pseudomonas aeruginosa P7815 in batch and fed-batch bioreactor. Bioprocess and Biosystems Engineering, 2022, 45, 309-319.	1.7	16
65	Self-assembled monolayers in biomaterials. , 2018, , 137-178.		15
66	Effect of TiO2 addition on adhesion and biological behavior of BCP-TiO2 composite films deposited by magnetron sputtering. Materials Science and Engineering C, 2020, 114, 111033.	3.8	15
67	Synthesis of finest superparamagnetic carbon-encapsulated magnetic nanoparticles by a plasma expansion method for biomedical applications. Journal of Alloys and Compounds, 2018, 749, 768-775.	2.8	13
68	Hydroxyapatite: an inorganic ceramic for biomedical applications. , 2019, , 205-249.		13
69	Physicochemical factors of bioprocessing impact the stability of therapeutic proteins. Biotechnology Advances, 2022, 55, 107909.	6.0	12
70	Biodegradation kinetics of binary mixture of hexadecane and phenanthrene by the bacterial microconsortium. Bioresource Technology, 2022, 358, 127408.	4.8	12
71	Synthesis, characterization and antibacterial activity of aluminum doped zinc oxide. Materials Today: Proceedings, 2019, 18, 1388-1400.	0.9	11
72	Shear-induced aggregation of amyloid \hat{I}^2 ($1\hat{a}\in 40$) in a parallel plate geometry. Journal of Biomolecular Structure and Dynamics, 2021, 39, 6415-6423.	2.0	10

#	Article	IF	Citations
73	Green synthesis of Ag doped ZnO nanoparticles: study of their structural, optical, thermal and antibacterial properties. Materials Technology, 2022, 37, 2785-2794.	1.5	10
74	The effect of the stoichiometric ratio of zinc towards the fibrillation of Bovine Serum Albumin (BSA): A mechanistic insight. International Journal of Biological Macromolecules, 2019, 123, 409-419.	3.6	9
7 5	Physical, chemical, and biological investigations of composites for biomedical applications. Journal of the American Ceramic Society, 2022, 105, 1790-1808.	1.9	9
76	Microstructural, electrical and biological activity in $\$$ mathrm{Ca}_{10}(mathrm{PO}_4)_6(mathrm{OH})_2-mathrm{Ba}_{0.5}mathrm{Sr}_{0.5}mathrm{TiO}_ceramic composites designed for tissue engineering applications. Scientific Reports, 2021, 11, 22304.	3\$\$6	8
77	Hydrophobic Surface Induced Biosorption and Microbial Ex Situ Remediation of Oil-Contaminated Sites. Industrial & Engineering Chemistry Research, 2021, 60, 9378-9388.	1.8	6
78	Functionalized Biogenic Nanoparticles for use in Emerging Biomedical Applications: A Review. Current Nanomaterials, 2020, 05, .	0.2	6
79	Prospective of fungal pathogenâ€based bioherbicides for the control of water hyacinth: A review. Journal of Basic Microbiology, 2022, 62, 415-427.	1.8	6
80	Design of antibiofilm surfaces by immobilization of biogenic silver nanoparticles on amine self-assembled monolayers. Materials Letters, 2022, 311, 131574.	1.3	6
81	Photocatalytic metal nanoparticles: a green approach for degradation of dyes., 2021,, 251-275.		5
82	Design and characterization of biphasic ferric hydroxyapatite-zincite nanoassembly for bone tissue engineering. Ceramics International, 2021, 47, 28274-28287.	2.3	5
83	Decontamination of distillery spent wash through advanced oxidation methods., 2021,, 103-117.		4
84	Plant-polyphenol-mediated synthesis of iron oxide nanomaterials for heavy metal removal., 2021,, 115-129.		4
85	Integration of biosorption and biodegradation in a fedâ€batch mode for the enhanced crude oil remediation. Letters in Applied Microbiology, 2021, 73, 471-476.	1.0	4
86	Experimental investigation on suitability of Surfactin for enhanced oil recovery: Stability, adsorption equilibrium and kinetics studies. Journal of Environmental Chemical Engineering, 2022, 10, 107083.	3.3	4
87	Engineered Drug Delivery Systems: Insights of Biointerface. , 2020, , 1-30.		3
88	Single-step, DC thermal plasma-assisted synthesis of Ag-C nanocomposites with less than 10 nm sizes for antibacterial applications. Journal Physics D: Applied Physics, 2020, 53, 365201.	1.3	3
89	Novel Nanoengineered Materials-Based Catalysts for Various Bioelectrochemical Systems. ACS Symposium Series, 2020, , 45-71.	0.5	3
90	A comparative study of microstructural, biological, and mechanical properties in 20H-80B and 20H-80S composite scaffolds. Materials Letters, 2021, 304, 130668.	1.3	3

#	Article	IF	CITATIONS
91	Microstructural, interfacial, biological and electrical activity in sputtered Hydroxyapatite-Barium strontium titanate bilayered thin films. Surfaces and Interfaces, 2022, 31, 102063.	1.5	3
92	Nano Hydroxyapatite (Nano-Hap): A Potential Bioceramic For Biomedical Applications. Current Nanomaterials, 2021, 06, .	0.2	2
93	Identification of Various Metabolites like Gases, Biopolymers and Biosurfactants. Green Energy and Technology, 2022, , 197-220.	0.4	2
94	Recent Case Studies of In-Situ and Ex-Situ Microbial Enhanced Oil Recovery. Green Energy and Technology, 2022, , 243-260.	0.4	2
95	Secondary and Tertiary Oil Recovery Processes. Green Energy and Technology, 2022, , 23-50.	0.4	2
96	Oil and petrochemical industries wastewater treatment in bioelectrochemical systems., 2020,, 157-173.		2
97	Iron Oxide based Magnetic Nanomaterials for Biomedical Applications. Materials Research Foundations, 2020, , 276-322.	0.2	1
98	CO2-Based Enhanced Oil Recovery. Green Energy and Technology, 2022, , 51-71.	0.4	1
99	Design of Consortium for the Production of Desired Metabolites. Green Energy and Technology, 2022, , 179-195.	0.4	1
100	Optimization of Culture Conditions for the Production of Biosurfactants. Green Energy and Technology, 2022, , 149-178.	0.4	1
101	Sustainability Assessment of Microbial Fuel Cells. , 2019, , 313-330.		1
102	Nanomaterial-based hydrogels for coronary interventions: a mini review. Mini-invasive Surgery, 0, , .	0.2	1
103	Novel Therapeutics and Diagnostics Strategies Based on Engineered Nanobiomaterials., 2019,, 1-27.		0
104	Microbial Biosurfactants Remediation of Contaminated Soils., 2021,, 160-173.		0
105	Implications of the Nanoscopic Surface Modification on the Protein Adsorption and Cell Adhesion. Nanotechnology in the Life Sciences, 2021, , 423-460.	0.4	0
106	Synthesis and Sintering of Calcium Hydroxyapatite for Biomedical Applications. , 2021, , .		0
107	Core Flooding Studies Using Microbial Systems. Green Energy and Technology, 2022, , 221-241.	0.4	0
108	Screening of Extremophiles for Microbial Enhanced Oil Recovery Based on Surface Active Properties. Green Energy and Technology, 2022, , 101-121.	0.4	0

#	Article	IF	CITATIONS
109	Effect of Reservoir Environmental Conditions and Inherent Microorganisms. Green Energy and Technology, 2022, , 123-148.	0.4	O
110	Optimum Formulation of Chemical Slug and Core Flooding Studies. Green Energy and Technology, 2022, , 73-99.	0.4	0
111	Nano-sorbents-assisted microbial bioremediation of hazardous petroleum hydrocarbons. , 2020, , 233-247.		O
112	Influence of medium based dipolar interaction in relaxation mechanism and self-heating efficiency of MWCNT/MnFe2O4 nanocomposite. Materials Chemistry and Physics, 2022, 288, 126374.	2.0	O