Anjali Pal

List of Publications by Citations

114 papers	7,033 citations	36 h-index	83 g-index
117 ext. papers	7,728 ext. citations	5 avg, IF	6.52 L-index

#	Paper	IF	Citations
114	Photochemical green synthesis of calcium-alginate-stabilized Ag and Au nanoparticles and their catalytic application to 4-nitrophenol reduction. *Langmuir*, **2010**, 26, 2885-93	4	813
113	Silver nanoparticle catalyzed reduction of aromatic nitro compounds. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2002**, 196, 247-257	5.1	758
112	Synthesis and Size-Selective Catalysis by Supported Gold Nanoparticles: Study on Heterogeneous and Homogeneous Catalytic Process. *Journal of Physical Chemistry C*, **2007**, 111, 4596-4605	3.8	688
111	Nitroarene reduction: a trusted model reaction to test nanoparticle catalysts. *Chemical Communications*, **2015**, 51, 9410-31	5.8	537
110	Catalytic Reduction of Aromatic Nitro Compounds by Coinage Metal Nanoparticles. *Langmuir*, **2001**, 17, 1800-1802	4	491
109	Photocatalytic degradation of a mixture of Crystal Violet (Basic Violet 3) and Methyl Red dye in aqueous suspensions using Ag+ doped TiO2. *Dyes and Pigments*, **2006**, 69, 224-232	4.6	238
108	Size Regime Dependent Catalysis by Gold Nanoparticles for the Reduction of Eosin. *Journal of Physical Chemistry B*, **2001**, 105, 9266-9272	3.4	225
107	Size Controlled Synthesis of Gold Nanoparticles using Photochemically Prepared Seed Particles. *Journal of Nanoparticle Research*, **2001**, 3, 257-261	2.3	223
106	Removal of crystal violet dye from wastewater by surfactant-modified alumina. *Separation and Purification Technology*, **2005**, 44, 139-144	8.3	140
105	Photocatalytic degradation of Methyl Red dye in aqueous solutions under UV irradiation using Ag+ doped TiO2. *Desalination*, **2005**, 181, 91-100	10.3	139
104	Arsenic removal from real-life groundwater by adsorption on laterite soil. *Journal of Hazardous Materials*, **2008**, 151, 811-20	12.8	118
103	Preparation of nanosized gold particles in a biopolymer using UV photoactivation. *Journal of Colloid and Interface Science*, **2005**, 288, 396-401	9.3	108
102	Removal of anionic surfactant from wastewater by alumina: a case study. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2005**, 254, 165-171	5.1	108
101	Tetracycline degradation in aquatic environment by highly porous MnO2 nanosheet assembly. *Chemical Engineering Journal*, **2015**, 276, 155-165	14.7	96
100	Synergistically improved adsorption of anionic surfactant and crystal violet on chitosan hydrogel beads. *Chemical Engineering Journal*, **2013**, 217, 426-434	14.7	93
99	Nano silver impregnation on commercial TiO2 and a comparative photocatalytic account to degrade malachite green. *Separation and Purification Technology*, **2012**, 89, 147-159	8.3	72
98	2D materials for renewable energy storage devices: Outlook and challenges. *Chemical Communications*, **2016**, 52, 13528-13542	5.8	71

97	Surfactant-modified chitosan beads for cadmium ion adsorption. *International Journal of Biological Macromolecules*, **2017**, 104, 1548-1555	7.9	70
96	Removal of phenol from water environment by surfactant-modified alumina through adsolubilization. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **2006**, 277, 63-68	5.1	68
95	Remarkable Facet Selective Reduction of 4-Nitrophenol by Morphologically Tailored (111) Faceted CuO Nanocatalyst. *ACS Omega*, **2017**, 2, 1968-1984	3.9	67
94	Fixed bed column study for the removal of crystal violet (C. I. Basic Violet 3) dye from aquatic environment by surfactant-modified alumina. *Dyes and Pigments*, **2006**, 69, 245-251	4.6	66
93	Silver nanoparticle aggregate formation by a photochemical method and its application to SERS analysis □*Journal of Raman Spectroscopy*, **1999**, 30, 199-204	2.3	61
92	Green and efficient biosorptive removal of methylene blue by Abelmoschus esculentus seed: Process optimization and multi-variate modeling. *Journal of Environmental Management*, **2017**, 200, 145-159	7.9	59
91	Microporous assembly of MnO2 nanosheets for malachite green degradation. *Separation and Purification Technology*, **2014**, 134, 26-36	8.3	57
90	Alginate Gel-Mediated Photochemical Growth of Mono- and Bimetallic Gold and Silver Nanoclusters and Their Application to Surface-Enhanced Raman Scattering. *Journal of Physical Chemistry C*, **2009**, 113, 7553-7560	3.8	53
89	Applications of chitosan in environmental remediation: A review. *Chemosphere*, **2021**, 266, 128934	8.4	52
88	UV induced degradation of herbicide 2,4-D: kinetics, mechanism and effect of various conditions on the degradation. *Separation and Purification Technology*, **2005**, 44, 121-129	8.3	51
87	Detached leaf culture: viability to evaluate 2,4-D toxicity symptoms in cotton apex leaves. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2005**, 40, 167-70	2.3	49
86	Liquor ammonia mediated V(V) insertion in thin Co3O4 sheets for improved pseudocapacitors with high energy density and high specific capacitance value. *Chemical Communications*, **2015**, 51, 15986-9	5.8	47
85	Methylene Blue□Cu2O Reaction Made Easy in Acidic Medium. *Journal of Physical Chemistry C*, **2012**, 116, 25741-25747	3.8	47
84	Removal of phenol from aquatic environment by SDS-modified alumina: Batch and fixed bed studies. *Separation and Purification Technology*, **2006**, 50, 256-262	8.3	46
83	Utilization of silica gel waste for adsorption of cationic surfactant and adsolubilization of organics from textile wastewater: A case study. *Desalination*, **2011**, 276, 142-147	10.3	44
82	New hydrothermal process for hierarchical TiO2nanostructures. *CrystEngComm*, **2009**, 11, 1210	3.3	44
81	Suitable Morphology Makes CoSn(OH)6 Nanostructure a Superior Electrochemical Pseudocapacitor. *ACS Applied Materials & Interfaces*, **2016**, 8, 17987-98	9.5	43
80	Synergism of gold and silver invites enhanced fluorescence for practical applications. *RSC Advances*, **2016**, 6, 17683-17703	3.7	38

79	Investigation on the adsorption of Mn(II) on surfactant-modified alumina: Batch and column studies. *Journal of Environmental Chemical Engineering*, **2014**, 2, 2295-2305	6.8	36
78	Surfactant-modified alumina: an efficient adsorbent for malachite green removal from water environment. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2009**, 44, 896-905	2.3	34
77	Synthesis and characterization of SERS gene probe for BRCA-1 (breast cancer). *Faraday Discussions*, **2006**, 132, 293-301; discussion 309-19	3.6	34
76	Decoration of Fe3O4 Base Material with Pd Loaded CdS Nanoparticle for Superior Photocatalytic Efficiency. *Journal of Physical Chemistry C*, **2014**, 118, 11485-11494	3.8	33
75	Graphitic carbon nitride based Z scheme photocatalysts: Design considerations, synthesis, characterization and applications. *Journal of Industrial and Engineering Chemistry*, **2019**, 79, 383-408	6.3	31
74	Fluorescent Au(I)@Ag⊃Ag⊃giant cluster for selective sensing of mercury(II) ion. *Dalton Transactions*, **2014**, 43, 11557-65	4.3	31
73	Fabrication of a novel Bi2O3 nanoparticle impregnated nitrogen vacant 2D g-C3N4 nanosheet Z scheme photocatalyst for improved degradation of methylene blue dye under LED light illumination. *Applied Surface Science*, **2020**, 507, 144965	6.7	31
72	Recent advancements in visible-light-assisted photocatalytic removal of aqueous pharmaceutical pollutants. *Clean Technologies and Environmental Policy*, **2020**, 22, 11-42	4.3	30
71	Adsolubilization phenomenon perceived in chitosan beads leading to a fast and enhanced malachite green removal. *Chemical Engineering Journal*, **2016**, 290, 371-380	14.7	29
70	Arsenic removal from aqueous solutions by adsorption on laterite soil. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2007**, 42, 453-62	2.3	28
69	Hierarchical growth of ZnFe2O4 for sensing applications. *New Journal of Chemistry*, **2016**, 40, 1861-1871	3.6	27
68	Development and validation of an adsorption kinetic model at solid-liquid interface using normalized Gudermannian function. *Journal of Molecular Liquids*, **2019**, 276, 67-77	6	27
67	Redox-Mediated Synthesis of a Fe⊃MnO⊃Nanocomposite for Dye Adsorption and Pseudocapacitance. *Chemistry - an Asian Journal*, **2015**, 10, 1571-80	4.5	26
66	Statistical modeling and performance evaluation of biosorptive removal of Nile blue A by lignocellulosic agricultural waste under the application of high-strength dye concentrations. *Journal of Environmental Chemical Engineering*, **2020**, 8, 103677	6.8	26
65	Wet-Chemical Synthesis Of Spherical Arsenic Nanoparticles By A Simple Reduction Method And Its Characterization. *Advanced Materials Letters*, **2012**, 3, 177-180	2.4	26
64	Novel 2D/2D g-CN/BiNbOCl nano-composite for enhanced photocatalytic degradation of oxytetracycline under visible LED light irradiation. *Journal of Colloid and Interface Science*, **2021**, 584, 320-331	9.3	26
63	Degradation of textile wastewater by modified photo-Fenton process: Application of Co(II) adsorbed surfactant-modified alumina as heterogeneous catalyst. *Journal of Environmental Chemical Engineering*, **2017**, 5, 2886-2893	6.8	23
62	Enhanced Pb2+ removal by anionic surfactant bilayer anchored on chitosan bead surface. *Journal of Molecular Liquids*, **2017**, 248, 713-724	6	23

61	Advance Aqueous Asymmetric Supercapacitor Based on Large 2D NiCoO Nanostructures and the rGO@FeO Composite. *ACS Omega*, **2017**, 2, 6576-6585	3.9	22
60	Rapid and high-performance adsorptive removal of hazardous acridine orange from aqueous environment using Abelmoschus esculentus seed powder: Single- and multi-parameter optimization studies. *Journal of Environmental Management*, **2018**, 217, 573-591	7.9	22
59	Surfactant modification of chitosan hydrogel beads for Ni@NiO core-shell nanoparticles formation and its catalysis to 4-nitrophenol reduction. *Journal of Environmental Chemical Engineering*, **2017**, 5, 1321-1329	6.8	21
58	Silver Molybdates with Intriguing Morphology and as a Peroxidase Mimic with High Sulfide Sensing Capacity. *Crystal Growth and Design*, **2017**, 17, 295-307	3.5	21
57	Cationic surfactant adsorption on silica gel and its application for wastewater treatment. *Desalination and Water Treatment*, **2010**, 22, 1-8		20
56	Photochemical synthesis of biopolymer coated Aucore-Agshell type bimetallic nanoparticles. *Journal of Nanoscience and Nanotechnology*, **2007**, 7, 2110-5	1.3	20
55	Sorption kinetics of arsenic on laterite soil in aqueous medium. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2007**, 42, 989-96	2.3	20
54	Photo-Fenton process in a Co(II)-adsorbed micellar soft-template on an alumina support for rapid methylene blue degradation. *RSC Advances*, **2016**, 6, 100876-100890	3.7	20
53	Nano-Particle-Mediated Wastewater Treatment: a Review. *Current Pollution Reports*, **2017**, 3, 17-30	7.6	19
52	Adsorptive removal of Mn(II) from water and wastewater by surfactant-modified alumina. *Desalination and Water Treatment*, **2016**, 57, 2775-2786		19
51	Intriguing Fluorescence Behavior of Diiminic Schiff Bases in the Presence of in situ Produced Noble Metal Nanoparticles. *Journal of Physical Chemistry C*, **2011**, 115, 22138-22147	3.8	19
50	Proportion of composition in a composite does matter for advanced supercapacitor behavior. *Journal of Materials Chemistry A*, **2016**, 4, 17440-17454	13	19
49	Photocatalytic CO2 reduction over g-C3N4 based heterostructures: Recent progress and prospects. *Journal of Environmental Chemical Engineering*, **2021**, 9, 104631	6.8	19
48	Treatment of real wastewater: Kinetic and thermodynamic aspects of cadmium adsorption onto surfactant-modified chitosan beads. *International Journal of Biological Macromolecules*, **2019**, 131, 1092-1100	7.9	17
47	Solar light-induced photocatalytic degradation of methyl red in an aqueous suspension of commercial ZnO: a green approach. *Desalination and Water Treatment*, **2015**, 53, 501-514		17
46	One-Pot Fabrication of Perforated Graphitic Carbon Nitride Nanosheets Decorated with Copper Oxide by Controlled Ammonia and Sulfur Trioxide Release for Enhanced Catalytic Activity. *ACS Omega*, **2018**, 3, 9318-9332	3.9	17
45	Dye removal using waste beads: Efficient utilization of surface-modified chitosan beads generated after lead adsorption process. *Journal of Water Process Engineering*, **2019**, 31, 100882	6.7	17
44	A soft-template mediated approach for Au(0) formation on a heterosilica surface and synergism in the catalytic reduction of 4-nitrophenol. *RSC Advances*, **2015**, 5, 78006-78016	3.7	16

43	Fixed-bed column study on removal of Mn(II), Ni(II) and Cu(II) from aqueous solution by surfactant bilayer supported alumina. *Separation Science and Technology*, **2016**, 51, 1287-1298	2.5	15
42	3D macroporous architecture of self-assembled defect-engineered ultrathin g-C3N4 nanosheets for tetracycline degradation under LED light irradiation. *Materials Research Bulletin*, **2021**, 133, 111074	5.1	15
41	Defect engineered mesoporous 2D graphitic carbon nitride nanosheet photocatalyst for rhodamine B degradation under LED light illumination. *Journal of Photochemistry and Photobiology A: Chemistry*, **2020**, 397, 112582	4.7	14
40	Adsorptive removal of Cu(II) and Ni(II) from single-metal, binary-metal, and industrial wastewater systems by surfactant-modified alumina. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2015**, 50, 385-95	2.3	14
39	Shape-controlled Synthesis of Gold Nanoparticles from Gold(III)-chelates of β-diketones. *Journal of Nanoparticle Research*, **2005**, 7, 641-650	2.3	14
38	Orange-red silver emitters for sensing application and bio-imaging. *Dalton Transactions*, **2015**, 44, 11457-69	4.3	13
37	Preparation of Ultrafine Colloidal Gold Particles using a Bioactive Molecule. *Journal of Nanoparticle Research*, **2004**, 6, 27-34	2.3	13
36	Supported metal and metal oxide particles with proximity effect for catalysis.. *RSC Advances*, **2020**, 10, 35449-35472	3.7	13
35	Novel Arsenic Nanoparticles Are More Effective and Less Toxic than As (III) to Inhibit Extracellular and Intracellular Proliferation of Leishmania donovani. *Journal of Parasitology Research*, **2014**, 2014, 187640	1.9	11
34	Methyl red degradation under UV illumination and catalytic action of commercial ZnO: a parametric study. *Desalination and Water Treatment*, **2015**, 56, 1066-1076		10
33	Tin/Indium nanobundle formation from aggregation or growth of nanoparticles. *Journal of Nanoparticle Research*, **2008**, 10, 41-46	2.3	10
32	Modeling and fixed bed column adsorption of As(V) on laterite soil. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2007**, 42, 1585-93	2.3	10
31	Behaviour of fixed-bed column for the adsorption of malachite green on surfactant-modified alumina. *Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering*, **2009**, 44, 265-72	2.3	9
30	Removal kinetics and mechanism for phenol uptake by surfactant-modified alumina. *Desalination and Water Treatment*, **2009**, 6, 269-275		9
29	Photo-Fenton process in Co(II)-adsorbed admicellar soft-template on alumina support for methyl orange degradation. *Catalysis Today*, **2020**, 348, 212-222	5.3	9
28	Application of response surface methodology to evaluate the removal efficiency of Mn(II), Ni(II), and Cu(II) by surfactant-modified alumina. *Clean Technologies and Environmental Policy*, **2016**, 18, 1003-1020	4.3	9
27	Surfactant bilayer on chitosan bead surface for enhanced Ni(II) adsorption. *Sustainable Materials and Technologies*, **2018**, 18, e00077	5.3	8
26	Galvanic replacement of As(0) nanoparticles by Au(III) for nanogold fabrication and SERS application. *New Journal of Chemistry*, **2014**, 38, 1675	3.6	7

25	Adsorption of 2,4-D Herbicide from Water Environment on Modified Silica Gel Factory Waste. *Water Environment Research*, **2013**, 85, 2147-2156	2.8	7
24	Adsorption Based Technologies for Arsenic Removal from Aqueous Environment: A Review. *Recent Patents on Engineering*, **2010**, 4, 92-101	0.3	7
23	Surfactant Adsorption on Solid Surfaces and Further Application to Adsolubilization: A Comprehensive Review. *Recent Patents on Engineering*, **2013**, 7, 167-181	0.3	7
22	Benzophenone assisted UV-activated synthesis of unique Pd-nanodendrite embedded reduced graphene oxide nanocomposite: a catalyst for C-C coupling reaction and fuel cell.. *RSC Advances*, **2019**, 9, 21329-21343	3.7	6
21	Arsenate stabilized CuO nanoparticle catalyst for one-electron transfer reversible reaction. *Dalton Transactions*, **2014**, 43, 6677-83	4.3	6
20	Utilization of Lignocellulosic Waste for Acridine Orange Uptake: Insights into Multiparameter Isotherms Modeling with ANN-Aimed Formulation. *Journal of Environmental Engineering, ASCE*, **2020**, 146, 04020096	2	5
19	Solid-Phase Extraction of Cu(II) from Aqueous Solution Using Surfactant-Modified Alumina. *Journal of Hazardous, Toxic, and Radioactive Waste*, **2017**, 21, 04016017	2.3	5
18	Degradation of tetracycline antibiotics by advanced oxidation processes: application of MnO2 nanomaterials. *Natural Resources & Engineering*, **2017**, 2, 32-42		5
17	Time and temperature dependent formation of hollow gold nanoparticles via galvanic replacement reaction of As(0) and its catalytic application. *MRS Communications*, **2019**, 9, 270-279	2.7	5
16	Enhanced adsorption of gentian violet dye from water using lignocellulosic agricultural waste modified with di- and tri-carboxylic acids: Artificial intelligence modeling, practical comprehension, mechanistic and regeneration analyses. *Journal of Environmental Chemical Engineering*, **2021**, 9, 105578	6.8	5
15	Spectrophotometric determination of cationic surfactants in aqueous media using chrome azurol S as colour forming agent and 1-butanol as extracting solvent. *Talanta*, **2020**, 206, 120238	6.2	4
14	Application of biopolymers as a new age sustainable material for surfactant adsorption: A brief review. *Carbohydrate Polymer Technologies and Applications*, **2021**, 2, 100145	1.7	4
13	Lead Cleanup from Environment using Altered form of Chitosan: A Review. *Recent Patents on Engineering*, **2018**, 12, 175-185	0.3	3
12	Insight into the multiple roles of nitrogen doped carbon quantum dots in an ultrathin 2D-0D-2D all-solid-state Z scheme heterostructure and its performance in tetracycline degradation under LED illumination. *Chemical Engineering Journal*, **2021**, 431, 133914	14.7	2
11	2D-Bi4NbO8Cl nanosheet for efficient photocatalytic degradation of tetracycline in synthetic and real wastewater under visible-light: Influencing factors, mechanism and degradation pathway. *Journal of Alloys and Compounds*, **2022**, 900, 163400	5.7	2
10	Batch and Continuous Fixed-Bed Column Adsorption for the Removal of Ni (II) from Aqueous Solutions using Surfactant-Treated Alumina. *Recent Patents on Engineering*, **2016**, 10, 36-50	0.3	2
9	Iron oxide-loaded alginate-bentonite hydrogel beads as a green and sustainable catalyst for 4-nitrophenol reduction. *Materials Today Communications*, **2021**, 28, 102588	2.5	2
8	Aggregation of nitroaniline in tetrahydrofuran through intriguing H-bond formation by sodium borohydride. *Physical Chemistry Chemical Physics*, **2014**, 16, 12865-74	3.6	1

7	Application of silica gel factory waste for methyl orange dye removal. *International Journal of Environment and Waste Management*, **2014**, 13, 37	0.9	1
6	Arsenic Nanoparticles are Effective in Reducing 3-Methylcholanthrene Induced Carcinogenesis in Murine Fibrosarcoma by Promoting Anti-tumorigenic Inflammation. *BioNanoScience*,	3.4	1
5	Immobilization of size variable Au nanoparticles on surfactant-modified silica and their catalytic application toward 4-nitrophenol reduction: A comparative account of catalysis. *Surfaces and Interfaces*, **2021**, 26, 101423	4.1	1
4	Silver nanoparticle aggregate formation by a photochemical method and its application to SERS analysis **1999**, 30, 199		1
3	Electrochemical aspects of coinage metal nanoparticles for catalysis and spectroscopy.. *RSC Advances*, **2022**, 12, 12116-12135	3.7	1
2	Bimetallic Nanoparticles: Synthesis and Characterization **2017**, 79-96		
1	Alteration in Inflammasome Cytokine Profile and Functional Plasticity of Macrophage Phenotype in Arsenic(0) Nanoparticle Treated Murine Fibrosarcoma. *BioNanoScience*,1	3.4	