

# Jaya Narayan Sahu

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7611951/publications.pdf>

Version: 2024-02-01

111  
papers

9,971  
citations

38660

50  
h-index

34900

98  
g-index

111  
all docs

111  
docs citations

111  
times ranked

11025  
citing authors

#	ARTICLE	IF	CITATIONS
1	Current Perspectives and Future Prospects of Nano-Biotechnology in Wastewater Treatment. Separation and Purification Reviews, 2021, 50, 139-158.	2.8	48
2	Parametric modelling of Pb(II) adsorption onto chitosan-coated Fe <sub>3</sub> O <sub>4</sub> particles through RSM and DE hybrid evolutionary optimization framework. Journal of Molecular Liquids, 2020, 297, 111893.	2.3	76
3	Improving efficacy of Cr (VI) adsorption process on sustainable adsorbent derived from waste biomass (sugarcane bagasse) with help of ant colony optimization. Industrial Crops and Products, 2020, 143, 111927.	2.5	119
4	Effect of Microlithotype Maceral Distribution on Coke Quality. Coke and Chemistry, 2020, 63, 294-302.	0.0	3
5	Microwave pyrolysis of OPS to synthesize micro porous OPS char: Effect of process parameters. AIP Conference Proceedings, 2019, . .	0.3	2
6	Critical review of abatement of ammonia from wastewater. Journal of Molecular Liquids, 2018, 261, 21-31.	2.3	143
7	Modeling and optimization by particle swarm embedded neural network for adsorption of zinc (II) by palm kernel shell based activated carbon from aqueous environment. Journal of Environmental Management, 2018, 206, 178-191.	3.8	136
8	Influence of coke structure on coke quality using image analysis method. International Journal of Coal Science and Technology, 2018, 5, 473-485.	2.7	10
9	Coal mine gas: a new fuel utilization technique for India. International Journal of Green Energy, 2018, 15, 732-743.	2.1	6
10	Optimization and modeling of methyl orange adsorption onto polyaniline nano-adsorbent through response surface methodology and differential evolution embedded neural network. Journal of Environmental Management, 2018, 223, 517-529.	3.8	140
11	Process optimization and adsorption modeling using activated carbon derived from palm oil kernel shell for Zn (II) disposal from the aqueous environment using differential evolution embedded neural network. Journal of Molecular Liquids, 2018, 265, 592-602.	2.3	74
12	Combined cycle power plant performance evaluation using exergy and energy analysis. Environmental Progress and Sustainable Energy, 2017, 36, 1180-1186.	1.3	27
13	Bioethanol production from renewable sources: Current perspectives and technological progress. Renewable and Sustainable Energy Reviews, 2017, 71, 475-501.	8.2	541
14	Modelling of fluidised-bed reactor by differential evolution optimization for phenol removal using coconut shells based activated carbon. Journal of Molecular Liquids, 2017, 231, 249-262.	2.3	67
15	Evaluation of the quality of dried distiller's grains with solubles for normal and high sugary corn genotypes during dry-â€œgrind ethanol production. Journal of Cleaner Production, 2017, 142, 4282-4293.	4.6	23
16	Sustainable waste management policy in Bangladesh for reduction of greenhouse gases. Sustainable Cities and Society, 2017, 33, 18-26.	5.1	75
17	Microwave Assisted Carbon Nanofibers for Removal of Zinc and Copper from Waste Water. Journal of Nanoscience and Nanotechnology, 2017, 17, 1847-1856.	0.9	3
18	Microwave induced synthesis of magnetic biochar from agricultural biomass for removal of lead and cadmium from wastewater. Journal of Industrial and Engineering Chemistry, 2017, 45, 287-295.	2.9	154

#	ARTICLE	IF	CITATIONS
19	Column performance of carbon nanotube packed bed for methylene blue and orange red dye removal from waste water. IOP Conference Series: Materials Science and Engineering, 2017, 206, 012081.	0.3	3
20	Effect of column angles to rise velocity of a single bubble: a CFD study. Progress in Computational Fluid Dynamics, 2016, 16, 288.	0.1	5
21	Fuel ethanol production from lignocellulosic biomass: An overview on feedstocks and technological approaches. Renewable and Sustainable Energy Reviews, 2016, 66, 751-774.	8.2	552
22	Thermophysical properties of a novel copper reinforced oil palm shell (OPS) composite: Effect of copper volume fraction and temperature. Materials Chemistry and Physics, 2016, 182, 418-428.	2.0	4
23	A comparative evaluation of agronomic performance and kernel composition of normal and high sugary corn genotypes ( <i>Zea mays</i> L.) grown for dry-grind ethanol production. Industrial Crops and Products, 2016, 94, 9-19.	2.5	20
24	Plam oil empty fruit bunch based magnetic biochar composite comparison for synthesis by microwave-assisted and conventional heating. Journal of Analytical and Applied Pyrolysis, 2016, 120, 521-528.	2.6	69
25	Optimization of lead (II) sorption potential using developed activated carbon from tamarind wood with chemical activation by zinc chloride. Desalination and Water Treatment, 2016, 57, 2006-2017.	1.0	16
26	Microwave pyrolysis of oil palm fiber (OPF) for hydrogen production: Parametric investigation. Energy Conversion and Management, 2016, 115, 232-243.	4.4	65
27	Thermophysical characterization of oil palm shell (OPS) and OPS char synthesized by the microwave pyrolysis of OPS. Applied Thermal Engineering, 2016, 105, 605-612.	3.0	31
28	Rapid adsorption of toxic Pb(II) ions from aqueous solution using multiwall carbon nanotubes synthesized by microwave chemical vapor deposition technique. Journal of Environmental Sciences, 2016, 45, 143-155.	3.2	72
29	High-performance removal of toxic phenol by single-walled and multi-walled carbon nanotubes: Kinetics, adsorption, mechanism and optimization studies. Journal of Industrial and Engineering Chemistry, 2016, 35, 63-74.	2.9	90
30	Toxicological and hematological effect of Terminalia arjuna bark extract on a freshwater catfish, <i>Heteropneustes fossilis</i> . Fish Physiology and Biochemistry, 2016, 42, 431-444.	0.9	9
31	Effect of process parameters on production of biochar from biomass waste through pyrolysis: A review. Renewable and Sustainable Energy Reviews, 2016, 55, 467-481.	8.2	1,031
32	Chemical, dielectric and structural characterization of optimized hydrochar produced from hydrothermal carbonization of palm shell. Fuel, 2016, 163, 88-97.	3.4	161
33	Microwave-assisted synthesis of multi-walled carbon nanotubes for enhanced removal of Zn(II) from wastewater. Research on Chemical Intermediates, 2016, 42, 3257-3281.	1.3	32
34	Synthesis and characterization of hydrochars produced by hydrothermal carbonization of oil palm shell. Canadian Journal of Chemical Engineering, 2015, 93, 1916-1921.	0.9	65
35	Effect of orifice size and bond number on bubble formation characteristics: A CFD study. Canadian Journal of Chemical Engineering, 2015, 93, 1869-1879.	0.9	20
36	Steady state modeling on energy and exergy analysis of a pulverized coal fired thermal power plant. Asia-Pacific Journal of Chemical Engineering, 2015, 10, 876-884.	0.8	8

#	ARTICLE	IF	CITATIONS
37	Numerical study of co-axial bubble coalescence characteristics. Asia-Pacific Journal of Chemical Engineering, 2015, 10, 670-680.	0.8	22
38	Sensitivity study of Bubble diameter for prediction of flow pattern in homogeneous bubble column regime. IOP Conference Series: Materials Science and Engineering, 2015, 88, 012004.	0.3	2
39	Hydrothermal carbonization of oil palm shell. Korean Journal of Chemical Engineering, 2015, 32, 1789-1797.	1.2	72
40	Mass Production of Carbon Nanofibers Using Microwave Technology. Journal of Nanoscience and Nanotechnology, 2015, 15, 9571-9577.	0.9	4
41	Utilization of palm oil sludge through pyrolysis for bio-oil and bio-char production. Bioresource Technology, 2015, 178, 65-69.	4.8	107
42	A combination of computational fluid dynamics (CFD) and adaptive neuro-fuzzy system (ANFIS) for prediction of the bubble column hydrodynamics. Powder Technology, 2015, 274, 466-481.	2.1	75
43	Comparative kinetic study of functionalized carbon nanotubes and magnetic biochar for removal of Cd <sup>2+</sup> ions from wastewater. Korean Journal of Chemical Engineering, 2015, 32, 446-457.	1.2	54
44	Microwave-assisted production of activated carbons from oil palm shell in the presence of CO <sub>2</sub> or N <sub>2</sub> for CO <sub>2</sub> adsorption. Journal of Industrial and Engineering Chemistry, 2015, 24, 196-205.	2.9	48
45	Effect of microwave frequency on dielectric properties of oil palm shell (OPS) and OPS char synthesized by microwave pyrolysis of OPS. Journal of Analytical and Applied Pyrolysis, 2015, 112, 306-312.	2.6	40
46	Optimization of sootblowing frequency to improve boiler performance and reduce combustion pollution. Clean Technologies and Environmental Policy, 2015, 17, 1897-1906.	2.1	26
47	Optimisation of the process variables in production of activated carbon by microwave heating. RSC Advances, 2015, 5, 35899-35908.	1.7	31
48	Effect of temperature on dielectric properties and penetration depth of oil palm shell (OPS) and OPS char synthesized by microwave pyrolysis of OPS. Fuel, 2015, 153, 257-266.	3.4	69
49	Prediction of multiphase flow pattern inside a 3D bubble column reactor using a combination of CFD and ANFIS. RSC Advances, 2015, 5, 85652-85672.	1.7	51
50	Effect of bubble diameter size on prediction of flow pattern in Euler-Euler simulation of homogeneous bubble column regime. Measurement: Journal of the International Measurement Confederation, 2015, 76, 255-270.	2.5	47
51	Removal of Methylene Blue and Orange-G from Waste Water Using Magnetic Biochar. International Journal of Nanoscience, 2015, 14, 1550009.	0.4	46
52	Microwave assisted multiwall carbon nanotubes enhancing Cd(II) adsorption capacity in aqueous media. Journal of Industrial and Engineering Chemistry, 2015, 24, 24-33.	2.9	34
53	Bioethanol Production from Fermentable Sugar Juice. Scientific World Journal, The, 2014, 2014, 1-11.	0.8	192
54	Removal of Heavy Metals from Wastewater Using Carbon Nanotubes. Separation and Purification Reviews, 2014, 43, 311-338.	2.8	240

#	ARTICLE	IF	CITATIONS
55	Synthesis of palm oil empty fruit bunch magnetic pyrolytic char impregnating with FeCl <sub>3</sub> by microwave heating technique. <i>Biomass and Bioenergy</i> , 2014, 61, 265-275.	2.9	99
56	Effect of interfacial forces and turbulence models on predicting flow pattern inside the bubble column. <i>Chemical Engineering and Processing: Process Intensification</i> , 2014, 75, 38-47.	1.8	151
57	An overview on methods for the production of carbon nanotubes. <i>Journal of Industrial and Engineering Chemistry</i> , 2014, 20, 1186-1197.	2.9	160
58	Numerical study for enhancement of solidification of phase change materials using trapezoidal cavity. <i>Powder Technology</i> , 2014, 268, 38-47.	2.1	55
59	Immobilization of cellulase enzyme on functionalized multiwall carbon nanotubes. <i>Journal of Molecular Catalysis B: Enzymatic</i> , 2014, 107, 124-131.	1.8	147
60	Bioreactor profile control by a nonlinear auto regressive moving average neuro and two degree of freedom PID controllers. <i>Journal of Process Control</i> , 2014, 24, 1761-1777.	1.7	21
61	Synthesis of green fuels from biogenic waste through thermochemical route " The role of heterogeneous catalyst: A review. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 38, 131-153.	8.2	56
62	Recovery of Liquid Fuel from the Aqueous Phase of Pyrolysis Oil Using Catalytic Conversion. <i>Energy &amp; Fuels</i> , 2014, 28, 3074-3085.	2.5	35
63	Single stage production of carbon nanotubes using microwave technology. <i>Diamond and Related Materials</i> , 2014, 48, 52-59.	1.8	49
64	A comparative study of biopolymers and alum in the separation and recovery of pulp fibres from paper mill effluent by flocculation. <i>Journal of Environmental Sciences</i> , 2014, 26, 1851-1860.	3.2	23
65	Water quality assessment of an unusual ritual well in Bangladesh and impact of mass bathing on this quality. <i>Science of the Total Environment</i> , 2014, 472, 363-369.	3.9	14
66	Adsorption of chromium (VI) on functionalized and non-functionalized carbon nanotubes. <i>Korean Journal of Chemical Engineering</i> , 2014, 31, 1582-1591.	1.2	36
67	Feasibility study for catalytic cracking of waste plastic to produce fuel oil with reference to Malaysia and simulation using ASPEN Plus. <i>Environmental Progress and Sustainable Energy</i> , 2014, 33, 298-307.	1.3	36
68	Characterization of Bio-oil and Bio-char from Pyrolysis of Palm Oil Wastes. <i>Bioenergy Research</i> , 2013, 6, 830-840.	2.2	175
69	Preparation of granular activated carbon from oil palm shell by microwave-induced chemical activation: Optimisation using surface response methodology. <i>Chemical Engineering Research and Design</i> , 2013, 91, 2447-2456.	2.7	86
70	Co-pyrolysis of palm shell and polystyrene waste mixtures to synthesis liquid fuel. <i>Fuel</i> , 2013, 108, 311-318.	3.4	130
71	Statistical optimization and kinetic studies on removal of Zn <sup>2+</sup> using functionalized carbon nanotubes and magnetic biochar. <i>Journal of Environmental Chemical Engineering</i> , 2013, 1, 486-495.	3.3	96
72	Comparison of oil palm shell-based activated carbons produced by microwave and conventional heating methods using zinc chloride activation. <i>Journal of Analytical and Applied Pyrolysis</i> , 2013, 104, 176-184.	2.6	100

#	ARTICLE	IF	CITATIONS
73	Optimization of bioreactor profile control. , 2013, , .		0
74	ADSORPTION AND KINETIC STUDY ON $\text{Sn}^{2+}$ REMOVAL USING MODIFIED CARBON NANOTUBE AND MAGNETIC BIOCHAR. International Journal of Nanoscience, 2013, 12, 1350044.	0.4	18
75	Comparison of a plant based natural surfactant with SDS for washing of As(V) from Fe rich soil. Journal of Environmental Sciences, 2013, 25, 2247-2256.	3.2	32
76	Utilization of oil palm tree residues to produce bio-oil and bio-char via pyrolysis. Energy Conversion and Management, 2013, 76, 1073-1082.	4.4	178
77	The effects of a microwave heating method on the production of activated carbon from agricultural waste: A review. Journal of Analytical and Applied Pyrolysis, 2013, 100, 1-11.	2.6	252
78	Bioreactor temperature profile controller using inverse neural network (INN) for production of ethanol. Journal of Process Control, 2013, 23, 731-742.	1.7	35
79	An overview of cathode material and catalysts suitable for generating hydrogen in microbial electrolysis cell. International Journal of Hydrogen Energy, 2013, 38, 1745-1757.	3.8	289
80	Catalytic synthesis of biodiesel from pongamia glabra over zirconia and its modified forms. Korean Journal of Chemical Engineering, 2013, 30, 2186-2190.	1.2	7
81	Clarification of rubber mill wastewater by a plant based biopolymer $\alpha\epsilon$ comparison with common inorganic coagulants. Journal of Chemical Technology and Biotechnology, 2013, 88, 1864-1873.	1.6	21
82	Hydrothermal Gasification of Palm Shell Biomass for Synthesis of Hydrogen Fuel. BioResources, 2013, 8, .	0.5	8
83	AIR POLLUTION PROBLEMS AND CONTROL MEASURES IN STEEL MAKING THROUGH DRI ROUTE. , 2012, , 93-148.		0
84	Application of colloidal gas aphrons for pollution remediation. Journal of Chemical Technology and Biotechnology, 2012, 87, 305-324.	1.6	38
85	AIR POLLUTION AND ITS CONTROL. , 2012, , 1-39.		1
86	Performance of a Biosurfactant Obtained from Sapindus Mukurossi in Removing Cadmium from Soil. , 2012, , .		0
87	Optimization process parameters for in-situ synthesis of ammonia by catalytic hydrolysis of urea with fly ash in a batch reactor for safe feedstock in power plants. Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2011, 46, 874-886.	0.9	7
88	Remediation technologies for heavy metal contaminated groundwater. Journal of Environmental Management, 2011, 92, 2355-2388.	3.8	697
89	Studies on the hydrolysis of urea for production of ammonia and modeling for flow characterization in presence of stirring in a batch reactor using computational fluid dynamics. Korean Journal of Chemical Engineering, 2011, 28, 1380-1385.	1.2	12
90	In situ synthesis of ammonia by catalytic hydrolysis of urea in the presence of aluminium oxide for safe use of ammonia in power plants for flue gas conditioning. Journal of Chemical Technology and Biotechnology, 2011, 86, 1282-1288.	1.6	9

#	ARTICLE	IF	CITATIONS
91	Computational Fluid Dynamics Modeling for Urea Hydrolysis in a Batch Reactor for Flue Gas Conditioning. <i>Chemical Engineering and Technology</i> , 2011, 34, 1347-1352.	0.9	3
92	Optimization and characterization studies on bio-oil production from palm shell by pyrolysis using response surface methodology. <i>Biomass and Bioenergy</i> , 2011, 35, 3604-3616.	2.9	153
93	Optimization of chromium(VI) sorption potential using developed activated carbon from sugarcane bagasse with chemical activation by zinc chloride. <i>Desalination</i> , 2011, 275, 276-284.	4.0	164
94	Utilization possibilities of palm shell as a source of biomass energy in Malaysia by producing bio-oil in pyrolysis process. <i>Biomass and Bioenergy</i> , 2011, 35, 1863-1872.	2.9	226
95	<i>In-situ</i> catalytic synthesis of ammonia from urea in a semi-batch reactor for safe utilization in thermal power plant. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2010, 5, 533-543.	0.8	5
96	Optimization for the Production of Ammonia from Urea in a Semi-batch Reactor for Safe Feedstock in Power Plants: Experimental and Statistical Studies. <i>Clean - Soil, Air, Water</i> , 2010, 38, 533-542.	0.7	17
97	Kinetic studies on hydrolysis of urea in a semi-batch reactor at atmospheric pressure for safe use of ammonia in a power plant for flue gas conditioning. <i>Journal of Hazardous Materials</i> , 2010, 175, 629-637.	6.5	51
98	Statistical modelling and optimization of hydrolysis of urea to generate ammonia for flue gas conditioning. <i>Journal of Hazardous Materials</i> , 2010, 182, 603-610.	6.5	57
99	Optimization of ammonia production from urea in continuous process using ASPEN Plus and computational fluid dynamics study of the reactor used for hydrolysis process. <i>Journal of Industrial and Engineering Chemistry</i> , 2010, 16, 577-586.	2.9	23
100	Optimization of production conditions for activated carbons from Tamarind wood by zinc chloride using response surface methodology. <i>Bioresource Technology</i> , 2010, 101, 1974-1982.	4.8	244
101	Response surface modeling and optimization for production of ammonia from urea in a batch reactor. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2009, 4, 462-470.	0.8	16
102	Performance of a modified multi-stage bubble column reactor for lead(II) and biological oxygen demand removal from wastewater using activated rice husk. <i>Journal of Hazardous Materials</i> , 2009, 161, 317-324.	6.5	65
103	Equilibrium studies on hydrolysis of urea in a semi-batch reactor for production of ammonia to reduce hazardous pollutants from flue gases. <i>Journal of Hazardous Materials</i> , 2009, 164, 659-664.	6.5	15
104	Response surface modeling and optimization of chromium(VI) removal from aqueous solution using Tamarind wood activated carbon in batch process. <i>Journal of Hazardous Materials</i> , 2009, 172, 818-825.	6.5	282
105	Equilibrium and Kinetic Studies of <i>In Situ</i> Generation of Ammonia from Urea in a Batch Reactor for Flue Gas Conditioning of Thermal Power Plants. <i>Industrial &amp; Engineering Chemistry Research</i> , 2009, 48, 2705-2712.	1.8	18
106	Catalytic Hydrolysis of Urea with Fly Ash for Generation of Ammonia in a Batch Reactor for Flue Gas Conditioning and NO <sub>x</sub> Reduction. <i>Industrial &amp; Engineering Chemistry Research</i> , 2009, 48, 727-734.	1.8	26
107	Studies on the removal of Pb(II) from wastewater by activated carbon developed from Tamarind wood activated with sulphuric acid. <i>Journal of Hazardous Materials</i> , 2008, 153, 221-228.	6.5	192
108	Column performance of granular activated carbon packed bed for Pb(II) removal. <i>Journal of Hazardous Materials</i> , 2008, 156, 596-603.	6.5	140

#	ARTICLE	IF	CITATIONS
109	Removal of methylene blue from wastewater using fly ash as an adsorbent by hydrocyclone. Journal of Hazardous Materials, 2008, 158, 531-540.	6.5	101
110	Equilibrium and Kinetic Studies on the Hydrolysis of Urea for Ammonia Generation in a Semibatch Reactor. Industrial & Engineering Chemistry Research, 2008, 47, 4689-4696.	1.8	39
111	Study of Pyrolyzates from a Variety of Indian Coals and Their Dependency on Coal Type and Intrinsic Properties – An Analytical Fast Pyrolysis Study. Combustion Science and Technology, 0, , 1-22.	1.2	1