

# Aymen Amine Assadi

## List of Publications by Year in descending order

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98  
papers

3,948  
citations

87723

38  
h-index

138251

58  
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98  
all docs

98  
docs citations

98  
times ranked

3183  
citing authors

#	ARTICLE	IF	CITATIONS
1	Removal of Methylene Blue from aqueous solutions by adsorption on Kaolin: Kinetic and equilibrium studies. <i>Applied Clay Science</i> , 2018, 153, 38-45.	2.6	489
2	Simultaneous removal of antibiotics and inactivation of antibiotic-resistant bacteria by photocatalysis: A review. <i>Journal of Water Process Engineering</i> , 2021, 42, 102089.	2.6	181
3	Review on discharge Plasma for water treatment: mechanism, reactor geometries, active species and combined processes. <i>Journal of Water Process Engineering</i> , 2020, 38, 101664.	2.6	116
4	Effective heterogeneous electro-Fenton process for the degradation of a malodorous compound, indole, using iron loaded alginate beads as a reusable catalyst. <i>Applied Catalysis B: Environmental</i> , 2016, 182, 47-58.	10.8	99
5	Electro-Fenton catalyzed with magnetic chitosan beads for the removal of Chlordimeform insecticide. <i>Applied Catalysis B: Environmental</i> , 2018, 226, 346-359.	10.8	89
6	Study of a photocatalytic process for removal of antibiotics from wastewater in a falling film photoreactor: Scavenger study and process intensification feasibility. <i>Chemical Engineering and Processing: Process Intensification</i> , 2017, 122, 213-221.	1.8	78
7	Synthesis of novel biocomposite powder for simultaneous removal of hazardous ciprofloxacin and methylene blue: Central composite design, kinetic and isotherm studies using Brouers-Sotolongo family models. <i>Journal of Hazardous Materials</i> , 2020, 387, 121675.	6.5	77
8	Activation of persulfate by irradiated laterite for removal of fluoroquinolones in multi-component systems. <i>Journal of Hazardous Materials</i> , 2018, 346, 159-166.	6.5	72
9	Recent Applications of Advanced Atomic Force Microscopy in Polymer Science: A Review. <i>Polymers</i> , 2020, 12, 1142.	2.0	69
10	Use of DBD plasma, photocatalysis, and combined DBD plasma/photocatalysis in a continuous annular reactor for isovaleraldehyde elimination – Synergetic effect and byproducts identification. <i>Chemical Engineering Journal</i> , 2014, 254, 124-132.	6.6	67
11	Metronidazole removal by means of a combined system coupling an electro-Fenton process and a conventional biological treatment: By-products monitoring and performance enhancement. <i>Journal of Hazardous Materials</i> , 2018, 359, 85-95.	6.5	66
12	Optimization of a cationic dye removal by a chemically modified agriculture by-product using response surface methodology: biomasses characterization and adsorption properties. <i>Environmental Science and Pollution Research</i> , 2017, 24, 9831-9846.	2.7	65
13	A new hetero-junction p -CuO/ n -ZnO for the removal of amoxicillin by photocatalysis under solar irradiation. <i>Journal of the Taiwan Institute of Chemical Engineers</i> , 2016, 68, 254-265.	2.7	64
14	Study of synergetic effect, catalytic poisoning and regeneration using dielectric barrier discharge and photocatalysis in a continuous reactor: Abatement of pollutants in air mixture system. <i>Applied Catalysis B: Environmental</i> , 2017, 213, 53-61.	10.8	64
15	Photocatalytic oxidation of trimethylamine and isovaleraldehyde in an annular reactor: Influence of the mass transfer and the relative humidity. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2012, 236, 61-69.	2.0	63
16	Spectroscopic and luminescence characteristics of erbium doped TNZL glass for lasing materials. <i>Journal of Alloys and Compounds</i> , 2015, 620, 129-136.	2.8	63
17	A comprehensive review of biochar in removal of organic pollutants from wastewater: Characterization, toxicity, activation/functionalization and influencing treatment factors. <i>Journal of Water Process Engineering</i> , 2022, 47, 102801.	2.6	61
18	Photocatalytic indoor/outdoor air treatment and bacterial inactivation on CuxO/TiO2 prepared by HiPIMS on polyester cloth under low intensity visible light. <i>Applied Catalysis B: Environmental</i> , 2019, 259, 118074.	10.8	58

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19	Bacterial adhesion and inactivation on Ag decorated TiO <sub>2</sub> -nanotubes under visible light: Effect of the nanotubes geometry on the photocatalytic activity. <i>Colloids and Surfaces B: Biointerfaces</i> , 2018, 170, 92-98.	2.5	57
20	Abatement of ammonia and butyraldehyde under non-thermal plasma and photocatalysis: Oxidation processes for the removal of mixture pollutants at pilot scale. <i>Chemical Engineering Journal</i> , 2018, 344, 165-172.	6.6	55
21	High efficient Cefixime removal from water by the sillenite Bi <sub>12</sub> TiO <sub>20</sub> : Photocatalytic mechanism and degradation pathway. <i>Journal of Cleaner Production</i> , 2022, 330, 129934.	4.6	54
22	Pilot scale degradation of mono and multi volatile organic compounds by surface discharge plasma/TiO <sub>2</sub> reactor: Investigation of competition and synergism. <i>Journal of Hazardous Materials</i> , 2018, 357, 305-313.	6.5	53
23	Modeling and simulation of VOCs removal by nonthermal plasma discharge with photocatalysis in a continuous reactor: Synergetic effect and mass transfer. <i>Chemical Engineering Journal</i> , 2014, 258, 119-127.	6.6	49
24	Treatment of hospital indoor air by a hybrid system of combined plasma with photocatalysis: Case of trichloromethane. <i>Chemical Engineering Journal</i> , 2018, 349, 276-286.	6.6	49
25	Photocatalytic Performance of Cu <sub>x</sub> O/TiO <sub>2</sub> Deposited by HiPIMS on Polyester under Visible Light LEDs: Oxidants, Ions Effect, and Reactive Oxygen Species Investigation. <i>Materials</i> , 2019, 12, 412.	1.3	49
26	Efficiency of DMSO as hydroxyl radical probe in an Electrochemical Advanced Oxidation Process $\hat{a}$ ' Reactive oxygen species monitoring and impact of the current density. <i>Electrochimica Acta</i> , 2017, 246, 1-8.	2.6	48
27	Modeling of a continuous photocatalytic reactor for isovaleraldehyde oxidation: Effect of different operating parameters and chemical degradation pathway. <i>Chemical Engineering Research and Design</i> , 2013, 91, 1307-1316.	2.7	46
28	A study of pollution removal in exhaust gases from animal quartering centers by combining photocatalysis with surface discharge plasma: From pilot to industrial scale. <i>Chemical Engineering and Processing: Process Intensification</i> , 2017, 111, 1-6.	1.8	45
29	Reactive species monitoring and their contribution for removal of textile effluent with photocatalysis under UV and visible lights: Dynamics and mechanism. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 365, 94-102.	2.0	45
30	Artificial neural network modeling of cefixime photodegradation by synthesized CoBi <sub>2</sub> O <sub>4</sub> nanoparticles. <i>Environmental Science and Pollution Research</i> , 2021, 28, 15436-15452.	2.7	45
31	Association of surface dielectric barrier discharge and photocatalysis in continuous reactor at pilot scale: Butyraldehyde oxidation, by-products identification and ozone valorization. <i>Chemical Engineering Journal</i> , 2016, 292, 276-283.	6.6	43
32	Reactive oxygen and iron species monitoring to investigate the electro-Fenton performances. Impact of the electrochemical process on the biodegradability of metronidazole and its by-products. <i>Chemosphere</i> , 2018, 199, 486-494.	4.2	43
33	Use of laterite as a sustainable catalyst for removal of fluoroquinolone antibiotics from contaminated water. <i>Chemosphere</i> , 2018, 195, 847-853.	4.2	43
34	Simultaneous removal of bacteria and volatile organic compounds on Cu <sub>2</sub> O-NPs decorated TiO <sub>2</sub> nanotubes: Competition effect and kinetic studies. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020, 400, 112722.	2.0	43
35	Comparative study between laboratory and large pilot scales for VOC's removal from gas streams in continuous flow surface discharge plasma. <i>Chemical Engineering Research and Design</i> , 2016, 106, 308-314.	2.7	41
36	Study of synergetic effect by surface discharge plasma/TiO <sub>2</sub> combination for indoor air treatment: Sequential and continuous configurations at pilot scale. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2015, 310, 148-154.	2.0	40

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37	Isovaleraldehyde elimination by UV/TiO <sub>2</sub> photocatalysis: comparative study of the process at different reactors configurations and scales. <i>Environmental Science and Pollution Research</i> , 2014, 21, 11178-11188.	2.7	39
38	Chemical treatment of orange tree sawdust for a cationic dye enhancement removal from aqueous solutions: kinetic, equilibrium and thermodynamic studies. <i>Desalination and Water Treatment</i> , 2016, 57, 22107-22119.	1.0	39
39	Discoloration of simulated textile effluent in continuous photoreactor using immobilized titanium dioxide: Effect of zinc and sodium chloride. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2018, 358, 111-120.	2.0	39
40	A comparative study of ceramic nanoparticles synthesized for antibiotic removal: catalysis characterization and photocatalytic performance modeling. <i>Environmental Science and Pollution Research</i> , 2021, 28, 13900-13912.	2.7	39
41	Synthesis and Characterization of ZnBi <sub>2</sub> O <sub>4</sub> Nanoparticles: Photocatalytic Performance for Antibiotic Removal under Different Light Sources. <i>Applied Sciences (Switzerland)</i> , 2021, 11, 3975.	1.3	39
42	Structural and electrochemical characterizations of Bi <sub>12</sub> CoO <sub>20</sub> sillenite crystals: degradation and reduction of organic and inorganic pollutants. <i>Journal of Materials Science: Materials in Electronics</i> , 2021, 32, 16411-16420.	1.1	39
43	Dynamic investigations on cationic dye desorption from chemically modified lignocellulosic material using a low-cost eluent: Dye recovery and anodic oxidation efficiencies of the desorbed solutions. <i>Journal of Cleaner Production</i> , 2018, 201, 28-38.	4.6	38
44	Removal of gas-phase ammonia and hydrogen sulfide using photocatalysis, nonthermal plasma, and combined plasma and photocatalysis at pilot scale. <i>Environmental Science and Pollution Research</i> , 2014, 21, 13127-13137.	2.7	37
45	Isovaleraldehyde degradation using UV photocatalytic and dielectric barrier discharge reactors, and their combinations. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2015, 299, 110-117.	2.0	37
46	Synergism between non-thermal plasma and photocatalysis: Implications in the post discharge of ozone at a pilot scale in a catalytic fixed-bed reactor. <i>Applied Catalysis B: Environmental</i> , 2019, 241, 227-235.	10.8	37
47	Abatement of 3-methylbutanal and trimethylamine with combined plasma and photocatalysis in a continuous planar reactor. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2014, 282, 1-8.	2.0	36
48	Removal of trimethylamine and isovaleric acid from gas streams in a continuous flow surface discharge plasma reactor. <i>Chemical Engineering Research and Design</i> , 2015, 93, 640-651.	2.7	35
49	Indoor air treatment of refrigerated food chambers with synergetic association between cold plasma and photocatalysis: Process performance and photocatalytic poisoning. <i>Chemical Engineering Journal</i> , 2020, 382, 122951.	6.6	35
50	Red mud-activated peroxymonosulfate process for the removal of fluoroquinolones in hospital wastewater. <i>Water Research</i> , 2020, 184, 116171.	5.3	35
51	Combining photocatalytic process and biological treatment for Reactive Green 12 degradation: optimization, mineralization, and phytotoxicity with seed germination. <i>Environmental Science and Pollution Research</i> , 2021, 28, 12490-12499.	2.7	34
52	Photocatalytic degradation of binary and ternary mixtures of antibiotics: reactive species investigation in pilot scale. <i>Chemical Engineering Research and Design</i> , 2019, 144, 300-309.	2.7	33
53	Advanced Photocatalytic Treatment of Wastewater Using Immobilized Titanium Dioxide as a Photocatalyst in a Pilot-Scale Reactor: Process Intensification. <i>Materials</i> , 2022, 15, 4547.	1.3	31
54	Photocatalytic treatment of petroleum industry wastewater using recirculating annular reactor: comparison of experimental and modeling. <i>Environmental Science and Pollution Research</i> , 2019, 26, 19035-19046.	2.7	30

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55	Innovative photocatalytic reactor for the degradation of VOCs and microorganism under simulated indoor air conditions: Cu-Ag/TiO <sub>2</sub> -based optical fibers at a pilot scale. <i>Chemical Engineering Journal</i> , 2021, 411, 128622.	6.6	30
56	Bismuth Sillenite Crystals as Recent Photocatalysts for Water Treatment and Energy Generation: A Critical Review. <i>Catalysts</i> , 2022, 12, 500.	1.6	30
57	Integrated process for the removal of indoor VOCs from food industry manufacturing: Elimination of Butane-2,3-dione and Heptan-2-one by cold plasma-photocatalysis combination. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2020, 386, 112071.	2.0	29
58	Study of butyraldehyde degradation and by-products formation by using a surface plasma discharge in pilot scale: Process modeling and simulation of relative humidity effect. <i>Chemical Engineering Journal</i> , 2017, 307, 785-792.	6.6	26
59	Modeling and optimization of process parameters in elucidating the adsorption mechanism of Gallic acid on activated carbon prepared from date stones. <i>Separation Science and Technology</i> , 2020, 55, 3113-3125.	1.3	26
60	A Review of the Use of Semiconductors as Catalysts in the Photocatalytic Inactivation of Microorganisms. <i>Catalysts</i> , 2021, 11, 1498.	1.6	26
61	Photocatalytic performance of TiO <sub>2</sub> impregnated polyester for the degradation of Reactive Green 12: Implications of the surface pretreatment and the microstructure. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2017, 346, 493-501.	2.0	25
62	Review on inactivation of airborne viruses using non-thermal plasma technologies: from MS2 to coronavirus. <i>Environmental Science and Pollution Research</i> , 2022, 29, 4880-4892.	2.7	25
63	Harmonizing the photocatalytic activity of g-C <sub>3</sub> N <sub>4</sub> nanosheets by ZrO <sub>2</sub> stuffing: From fabrication to experimental study for the wastewater treatment. <i>Biochemical Engineering Journal</i> , 2022, 182, 108411.	1.8	24
64	Techno-economic studies for a pilot-scale Bi <sub>12</sub> TiO <sub>20</sub> based photocatalytic system for pharmaceutical wastewater treatment: From laboratory studies to commercial-scale applications. <i>Journal of Water Process Engineering</i> , 2022, 48, 102847.	2.6	24
65	Innovative and stable TiO <sub>2</sub> supported catalytic surfaces removing aldehydes under UV-light irradiation. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2017, 343, 96-102.	2.0	22
66	Disinfection of corona and myriad viruses in water by non-thermal plasma: a review. <i>Environmental Science and Pollution Research</i> , 2022, 29, 55321-55335.	2.7	21
67	Photocatalytic Treatment of Wastewater Containing Simultaneous Organic and Inorganic Pollution: Competition and Operating Parameters Effects. <i>Catalysts</i> , 2021, 11, 855.	1.6	19
68	Characterization of Slaughterhouse Wastewater and Development of Treatment Techniques: A Review. <i>Processes</i> , 2022, 10, 1300.	1.3	19
69	Application of Bi <sub>12</sub> ZnO <sub>20</sub> Sillenite as an Efficient Photocatalyst for Wastewater Treatment: Removal of Both Organic and Inorganic Compounds. <i>Materials</i> , 2021, 14, 5409.	1.3	17
70	Modeling of indoor air treatment using an innovative photocatalytic luminous textile: Reactor compactness and mass transfer enhancement. <i>Chemical Engineering Journal</i> , 2022, 430, 132636.	6.6	17
71	Electro Fenton removal of clopyralid in soil washing effluents. <i>Chemosphere</i> , 2019, 237, 124447.	4.2	16
72	Recent progress in air treatment with combined photocatalytic/plasma processes: A review. <i>Journal of Environmental Management</i> , 2021, 299, 113588.	3.8	16

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73	Enhanced removal of antibiotics in hospital wastewater by Fe <sup>2+</sup> /ZnO activated persulfate oxidation. <i>Environmental Science: Water Research and Technology</i> , 2019, 5, 2193-2201.	1.2	15
74	Facile synthesis, structural and optical characterizations of Bi <sub>12</sub> ZnO <sub>20</sub> sillenite crystals: Application for Cefuroxime removal from wastewater. <i>Materials Letters</i> , 2021, 304, 130658.	1.3	15
75	Continuous air purification by front flow photocatalytic reactor: Modelling of the influence of mass transfer step under simulated real conditions. <i>Chemosphere</i> , 2022, 295, 133809.	4.2	15
76	Methods for Synthesis of Hybrid Nanoparticles. , 2019, , 51-63.		14
77	Synthesis and Characterization of TiO <sub>2</sub> Nanotubes (TiO <sub>2</sub> -NTs) with Ag Silver Nanoparticles (Ag-NPs): Photocatalytic Performance for Wastewater Treatment under Visible Light. <i>Materials</i> , 2022, 15, 1463.	1.3	13
78	Acceleration of Trimethylamine Removal Process Under Synergistic Effect of Photocatalytic Oxidation and Surface Discharge Plasma Reactor. <i>Canadian Journal of Chemical Engineering</i> , 2015, 93, 1239-1246.	0.9	12
79	Innovative photocatalytic luminous textiles optimized towards water treatment: Performance evaluation of photoreactors. <i>Chemical Engineering Journal</i> , 2021, 416, 129195.	6.6	12
80	Kinetic Modeling of VOC Photocatalytic Degradation Using a Process at Different Reactor Configurations and Scales. <i>International Journal of Chemical Reactor Engineering</i> , 2016, 14, 395-405.	0.6	11
81	Nano-sized iron oxides supported on polyester textile to remove fluoroquinolones in hospital wastewater. <i>Environmental Science: Nano</i> , 2020, 7, 2156-2165.	2.2	11
82	Innovative sequential combination of fixed bed adsorption/desorption and photocatalysis cost-effective process to remove antibiotics in solution. <i>Progress in Organic Coatings</i> , 2021, 151, 106014.	1.9	11
83	Enoxacin degradation by photo-Fenton process combined with a biological treatment: optimization and improvement of by-products biodegradability. <i>International Journal of Environmental Science and Technology</i> , 2019, 16, 655-666.	1.8	9
84	Titanium-based photocatalytic coatings for bacterial disinfection: The shift from suspended powders to catalytic interfaces. <i>Surfaces and Interfaces</i> , 2022, 32, 102078.	1.5	9
85	An engineering approach towards the design of an innovative compact photo-reactor for antibiotic removal in the frame of laboratory and pilot-plant scale. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2021, 418, 113445.	2.0	7
86	Spectroscopic properties of Yb <sup>2+</sup> in aluminosilicate glass. <i>International Journal of Applied Glass Science</i> , 2017, 8, 322-328.	1.0	6
87	Optimization of the artificial neuronal network for the degradation and mineralization of amoxicillin photoinduced by the complex ferrioxalate with a gradual and progressive approach of the ligand. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2021, 406, 112982.	2.0	6
88	Reconsideration of the contribution of photogenerated ROS in methyl orange degradation on TiO <sub>2</sub> , Cu <sub>2</sub> O, WO <sub>3</sub> , and Bi <sub>2</sub> O <sub>3</sub> under low-intensity simulated solar light: mechanistic understanding of photocatalytic activity. <i>Euro-Mediterranean Journal for Environmental Integration</i> , 2021, 6, 1.	0.6	6
89	Thermal and Spectroscopic Properties of High Dense Optical Glasses TeO <sub>2</sub> /Bi <sub>2</sub> O <sub>3</sub> /WO <sub>3</sub> (TBW) Doped with Er <sub>2</sub> O <sub>3</sub> as Laser Material. <i>Science of Advanced Materials</i> , 2018, 10, 818-826.	0.1	6
90	Treatment of gaseous effluents by using surface discharge plasma in continuous reactors: Process modelling and simulation. <i>Canadian Journal of Chemical Engineering</i> , 2015, 93, 206-212.	0.9	5

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91	The impact of material design on the photocatalytic removal efficiency and toxicity of two textile dyes. <i>Environmental Science and Pollution Research</i> , 2022, 29, 66640-66658.	2.7	5
92	Synthesis and Characterization of TiO <sub>2</sub> Nanotubes (TiO <sub>2</sub> -NTs) Decorated with Platine Nanoparticles (Pt-NPs): Photocatalytic Performance for Simultaneous Removal of Microorganisms and Volatile Organic Compounds. <i>Materials</i> , 2021, 14, 7341.	1.3	4
93	Combined system of natural pomegranate as heterogeneous bioadsorbent and photocatalysis for removal of textile dye herbicide in presence of heavy metals: effect of operating parameters and reaction monitoring. , 0, 67, 339-335.		3
94	Photocatalytic degradation of indole-4-methylphenol mixture in an aqueous solution: optimization and statistical analysis. <i>Desalination and Water Treatment</i> , 0, , 1-12.	1.0	0
95	Photo-plasma catalytic hybrid systems for air treatment: reactor design from laboratory to industrial scales. , 2020, , 373-389.		0
96	Nanocontainer: An introduction. , 2020, , 3-6.		0
97	Integration of nondestructive processes: adsorption/uptake/absorption. , 2022, , 345-356.		0
98	The photocatalytic degradation of a binary textile dyes mixture within a new configuration of loop reactor using ZnO thin film-phytotoxicity control. <i>Comptes Rendus Chimie</i> , 2022, 25, 261-279.	0.2	0