Mario J MuÃ±oz-Batista

List of Publications by Year
in descending order

80 papers	3,387 citations	126907 33 h-index	155660 55 g-index
82 all docs	82 docs citations	82 times ranked	4338 citing authors

#	Article	IF	Citations
1	Photodegradation of 2-propanol in gas phase over zirconium doped TiO2: Effect of Zr content. Journal of Photochemistry and Photobiology A: Chemistry, 2022, 427, 113774.	3.9	5
2	Enhanced boron modified graphitic carbon nitride for the selective photocatalytic production of benzaldehyde. Separation and Purification Technology, 2022, 298, 121613.	7.9	6
3	Nature-inspired hierarchical materials for sensing and energy storage applications. Chemical Society Reviews, 2021, 50, 4856-4871.	38.1	49
4	Heterogeneous Photocatalysis. ChemEngineering, 2021, 5, 26.	2.4	9
5	Metabolomics reveals synergy between Ag and g-C3N4 in Ag/g-C3N4 composite photocatalysts: a unique feature among Ag-doped biocidal materials. Metabolomics, 2021, 17, 53.	3.0	2
6	Thermo-photo production of hydrogen using ternary Pt-CeO2-TiO2 catalysts: A spectroscopic and mechanistic study. Chemical Engineering Journal, 2021, 425, 130641.	12.7	13
7	Pd-Pt bimetallic Nb-doped TiO2 for H2 photo-production: Gas and liquid phase processes. Molecular Catalysis, 2020, 481, 110240.	2.0	1
8	Sunlight active g-C3N4-based Mn+ (M Cu, Ni, Zn, Mn) â€“ promoted catalysts: Sharing of nitrogen atoms as a door for optimizing photo-activity. Molecular Catalysis, 2020, 484, 110725.	2.0	2
9	Waste-derived Materials: Opportunities in Photocatalysis. Topics in Current Chemistry, 2020, 378, 3.	5.8	18
10	Improving Electrochemical Hydrogen Evolution of Ag@CN Nanocomposites by Synergistic Effects with Î±-Rich Proteins. ACS Applied Materials & Interfaces, 2020, 12, 2207-2215.	8.0	20
11	Photocatalytic Production of Vanillin over CeO_x and ZrO₂ Modified Biomass-Templated Titania. Industrial & Engineering Chemistry Research, 2020, 59, 17085-17093.	3.7	18
12	Facile synthesis of B/g-C₃N₄ composite materials for the continuous-flow selective photo-production of acetone. Green Chemistry, 2020, 22, 4975-4984.	9.0	25
13	Microemulsion: A versatile synthesis tool for photocatalysis. Current Opinion in Colloid and Interface Science, 2020, 49, 42-59.	7.4	14
14	Thermal and light irradiation effects on the electrocatalytic performance of hemoglobin modified Co₃O₄-g-C₃N₄ nanomaterials for the oxygen evolution reaction. Nanoscale, 2020, 12, 8477-8484.	5.6	14
15	Graphitic carbon nitride-based photocatalysts: Toward efficient organic transformation for value-added chemicals production. Molecular Catalysis, 2020, 488, 110902.	2.0	245
16	Waste-derived Materials: Opportunities in Photocatalysis. Topics in Current Chemistry Collections, 2020, , 1-28.	0.5	1
17	g-C3N4/TiO2 composite catalysts for the photo-oxidation of toluene: Chemical and charge handling effects. Chemical Engineering Journal, 2019, 378, 122228.	12.7	46
18	Efficient Ru-based scrap waste automotive converter catalysts for the continuous-flow selective hydrogenation of cinnamaldehyde. Green Chemistry, 2019, 21, 4712-4722.	9.0	29

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19	Characterization of Photo-catalysts: From Traditional to Advanced Approaches. Topics in Current Chemistry, 2019, 377, 24.	5.8	12
20	Spent Coffee Grounds-Templated Magnetic Nanocatalysts for Mild Oxidations. ACS Sustainable Chemistry and Engineering, 2019, 7, 17030-17038.	6.7	13
21	Mimicking the bioelectrocatalytic function of recombinant CotA laccase through electrostatically self-assembled bioconjugates. Nanoscale, 2019, 11, 1549-1554.	5.6	9
22	Braiding kinetics and spectroscopy in photo-catalysis: the spectro-kinetic approach. Chemical Society Reviews, 2019, 48, 637-682.	38.1	79
23	Continuous flow synthesis of amines from the cascade reactions of nitriles and carbonyl-containing compounds promoted by Pt-modified titania catalysts. Green Chemistry, 2019, 21, 300-306.	9.0	21
24	Mechanochemically Synthesized Supported Magnetic Fe-Nanoparticles as Catalysts for Efficient Vanillin Production. Catalysts, 2019, 9, 290.	3.5	8
25	Continuous Flow Synthesis of High Valuable N-Heterocycles via Catalytic Conversion of Levulinic Acid. Frontiers in Chemistry, 2019, 7, 103.	3.6	21
26	Thermoâ€Photocatalysis: Environmental and Energy Applications. ChemSusChem, 2019, 12, 2098-2116.	6.8	115
27	Versatile Protein-Templated TiO₂ Nanocomposite for Energy Storage and Catalytic Applications. ACS Sustainable Chemistry and Engineering, 2019, 7, 5329-5337.	6.7	24
28	Controllable Design of Polypyrrole-Iron Oxide Nanocoral Architectures for Supercapacitors with Ultrahigh Cycling Stability. ACS Applied Energy Materials, 2019, 2, 2161-2168.	5.1	25
29	Toluene and styrene photo-oxidation quantum efficiency: Comparison between doped and composite tungsten-containing anatase-based catalysts. Applied Catalysis B: Environmental, 2019, 245, 49-61.	20.2	21
30	Unprecedented Wiring Efficiency of Sulfonated Graphitic Carbon Nitride Materials: Toward High-Performance Amperometric Recombinant CotA Laccase Biosensors. ACS Sustainable Chemistry and Engineering, 2019, 7, 1474-1484.	6.7	21
31	A Sustainable Approach for the Synthesis of Catalytically Active Peroxidase-Mimic ZnS Catalysts. ACS Sustainable Chemistry and Engineering, 2019, 7, 1300-1307.	6.7	19
32	Environmental Catalysis: Present and Future. ChemCatChem, 2019, 11, 18-38.	3.7	87
33	Non-porous carbonaceous materials derived from coffee waste grounds as highly sustainable anodes for lithium-ion batteries. Journal of Cleaner Production, 2019, 207, 411-417.	9.3	85
34	Facile mechanochemical modification of g-C3N4 for selective photo-oxidation of benzyl alcohol. Chemical Engineering Science, 2019, 194, 78-84.	3.8	43
35	Sunlightâ€Driven Hydrogen Production Using an Annular Flow Photoreactor and gâ€C₃N₄â€Based Catalysts. ChemPhotoChem, 2018, 2, 870-877.	3.0	20
36	Er-W codoping of TiO2-anatase: Structural and electronic characterization and disinfection capability under UVâ€“vis, and near-IR excitation. Applied Catalysis B: Environmental, 2018, 228, 113-129.	20.2	22

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37	Sn modification of TiO2 anatase and rutile type phases: 2-Propanol photo-oxidation under UV and visible light. Applied Catalysis B: Environmental, 2018, 228, 130-141.	20.2	19
38	Phaseâ€Contact Engineering in Monoâ€•and Bimetallic Cuâ€Ni Coâ€catalysts for Hydrogen Photocatalytic Materials. Angewandte Chemie, 2018, 130, 1213-1217.	2.0	6
39	Phaseâ€Contact Engineering in Monoâ€•and Bimetallic Cuâ€Ni Coâ€catalysts for Hydrogen Photocatalytic Materials. Angewandte Chemie - International Edition, 2018, 57, 1199-1203.	13.8	59
40	H2 photo-production from methanol, ethanol and 2-propanol: Pt-(Nb)TiO2 performance under UV and visible light. Molecular Catalysis, 2018, 446, 88-97.	2.0	28
41	Measuring and interpreting quantum efficiency of acid blue 9 photodegradation using TiO2-based catalysts. Applied Catalysis A: General, 2018, 550, 38-47.	4.3	11
42	Thermo-photo degradation of 2-propanol using a composite ceria-titania catalyst: Physico-chemical interpretation from a kinetic model. Applied Catalysis B: Environmental, 2018, 225, 298-306.	20.2	34
43	Composite H3PW12O40â€“TiO2 catalysts for toluene selective photo-oxidation. Applied Catalysis B: Environmental, 2018, 225, 100-109.	20.2	58
44	Microwave-assisted preparation of Ag/Ag₂S carbon hybrid structures from pig bristles as efficient HER catalysts. Journal of Materials Chemistry A, 2018, 6, 21516-21523.	10.3	48
45	Benign-by-Design Orange Peel-Templated Nanocatalysts for Continuous Flow Conversion of Levulinic Acid to N-Heterocycles. ACS Sustainable Chemistry and Engineering, 2018, 6, 16637-16644.	6.7	38
46	Highly Active Catalytic Ruthenium/TiO2Nanomaterials for Continuous Production of Î³â€Valerolactone. ChemSusChem, 2018, 11, 2604-2611.	6.8	23
47	Encapsulated Laccases as Effective Electrocatalysts for Oxygen Reduction Reactions. ACS Sustainable Chemistry and Engineering, 2018, 6, 11058-11062.	6.7	18
48	Operando Spectroscopy in Photocatalysis. ChemPhotoChem, 2018, 2, 777-785.	3.0	28
49	Enhancing photocatalytic performance of TiO2 in H2 evolution via Ru co-catalyst deposition. Applied Catalysis B: Environmental, 2018, 238, 434-443.	20.2	85
50	Novel (NH4)4[NiMo6O24H6]Â·5H2O â€“ TiO2 composite system: Photo-oxidation of toluene under UV and sunlight-type illumination. Applied Catalysis B: Environmental, 2018, 238, 381-392.	20.2	16
51	Bimetallic Pt-Pd co-catalyst Nb-doped TiO2 materials for H2 photo-production under UV and Visible light illumination. Applied Catalysis B: Environmental, 2018, 238, 533-545.	20.2	70
52	Microwave-assisted valorization of pig bristles: towards visible light photocatalytic chalcocite composites. Green Chemistry, 2018, 20, 3001-3007.	9.0	20
53	Mechanochemistry: Toward Sustainable Design of Advanced Nanomaterials for Electrochemical Energy Storage and Catalytic Applications. ACS Sustainable Chemistry and Engineering, 2018, 6, 9530-9544.	6.7	130
54	Measuring and interpreting quantum efficiency for hydrogen photo-production using Pt-titania catalysts. Journal of Catalysis, 2017, 347, 157-169.	6.2	68

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55	UV and visible light driven H2 photo-production using Nb-doped TiO2: Comparing Pt and Pd co-catalysts. Molecular Catalysis, 2017, 437, 1-10.	2.0	28
56	UV and visible hydrogen photo-production using Pt promoted Nb-doped TiO 2 photo-catalysts: Interpreting quantum efficiency. Applied Catalysis B: Environmental, 2017, 216, 133-145.	20.2	41
57	Effect of exfoliation and surface deposition of MnOx species in g-C3N4: Toluene photo-degradation under UV and visible light. Applied Catalysis B: Environmental, 2017, 203, 663-672.	20.2	43
58	Gas phase 2-propanol degradation using titania photocatalysts: Study of the quantum efficiency. Applied Catalysis B: Environmental, 2017, 201, 400-410.	20.2	35
59	Surface CuO, Bi₂O₃, and CeO₂ Species Supported in TiO₂-Anatase: Study of Interface Effects in Toluene Photodegradation Quantum Efficiency. ACS Applied Materials & Interfaces, 2016, 8, 13934-13945.	8.0	22
60	Efficient Electrochemical Production of Syngas from CO₂ and H₂O by using a Nanostructured Ag/gâ€C₃N₄ Catalyst. ChemElectroChem, 2016, 3, 1497-1502.	3.4	46
61	Effect of the anataseâ€“rutile contact in gas phase toluene photodegradation quantum efficiency. Chemical Engineering Journal, 2016, 299, 393-402.	12.7	23
62	Enhanced photocatalytic activity of MWCNT/TiO2 heterojunction photocatalysts obtained by microwave assisted synthesis. Catalysis Today, 2016, 266, 102-109.	4.4	29
63	Disinfection capability of Ag/g-C 3 N 4 composite photocatalysts under UV and visible light illumination. Applied Catalysis B: Environmental, 2016, 183, 86-95.	20.2	127
64	Interface Effects in Sunlight-Driven Ag/g-C₃N₄ Composite Catalysts: Study of the Toluene Photodegradation Quantum Efficiency. ACS Applied Materials & Interfaces, 2016, 8, 2617-2627.	8.0	140
65	Cuâ€“TiO2 systems for the photocatalytic H2 production: Influence of structural and surface support features. Applied Catalysis B: Environmental, 2015, 179, 468-478.	20.2	79
66	Heterogeneous photocatalysis: Light-matter interaction and chemical effects in quantum efficiency calculations. Journal of Catalysis, 2015, 330, 154-166.	6.2	59
67	Enhancing promoting effects in g-C3N4-Mn+/CeO2-TiO2 ternary composites: Photo-handling of charge carriers. Applied Catalysis B: Environmental, 2015, 176-177, 687-698.	20.2	33
68	Ceria promotion of acetaldehyde photo-oxidation in a TiO₂-based catalyst: a spectroscopic and kinetic study. Catalysis Science and Technology, 2015, 5, 1521-1531.	4.1	22
69	Promotion of CeO2â€“TiO2 photoactivity by g-C3N4: Ultraviolet and visible light elimination of toluene. Applied Catalysis B: Environmental, 2015, 164, 261-270.	20.2	63
70	Evolution of H2 photoproduction with Cu content on CuO -TiO2 composite catalysts prepared by a microemulsion method. Applied Catalysis B: Environmental, 2015, 163, 214-222.	20.2	61
71	Composite Bi2O3â€“TiO2 catalysts for toluene photo-degradation: Ultraviolet and visible light performances. Applied Catalysis B: Environmental, 2014, 156-157, 307-313.	20.2	63
72	Role of Interface Contact in CeO₂â€“TiO₂ Photocatalytic Composite Materials. ACS Catalysis, 2014, 4, 63-72.	11.2	178

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73	Green photo-oxidation of styrene over Wâ€“Ti composite catalysts. Journal of Catalysis, 2014, 309, 428-438.	6.2	32
74	Effective Enhancement of TiO₂ Photocatalysis by Synergistic Interaction of Surface Species: From Promoters to Co-catalysts. ACS Catalysis, 2014, 4, 4277-4288.	11.2	37
75	Effect of g-C3N4 loading on TiO2-based photocatalysts: UV and visible degradation of toluene. Catalysis Science and Technology, 2014, 4, 2006.	4.1	83
76	Acetaldehyde degradation under UV and visible irradiation using CeO2â€“TiO2 composite systems: Evaluation of the photocatalytic efficiencies. Chemical Engineering Journal, 2014, 255, 297-306.	12.7	56
77	Abatement of organics and Escherichia coli using CeO2-TiO2 composite oxides: Ultraviolet and visible light performances. Applied Catalysis B: Environmental, 2014, 154-155, 350-359.	20.2	29
78	UV and visible light optimization of anatase TiO2 antimicrobial properties: Surface deposition of metal and oxide (Cu, Zn, Ag) species. Applied Catalysis B: Environmental, 2013, 140-141, 680-690.	20.2	73
79	Sunlight-driven toluene photo-elimination using CeO2-TiO2 composite systems: A kinetic study. Applied Catalysis B: Environmental, 2013, 140-141, 626-635.	20.2	58
80	Recent progress in the quantitative assessment and interpretation of photoactivity. Catalysis Reviews - Science and Engineering, 0, , 1-55.	12.9	5