

# Alina Mariana Balu

## List of Publications by Year in descending order

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Version: 2024-02-01

111  
papers

4,193  
citations

109137

35  
h-index

128067

60  
g-index

122  
all docs

122  
docs citations

122  
times ranked

5907  
citing authors

#	ARTICLE	IF	CITATIONS
1	Humins as bio-based template for the synthesis of alumina foams. <i>Molecular Catalysis</i> , 2022, 526, 112363.	1.0	0
2	Exploring the potential of biomass-templated Nb/ZnO nanocatalysts for the sustainable synthesis of N-heterocycles. <i>Catalysis Today</i> , 2021, 368, 243-249.	2.2	8
3	Insulating rigid polyurethane foams from laurel tree pruning based polyol. <i>Journal of Applied Polymer Science</i> , 2021, 138, 49789.	1.3	4
4	Continuous flow study of isoeugenol to vanillin: A bio-based iron oxide catalyst. <i>Catalysis Today</i> , 2021, 368, 281-290.	2.2	3
5	Biomass valorization: Catalytic approaches using benign-by-design nanomaterials. <i>Advances in Inorganic Chemistry</i> , 2021, 77, 27-58.	0.4	5
6	Metal doping of porous materials via a post-synthetic mechano-chemical approach: a general route to design low-loaded versatile catalytic systems. <i>Catalysis Science and Technology</i> , 2021, 11, 2103-2109.	2.1	2
7	Mechanochemical Preparation of Magnetically Separable Fe and Cu-Based Bimetallic Nanocatalysts for Vanillin Production. <i>Nanomaterials</i> , 2021, 11, 1050.	1.9	2
8	Mechanochemical Synthesis of Nickel-Modified Metal-Organic Frameworks for Reduction Reactions. <i>Catalysts</i> , 2021, 11, 526.	1.6	7
9	Innovative nanomaterials for energy storage: Moving toward nature-inspired systems. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2021, 32, 100520.	3.2	5
10	Heterogeneous Catalysis to Drive the Waste-to-Pharma Concept: From Furanics to Active Pharmaceutical Ingredients. <i>Molecules</i> , 2021, 26, 6738.	1.7	3
11	Characterization and Antioxidant Activity of Microwave-Extracted Phenolic Compounds from Biomass Residues. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, 8, 1513-1519.	3.2	20
12	Evaluation of acid properties of mechanochemically synthesized supported niobium oxide catalysts in the alkylation of toluene. <i>Molecular Catalysis</i> , 2020, 493, 111092.	1.0	8
13	Nanomaterials and catalysis for green chemistry. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2020, 24, 48-55.	3.2	53
14	Combined Extraction/Purification-Catalytic Microwave-Assisted Conversion of <i>Laurus nobilis</i> L. Pruning Waste Polysaccharides into Methyl Levulinate. <i>ACS Sustainable Chemistry and Engineering</i> , 2020, , .	3.2	1
15	Lignocellulosics to biofuels: An overview of recent and relevant advances. <i>Current Opinion in Green and Sustainable Chemistry</i> , 2020, 24, 21-25.	3.2	28
16	Sustainable and recyclable heterogeneous palladium catalysts from rice husk-derived biosilicates for Suzuki-Miyaura cross-couplings, aerobic oxidations and stereoselective cascade carbocyclizations. <i>Scientific Reports</i> , 2020, 10, 6407.	1.6	19
17	Tuneable Acidity in Fluorinated Al-SBA-15 Materials for the Esterification of Valeric Acid to Alkyl Valerates. <i>Frontiers in Chemistry</i> , 2020, 8, 42.	1.8	6
18	Effect of Bay Leaves Essential Oil Concentration on the Properties of Biodegradable Carboxymethyl Cellulose-Based Edible Films. <i>Materials</i> , 2019, 12, 2356.	1.3	31

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19	Furfural production in a biphasic system using a carbonaceous solid acid catalyst. <i>Applied Catalysis A: General</i> , 2019, 585, 117180.	2.2	31
20	Reconstruction of humins formation mechanism from decomposition products: A GC-MS study based on catalytic continuous flow depolymerizations. <i>Molecular Catalysis</i> , 2019, 479, 110564.	1.0	16
21	Continuous flow transfer hydrogenation of biomass derived methyl levulinate over Zr containing zeolites: Insights into the role of the catalyst acidity. <i>Molecular Catalysis</i> , 2019, 477, 110522.	1.0	15
22	Spent Coffee Grounds-Templated Magnetic Nanocatalysts for Mild Oxidations. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 17030-17038.	3.2	13
23	Mechanochemical extraction of antioxidant phenolic compounds from Mediterranean and medicinal <i>Laurus nobilis</i> : A comparative study with other traditional and green novel techniques. <i>Industrial Crops and Products</i> , 2019, 141, 111805.	2.5	39
24	Continuous flow synthesis of amines from the cascade reactions of nitriles and carbonyl-containing compounds promoted by Pt-modified titania catalysts. <i>Green Chemistry</i> , 2019, 21, 300-306.	4.6	21
25	Post-synthetic Mechanochemical Incorporation of Al-Species into the Framework of Porous Materials: Toward More Sustainable Redox Chemistries. <i>ACS Sustainable Chemistry and Engineering</i> , 2019, 7, 9537-9543.	3.2	11
26	Mechanochemically Synthesized Supported Magnetic Fe-Nanoparticles as Catalysts for Efficient Vanillin Production. <i>Catalysts</i> , 2019, 9, 290.	1.6	8
27	Continuous Flow Synthesis of High Valuable N-Heterocycles via Catalytic Conversion of Levulinic Acid. <i>Frontiers in Chemistry</i> , 2019, 7, 103.	1.8	21
28	Versatile Sulfathiazole-Functionalized Magnetic Nanoparticles as Catalyst in Oxidation and Alkylation Reactions. <i>Catalysts</i> , 2019, 9, 348.	1.6	9
29	Continuous-Flow Hydrogenation of Methyl Levulinate Promoted by Zr-Based Mesoporous Materials. <i>Catalysts</i> , 2019, 9, 142.	1.6	23
30	Recent Advances in the Catalytic Production of Platform Chemicals from Holocellulosic Biomass. <i>ChemCatChem</i> , 2019, 11, 2022-2042.	1.8	92
31	Controllable Design of Polypyrrole-Iron Oxide Nanocoral Architectures for Supercapacitors with Ultrahigh Cycling Stability. <i>ACS Applied Energy Materials</i> , 2019, 2, 2161-2168.	2.5	25
32	One-Pot Cu/TiO <sub>2</sub> Nanoparticles Synthesis for Trans-Ferulic Acid Conversion into Vanillin. <i>Molecules</i> , 2019, 24, 3985.	1.7	12
33	International Perspectives on Green and Sustainable Chemistry Education via Systems Thinking. <i>Journal of Chemical Education</i> , 2019, 96, 2794-2804.	1.1	24
34	Mechanochemical Preparation of Novel Polysaccharide-Supported Nb <sub>2</sub> O <sub>5</sub> Catalysts. <i>Catalysts</i> , 2019, 9, 38.	1.6	6
35	Environmental Catalysis: Present and Future. <i>ChemCatChem</i> , 2019, 11, 18-38.	1.8	87
36	Non-porous carbonaceous materials derived from coffee waste grounds as highly sustainable anodes for lithium-ion batteries. <i>Journal of Cleaner Production</i> , 2019, 207, 411-417.	4.6	85

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37	Facile mechanochemical modification of g-C <sub>3</sub> N <sub>4</sub> for selective photo-oxidation of benzyl alcohol. <i>Chemical Engineering Science</i> , 2019, 194, 78-84.	1.9	43
38	Continuous Flow Conversion of Biomass-Derived Methyl Levulinate into Î <sup>3</sup> -Valerolactone Using Functional Metal Organic Frameworks. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 6746-6752.	3.2	65
39	Highly efficient direct oxygen electro-reduction by partially unfolded laccases immobilized on waste-derived magnetically separable nanoparticles. <i>Nanoscale</i> , 2018, 10, 3961-3968.	2.8	31
40	Catalytic insights into the production of biomass-derived side products methyl levulinate, furfural and humins. <i>Catalysis Today</i> , 2018, 302, 2-15.	2.2	125
41	Synthesis of carbon-based fluorescent polymers driven by catalytically active magnetic bioconjugates. <i>Green Chemistry</i> , 2018, 20, 225-229.	4.6	34
42	Benign-by-Design Orange Peel-Templated Nanocatalysts for Continuous Flow Conversion of Levulinic Acid to N-Heterocycles. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 16637-16644.	3.2	38
43	Sol-Gel Immobilisation of Lipases: Towards Active and Stable Biocatalysts for the Esterification of Valeric Acid. <i>Molecules</i> , 2018, 23, 2283.	1.7	22
44	Conversion of Palmitic Acid Over Bi-functional Ni/ZSM-5 Catalyst: Effect of Stoichiometric Ni/Al Molar Ratio. <i>Topics in Catalysis</i> , 2018, 61, 1757-1768.	1.3	32
45	Encapsulated Laccases as Effective Electrocatalysts for Oxygen Reduction Reactions. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11058-11062.	3.2	18
46	Vapor-Phase Hydrogenation of Levulinic Acid to Î <sup>3</sup> -Valerolactone Over Bi-Functional Ni/HZSM-5 Catalyst. <i>Frontiers in Chemistry</i> , 2018, 6, 285.	1.8	30
47	Integrated Mechanochemical/Microwave-Assisted Approach for the Synthesis of Biogenic Silica-Based Catalysts from Rice Husk Waste. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 11555-11562.	3.2	22
48	Ultrasound-Assisted Esterification of Valeric Acid to Alkyl Valerates Promoted by Biosilicified Lipases. <i>Frontiers in Chemistry</i> , 2018, 6, 197.	1.8	16
49	A comprehensive study on the continuous flow synthesis of supported iron oxide nanoparticles on porous silicates and their catalytic applications. <i>Reaction Chemistry and Engineering</i> , 2018, 3, 757-768.	1.9	8
50	Catalytic Transfer Hydrogenolysis of Lignin-Derived Aromatic Ethers Promoted by Bimetallic Pd/Ni Systems. <i>ACS Sustainable Chemistry and Engineering</i> , 2018, 6, 9269-9276.	3.2	112
51	Mechanochemical synthesis of supported cobalt oxide nanoparticles on mesoporous materials as versatile bifunctional catalysts. <i>Microporous and Mesoporous Materials</i> , 2018, 272, 129-136.	2.2	39
52	Mechanochemically synthesized Ag-based nanohybrids with unprecedented low toxicity in biomedical applications. <i>Environmental Research</i> , 2017, 154, 204-211.	3.7	12
53	Activity of continuous flow synthesized Pd-based nanocatalysts in the flow hydroconversion of furfural. <i>Tetrahedron</i> , 2017, 73, 5599-5604.	1.0	34
54	Solventless mechanochemical preparation of novel magnetic bioconjugates. <i>Chemical Communications</i> , 2017, 53, 7635-7637.	2.2	26

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55	Towards the photophysical studies of humin by-products. <i>Chemical Communications</i> , 2017, 53, 7015-7017.	2.2	14
56	Efficient and Environmentally Friendly Microwave-Assisted Synthesis of Catalytically Active Magnetic Metallic Ni Nanoparticles. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 11584-11587.	3.2	28
57	Selective Oxidation of Isoeugenol to Vanillin over Mechanochemically Synthesized Aluminosilicate Supported Transition Metal Catalysts. <i>ChemistrySelect</i> , 2017, 2, 9546-9551.	0.7	16
58	Benign-by-design preparation of humin-based iron oxide catalytic nanocomposites. <i>Green Chemistry</i> , 2017, 19, 4423-4434.	4.6	57
59	Mechanochemical design of hemoglobin-functionalised magnetic nanomaterials for energy storage devices. <i>Journal of Materials Chemistry A</i> , 2017, 5, 16404-16411.	5.2	18
60	Wheat bran valorisation: Towards photocatalytic nanomaterials for benzyl alcohol photo-oxidation. <i>Journal of Environmental Management</i> , 2017, 203, 768-773.	3.8	11
61	Mechanochemical synthesis of graphene oxide-supported transition metal catalysts for the oxidation of isoeugenol to vanillin. <i>Beilstein Journal of Organic Chemistry</i> , 2017, 13, 1439-1445.	1.3	29
62	New bio-nanocomposites based on iron oxides and polysaccharides applied to oxidation and alkylation reactions. <i>Beilstein Journal of Organic Chemistry</i> , 2017, 13, 1982-1993.	1.3	14
63	Sustainable Biomaterials: Current Trends, Challenges and Applications. <i>Molecules</i> , 2016, 21, 48.	1.7	31
64	Catalytic Conversion of Biomass. <i>Catalysts</i> , 2016, 6, 148.	1.6	4
65	Mechanochemical Synthesis of TiO <sub>2</sub> Nanocomposites as Photocatalysts for Benzyl Alcohol Photo-Oxidation. <i>Nanomaterials</i> , 2016, 6, 93.	1.9	41
66	Insights into the activity, selectivity and stability of heterogeneous catalysts in the continuous flow hydroconversion of furfural. <i>Catalysis Science and Technology</i> , 2016, 6, 4705-4711.	2.1	45
67	Continuous flow room temperature reductive aqueous homo-coupling of aryl halides using supported Pd catalysts. <i>Scientific Reports</i> , 2016, 6, 32719.	1.6	11
68	Insights into the selective hydrogenation of levulinic acid to $\gamma$ -valerolactone using supported mono- and bimetallic catalysts. <i>Journal of Molecular Catalysis A</i> , 2016, 417, 145-152.	4.8	42
69	Mild ultrasound-assisted synthesis of TiO <sub>2</sub> supported on magnetic nanocomposites for selective photo-oxidation of benzyl alcohol. <i>Applied Catalysis B: Environmental</i> , 2016, 183, 107-112.	10.8	103
70	Mechanochemical synthesis of advanced nanomaterials for catalytic applications. <i>Chemical Communications</i> , 2015, 51, 6698-6713.	2.2	270
71	Biomass-Derived Porous Carbon Materials: Synthesis and Catalytic Applications. <i>ChemCatChem</i> , 2015, 7, 1608-1629.	1.8	227
72	Mechanochemical preparation of advanced catalytically active bifunctional Pd-containing nanomaterials for aqueous phase hydrogenation. <i>Catalysis Science and Technology</i> , 2015, 5, 2085-2091.	2.1	12

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73	MAGBONS: Novel Magnetically Separable Carbonaceous Nanohybrids from Porous Polysaccharides. <i>ChemCatChem</i> , 2014, 6, 2847-2853.	1.8	8
74	Solventless mechanochemical synthesis of magnetic functionalized catalytically active mesoporous SBA-15 nanocomposites. <i>Journal of Materials Chemistry A</i> , 2014, 2, 387-393.	5.2	40
75	Activity of amino-functionalised mesoporous solid bases in microwave-assisted condensation reactions. <i>Catalysis Communications</i> , 2013, 33, 1-6.	1.6	12
76	Heterogeneously Catalysed Mild Hydrogenolytic Depolymerisation of Lignin Under Microwave Irradiation with Hydrogen-Donating Solvents. <i>ChemCatChem</i> , 2013, 5, 977-985.	1.8	93
77	Fractionation of Organosolv Lignin from Olive Tree Clippings and its Valorization to Simple Phenolic Compounds. <i>ChemSusChem</i> , 2013, 6, 529-536.	3.6	82
78	Versatile low-loaded mechanochemically synthesized supported iron oxide nanoparticles for continuous flow alkylations. <i>RSC Advances</i> , 2013, 3, 16292.	1.7	19
79	Aqueous oxidation of alcohols catalysed by recoverable iron oxide nanoparticles supported on aluminosilicates. <i>Green Chemistry</i> , 2013, 15, 1232.	4.6	43
80	Iron oxide functionalised MIL-101 materials in aqueous phase selective oxidations. <i>Applied Catalysis A: General</i> , 2013, 455, 261-266.	2.2	38
81	Nanocatalysis in continuous flow: supported iron oxide nanoparticles for the heterogeneous aerobic oxidation of benzyl alcohol. <i>Green Chemistry</i> , 2013, 15, 1530.	4.6	100
82	Laser-driven heterogeneous catalysis: efficient amide formation catalysed by Au/SiO <sub>2</sub> systems. <i>Green Chemistry</i> , 2013, 15, 2043.	4.6	58
83	Simple Preparation of Novel Metal-Containing Mesoporous Starches. <i>Materials</i> , 2013, 6, 1891-1902.	1.3	8
84	From Waste to Healing Biopolymers: Biomedical Applications of Bio-Collagenic Materials Extracted from Industrial Leather Residues in Wound Healing. <i>Materials</i> , 2013, 6, 1599-1607.	1.3	17
85	Microwave-assisted mild-temperature preparation of neodymium-doped titania for the improved photodegradation of water contaminants. <i>Applied Catalysis A: General</i> , 2012, 441-442, 47-53.	2.2	36
86	Catalytic transformations of biomass-derived acids into advanced biofuels. <i>Catalysis Today</i> , 2012, 195, 162-168.	2.2	108
87	Valorisation of Orange Peel Residues: Waste to Biochemicals and Nanoporous Materials. <i>ChemSusChem</i> , 2012, 5, 1694-1697.	3.6	112
88	Insights into the microwave-assisted preparation of supported iron oxide nanoparticles on silica-type mesoporous materials. <i>Green Chemistry</i> , 2012, 14, 393-402.	4.6	30
89	Versatile dual hydrogenation-oxidation nanocatalysts for the aqueous transformation of biomass-derived platform molecules. <i>Green Chemistry</i> , 2012, 14, 1434.	4.6	47
90	Tailor-made biopolymers from leather waste valorisation. <i>Green Chemistry</i> , 2012, 14, 308.	4.6	34

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91	Catalytic applications of mesoporous silica-based materials. <i>Catalysis</i> , 2012, , 253-280.	0.6	35
92	High alkylation activities of ball-milled synthesized low-load supported iron oxide nanoparticles on mesoporous aluminosilicates. <i>Catalysis Today</i> , 2012, 187, 65-69.	2.2	34
93	A versatile supported cobalt(ii) complex for heterogeneously catalysed processes: conventional vs. microwave irradiation protocols. <i>Catalysis Science and Technology</i> , 2011, 1, 1051.	2.1	11
94	Magnetically separable nanocomposites with photocatalytic activity under visible light for the selective transformation of biomass-derived platform molecules. <i>Green Chemistry</i> , 2011, 13, 2750.	4.6	89
95	Heteronuclear (Co <sup>II</sup> -Ca, Co <sup>II</sup> -Ba) 2,3-pyridinedicarboxylate complexes: synthesis, structure and physico-chemical properties. <i>Dalton Transactions</i> , 2011, 40, 463-471.	1.6	24
96	Valorisation of corncob residues to functionalised porous carbonaceous materials for the simultaneous esterification/transesterification of waste oils. <i>Green Chemistry</i> , 2011, 13, 3162.	4.6	74
97	Incorporation of chemical functionalities in the framework of mesoporous silica. <i>Chemical Communications</i> , 2011, 47, 9024.	2.2	119
98	Heterogeneously catalysed Strecker-type reactions using supported Co(ii) catalysts: microwave vs. conventional heating. <i>Green Chemistry</i> , 2011, 13, 3282.	4.6	35
99	A Dry Milling Approach for the Synthesis of Highly Active Nanoparticles Supported on Porous Materials. <i>ChemSusChem</i> , 2011, 4, 1561-1565.	3.6	74
100	One-step microwave-assisted asymmetric cyclisation/hydrogenation of citronellal to menthols using supported nanoparticles on mesoporous materials. <i>Organic and Biomolecular Chemistry</i> , 2010, 8, 2845.	1.5	28
101	Biomaterials supported CdS nanocrystals. <i>Materials Chemistry and Physics</i> , 2010, 124, 52-54.	2.0	8
102	Towards Greener and More Efficient C-C and C-Heteroatom Couplings: Present and Future. <i>Current Organic Synthesis</i> , 2010, 7, 568-586.	0.7	18
103	Catalytically active self-assembled silica-based nanostructures containing supported nanoparticles. <i>Green Chemistry</i> , 2010, 12, 1995.	4.6	38
104	Fe/Al synergy in Fe <sub>2</sub> O <sub>3</sub> nanoparticles supported on porous aluminosilicate materials: excellent activities in oxidation reactions. <i>Chemical Communications</i> , 2010, 46, 7825.	2.2	81
105	Tunable shapes in supported metal nanoparticles: From nanoflowers to nanocubes. <i>Materials Chemistry and Physics</i> , 2009, 117, 408-413.	2.0	13
106	Evidences of the in situ generation of highly active Lewis acid species on Zr-SBA-15. <i>Applied Catalysis A: General</i> , 2009, 371, 85-91.	2.2	54
107	Raman and ESR study of sol-gel materials from ZnO-TiO <sub>2</sub> -B <sub>2</sub> O <sub>3</sub> system. <i>Journal of Non-Crystalline Solids</i> , 2009, 355, 2020-2022.	1.5	5
108	Para-hydrogen induced polarisation effects in liquid phase hydrogenations catalysed by supported metal nanoparticles. <i>Dalton Transactions</i> , 2009, , 5074.	1.6	73

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109	Physico-chemical Characterisation of Lipids from <i>Mytilus galloprovincialis</i> (L.) and <i>Rapana venosa</i> and their Healing Properties on Skin Burns. <i>Lipids</i> , 2008, 43, 829-41.	0.7	37
110	Microwave oxidation of alkenes and alcohols using highly active and stable mesoporous organotitanium silicates. <i>Journal of Molecular Catalysis A</i> , 2008, 293, 17-24.	4.8	23
111	Thermal analysis of some polynuclear coordination compounds. <i>Journal of Thermal Analysis and Calorimetry</i> , 2007, 88, 273-277.	2.0	5